Kevin Murphy

KM Environmental Consulting

Assuring Environmental Compliance in Deep-Sea Mining:

Lessons from Industry and Regulators—Case Studies

A report prepared for The Pew Charitable Trusts

under Contract Number 32989

# Acknowledgements

This paper was researched and written by Kevin Murphy of KM Environmental Consulting.

The study was commissioned by The Pew Charitable Trusts. Pew is not responsible for errors within and does not necessarily endorse its opinions and conclusions.

Table of Contents

[Table of Contents 2](#_Toc31297237)

[1 Introduction 10](#_Toc31297238)

[1.1 Background 10](#_Toc31297239)

[1.2 Purpose of this Report 10](#_Toc31297240)

[1.3 Study Methods and Information Sources 10](#_Toc31297241)

[1.4 Content of this Report 11](#_Toc31297242)

[2 Department of Environmental Affairs, South Africa 13](#_Toc31297243)

[2.1 Overview 13](#_Toc31297244)

[2.2 The Institutional Framework 13](#_Toc31297245)

[2.2.1 Centralized Responsibilities 13](#_Toc31297246)

[2.2.2 Strategic Planning 15](#_Toc31297247)

[2.2.3 Funding 15](#_Toc31297248)

[2.2.4 Staff Resources and Training 15](#_Toc31297249)

[2.2.5 Ring-Fencing of Different Functions 15](#_Toc31297250)

[2.3 Compliance Promotion 16](#_Toc31297251)

[2.3.1 General Considerations 16](#_Toc31297252)

[2.3.2 Publications 16](#_Toc31297253)

[2.3.3 Other Media 18](#_Toc31297254)

[2.3.4 Incentivization 18](#_Toc31297255)

[2.4 Compliance Monitoring 19](#_Toc31297256)

[2.4.1 Introduction 19](#_Toc31297257)

[2.4.2 Self-Monitoring 19](#_Toc31297258)

[2.4.3 Regulator Audits and Inspections 19](#_Toc31297259)

[2.4.4 Independent Verification 20](#_Toc31297260)

[2.4.5 Targeting/Prioritizing Strategies 20](#_Toc31297261)

[2.5 Compliance Enforcement 20](#_Toc31297262)

[2.5.1 Introduction 20](#_Toc31297263)

[2.5.2 Administrative Enforcement (Including Financial) 20](#_Toc31297264)

[2.5.3 Criminal Enforcement 20](#_Toc31297265)

[2.5.4 Other Sanctions 21](#_Toc31297266)

[2.6 Reporting, Accountability and Transparency 21](#_Toc31297267)

[2.6.1 Internal Reporting 21](#_Toc31297268)

[2.6.2 External (Public) Reporting 21](#_Toc31297269)

[2.6.3 Scope and Transparency of Reporting 21](#_Toc31297270)

[2.6.4 Whistle-Blowing 22](#_Toc31297271)

[2.6.5 Complaints Procedure 22](#_Toc31297272)

[2.7 Effectiveness 23](#_Toc31297273)

[2.7.1 Internal Assessment 23](#_Toc31297274)

[2.7.2 External/Independent Assessment 23](#_Toc31297275)

[3 Environmental Protection Department, Hong Kong 25](#_Toc31297276)

[3.1 Overview 25](#_Toc31297277)

[3.2 The Institutional Framework 25](#_Toc31297278)

[3.2.1 Centralized Responsibilities 25](#_Toc31297279)

[3.2.2 Strategic Planning 27](#_Toc31297280)

[3.2.3 Funding 27](#_Toc31297281)

[3.2.4 Staff Resources and Training 27](#_Toc31297282)

[3.2.5 Ring-Fencing of Different Functions 28](#_Toc31297283)

[3.3 Compliance Promotion 28](#_Toc31297284)

[3.3.1 General Considerations 28](#_Toc31297285)

[3.3.2 Publications 29](#_Toc31297286)

[3.3.3 Other Media 30](#_Toc31297287)

[3.3.4 Incentivization 31](#_Toc31297288)

[3.4 Compliance Monitoring 32](#_Toc31297289)

[3.4.1 Introduction 32](#_Toc31297290)

[3.4.2 Self-Monitoring 32](#_Toc31297291)

[3.4.3 Regulator Audits and Inspections 32](#_Toc31297292)

[3.4.4 Independent Verification 32](#_Toc31297293)

[3.4.5 Targeting/Prioritizing Strategies 33](#_Toc31297294)

[3.5 Compliance Enforcement 33](#_Toc31297295)

[3.5.1 Introduction 33](#_Toc31297296)

[3.5.2 Administrative Enforcement (Including Financial) 34](#_Toc31297297)

[3.5.3 Criminal Enforcement 34](#_Toc31297298)

[3.5.4 Other Sanctions 34](#_Toc31297299)

[3.6 Reporting, Accountability and Transparency 34](#_Toc31297300)

[3.6.1 Internal Reporting 34](#_Toc31297301)

[3.6.2 External (Public) Reporting 34](#_Toc31297302)

[3.6.3 Scope and Transparency of Reporting 35](#_Toc31297303)

[3.6.4 Whistle-Blowing 36](#_Toc31297304)

[3.6.5 Complaints Procedure 36](#_Toc31297305)

[3.7 Effectiveness 36](#_Toc31297306)

[3.7.1 Internal Assessment 36](#_Toc31297307)

[3.7.2 External/Independent Assessment 37](#_Toc31297308)

[4 Environmental Protection Authority, New Zealand 38](#_Toc31297309)

[4.1 Overview 38](#_Toc31297310)

[4.2 The Institutional Framework 38](#_Toc31297311)

[4.2.1 Centralized Responsibilities 38](#_Toc31297312)

[4.2.2 Strategic Planning 40](#_Toc31297313)

[4.2.3 Funding 41](#_Toc31297314)

[4.2.4 Staff Resources and Training 41](#_Toc31297315)

[4.2.5 Ring-Fencing of Different Functions 42](#_Toc31297316)

[4.3 Compliance Promotion 42](#_Toc31297317)

[4.3.1 General Considerations 42](#_Toc31297318)

[4.3.2 Publications 42](#_Toc31297319)

[4.3.3 Other Media 43](#_Toc31297320)

[4.3.4 Incentivization 44](#_Toc31297321)

[4.4 Compliance Monitoring 44](#_Toc31297322)

[4.4.1 Introduction 44](#_Toc31297323)

[4.4.2 Self-Monitoring 45](#_Toc31297324)

[4.4.3 Regulator Audits and Inspections 45](#_Toc31297325)

[4.4.4 Independent Verification 45](#_Toc31297326)

[4.4.5 Targeting/Prioritizing Strategies 45](#_Toc31297327)

[4.5 Compliance Enforcement 48](#_Toc31297328)

[4.5.1 Introduction 48](#_Toc31297329)

[4.5.2 Administrative Enforcement (Including Financial) 48](#_Toc31297330)

[4.5.3 Criminal Enforcement 48](#_Toc31297331)

[4.6 Reporting, Accountability and Transparency 49](#_Toc31297332)

[4.6.1 Internal Reporting 49](#_Toc31297333)

[4.6.2 External (Public) Reporting 49](#_Toc31297334)

[4.6.3 Scope and Transparency of Reporting 49](#_Toc31297335)

[4.6.4 Whistle-Blowing 50](#_Toc31297336)

[4.6.5 Complaints Procedure 50](#_Toc31297337)

[4.7 Effectiveness 51](#_Toc31297338)

[4.7.1 Internal Assessment 51](#_Toc31297339)

[4.7.2 External/Independent Assessment 52](#_Toc31297340)

[5 Marine Management Organisation, UK 54](#_Toc31297341)

[5.1 Overview 54](#_Toc31297342)

[5.2 The Institutional Framework 55](#_Toc31297343)

[5.2.1 Centralized Responsibilities 55](#_Toc31297344)

[5.2.2 Strategic Planning 56](#_Toc31297345)

[5.2.3 Funding 58](#_Toc31297346)

[5.2.4 Staff Resources and Training 58](#_Toc31297347)

[5.2.5 Ring-Fencing of Different Functions 58](#_Toc31297348)

[5.3 Compliance Promotion 59](#_Toc31297349)

[5.3.1 General Considerations 59](#_Toc31297350)

[5.3.2 Publications 59](#_Toc31297351)

[5.3.3 Other Media 62](#_Toc31297352)

[5.3.4 Incentivization 63](#_Toc31297353)

[5.4 Compliance Monitoring 64](#_Toc31297354)

[5.4.1 Introduction 64](#_Toc31297355)

[5.4.2 Self-Monitoring 64](#_Toc31297356)

[5.4.3 Regulator Audits and Inspections 65](#_Toc31297357)

[5.4.4 Independent Verification 66](#_Toc31297358)

[5.4.5 Targeting/Prioritizing Strategies 66](#_Toc31297359)

[5.5 Compliance Enforcement 67](#_Toc31297360)

[5.5.1 Introduction 67](#_Toc31297361)

[5.5.2 Administrative Enforcement (Including Financial) 67](#_Toc31297362)

[5.5.3 Criminal Enforcement 69](#_Toc31297363)

[5.5.4 Other Sanctions 69](#_Toc31297364)

[5.6 Reporting, Accountability and Transparency 69](#_Toc31297365)

[5.6.1 Internal Reporting 69](#_Toc31297366)

[5.6.2 External (Public) Reporting 70](#_Toc31297367)

[5.6.3 Scope and Transparency of Reporting 70](#_Toc31297368)

[5.6.4 Whistle-Blowing 70](#_Toc31297369)

[5.6.5 Complaints Procedure 70](#_Toc31297370)

[5.7 Effectiveness 71](#_Toc31297371)

[5.7.1 Internal Assessment 71](#_Toc31297372)

[5.7.2 External/Independent Assessment 71](#_Toc31297373)

[6 Parties to the Nauru Agreement 72](#_Toc31297374)

[6.1 Overview 72](#_Toc31297375)

[6.2 The Institutional Framework 72](#_Toc31297376)

[6.2.1 Centralized Responsibilities 72](#_Toc31297377)

[6.2.2 Strategic Planning 72](#_Toc31297378)

[6.2.3 Funding 73](#_Toc31297379)

[6.2.4 Staff Resources and Training 73](#_Toc31297380)

[6.2.5 Ring-Fencing of Different Functions 73](#_Toc31297381)

[6.3 Compliance Promotion 73](#_Toc31297382)

[6.4 Compliance Monitoring 73](#_Toc31297383)

[6.4.1 Introduction 73](#_Toc31297384)

[6.4.2 Self-Monitoring 74](#_Toc31297385)

[6.4.3 Regulator Audits and Inspections 74](#_Toc31297386)

[6.4.4 Independent Verification 74](#_Toc31297387)

[6.4.5 Targeting/Prioritizing Strategies 74](#_Toc31297388)

[6.5 Compliance Enforcement 74](#_Toc31297389)

[6.5.1 Administrative Enforcement (Including Financial) 74](#_Toc31297390)

[6.5.2 Criminal Enforcement 75](#_Toc31297391)

[6.6 Reporting, Accountability and Transparency 75](#_Toc31297392)

[6.7 Effectiveness 75](#_Toc31297393)

[6.7.1 Internal Assessment 75](#_Toc31297394)

[6.7.2 External/Independent Assessment 75](#_Toc31297395)

[7 Rio Tinto 76](#_Toc31297396)

[7.1 Overview 76](#_Toc31297397)

[7.2 The Institutional Framework 76](#_Toc31297398)

[7.2.1 Centralized Responsibilities 76](#_Toc31297399)

[7.2.2 Strategic Planning 76](#_Toc31297400)

[7.2.3 Funding 77](#_Toc31297401)

[7.2.4 Staff Resources and Training 77](#_Toc31297402)

[7.2.5 Ring-Fencing of Different Functions 77](#_Toc31297403)

[7.3 Compliance Promotion 78](#_Toc31297404)

[7.3.1 General Considerations 78](#_Toc31297405)

[7.3.2 Publications 79](#_Toc31297406)

[7.3.3 Other Media 81](#_Toc31297407)

[7.3.4 Incentivization 82](#_Toc31297408)

[7.4 Compliance Monitoring 82](#_Toc31297409)

[7.4.1 Introduction 82](#_Toc31297410)

[7.4.2 Self-Monitoring 83](#_Toc31297411)

[7.4.3 Company Audits and Inspections 83](#_Toc31297412)

[7.4.4 Independent Verification 83](#_Toc31297413)

[7.4.5 Targeting/Prioritizing Strategies 84](#_Toc31297414)

[7.5 Compliance Enforcement 84](#_Toc31297415)

[7.5.1 Administrative Enforcement (Including Financial) 84](#_Toc31297416)

[7.5.2 Criminal Enforcement 84](#_Toc31297417)

[7.5.3 Other Sanctions 84](#_Toc31297418)

[7.6 Reporting, Accountability and Transparency 85](#_Toc31297419)

[7.6.1 Internal Reporting 85](#_Toc31297420)

[7.6.2 External (Public) Reporting 85](#_Toc31297421)

[7.6.3 Scope and Transparency of Reporting 85](#_Toc31297422)

[7.6.4 Whistle-Blowing 86](#_Toc31297423)

[7.6.5 Complaints Procedure 86](#_Toc31297424)

[7.7 Effectiveness 86](#_Toc31297425)

[7.7.1 Internal Assessment 86](#_Toc31297426)

[7.7.2 External/Independent Assessment 87](#_Toc31297427)

[8 International Oil and Gas Companies 88](#_Toc31297428)

[8.1 Overview 88](#_Toc31297429)

[8.2 The Institutional Framework 88](#_Toc31297430)

[8.2.1 Introduction 88](#_Toc31297431)

[8.2.2 Centralized Responsibilities 89](#_Toc31297432)

[8.2.3 Strategic Planning 90](#_Toc31297433)

[8.2.4 Funding 91](#_Toc31297434)

[8.2.5 Staff Resources and Training 92](#_Toc31297435)

[8.2.6 Ring-Fencing of Different Functions 92](#_Toc31297436)

[8.3 Compliance Promotion 93](#_Toc31297437)

[8.3.1 General Considerations 93](#_Toc31297438)

[8.3.2 Publications 93](#_Toc31297439)

[8.3.3 Other Media 96](#_Toc31297440)

[8.3.4 Incentivization 98](#_Toc31297441)

[8.4 Compliance Monitoring 98](#_Toc31297442)

[8.4.1 Introduction 98](#_Toc31297443)

[8.4.2 Self-Monitoring 100](#_Toc31297444)

[8.4.3 Company Audits and Inspections 100](#_Toc31297445)

[8.4.4 Independent Verification 101](#_Toc31297446)

[8.4.5 Targeting/Prioritizing Strategies 101](#_Toc31297447)

[8.5 Compliance Enforcement 102](#_Toc31297448)

[8.5.1 Administrative Enforcement (Including Financial) 102](#_Toc31297449)

[8.5.2 Criminal Enforcement 102](#_Toc31297450)

[8.5.3 Other Sanctions 102](#_Toc31297451)

[8.6 Reporting, Accountability and Transparency 102](#_Toc31297452)

[8.6.1 Internal Reporting 103](#_Toc31297453)

[8.6.2 External (Public) Reporting 103](#_Toc31297454)

[8.6.3 Scope and Transparency of Reporting 104](#_Toc31297455)

[8.6.4 Whistle-Blowing 106](#_Toc31297456)

[8.6.5 Complaints Procedure 107](#_Toc31297457)

[8.7 Effectiveness 107](#_Toc31297458)

[8.7.1 Internal Assessment 107](#_Toc31297459)

[8.7.2 External/Independent Assessment 108](#_Toc31297460)

[9 European Bank for Reconstruction and Development 110](#_Toc31297461)

[9.1 Overview 110](#_Toc31297462)

[9.2 The Institutional Framework 110](#_Toc31297463)

[9.2.1 Centralized Responsibilities 110](#_Toc31297464)

[9.2.2 Strategic Planning 112](#_Toc31297465)

[9.2.3 Funding 112](#_Toc31297466)

[9.2.4 Staff Resources and Training 113](#_Toc31297467)

[9.2.5 Ring-Fencing of Different Functions 113](#_Toc31297468)

[9.3 Compliance Promotion 114](#_Toc31297469)

[9.3.1 General Considerations 114](#_Toc31297470)

[9.3.2 Publications 115](#_Toc31297471)

[9.3.3 Other Media 116](#_Toc31297472)

[9.3.4 Incentivization 117](#_Toc31297473)

[9.4 Compliance Monitoring 118](#_Toc31297474)

[9.4.1 Introduction 118](#_Toc31297475)

[9.4.2 Self-Monitoring 121](#_Toc31297476)

[9.4.3 Bank Audits and Inspections 121](#_Toc31297477)

[9.4.4 Independent Verification 121](#_Toc31297478)

[9.4.5 Targeting/Prioritizing Strategies 121](#_Toc31297479)

[9.5 Compliance Enforcement 121](#_Toc31297480)

[9.5.1 Administrative Enforcement (Including Financial) 121](#_Toc31297481)

[9.5.2 Criminal Enforcement 122](#_Toc31297482)

[9.5.3 Other Sanctions 122](#_Toc31297483)

[9.6 Reporting, Accountability and Transparency 122](#_Toc31297484)

[9.6.1 Internal Reporting 122](#_Toc31297485)

[9.6.2 External (Public) Reporting 122](#_Toc31297486)

[9.6.3 Scope and Transparency of Reporting 123](#_Toc31297487)

[9.6.4 Whistle-Blowing 123](#_Toc31297488)

[9.6.5 Complaints Procedure 123](#_Toc31297489)

[9.7 Effectiveness 124](#_Toc31297490)

[9.7.1 Internal Assessment 124](#_Toc31297491)

[9.7.2 External/Independent Assessment 124](#_Toc31297492)

# Introduction

## Background

The Pew Charitable Trusts (Pew) and the J.M. Kaplan Fund (Kaplan Fund) have commissioned a study of practices in environmental compliance assurance among various sectors including national regulatory authorities, industry (oil and gas and mining), and international finance. The work included the production of a series of case studies looking at the various practices of these different organizations with a view to identifying lessons learned.

The case studies consider the key elements of compliance assurance practices:

* the institutional framework for compliance activities;
* compliance promotion;
* compliance monitoring;
* compliance enforcement;
* reporting, accountability and transparency; and
* the effectiveness of the practices.

## Purpose of this Report

The ultimate objective of the work was to develop a set of recommendations on best practice for the consideration of the International Seabed Authority (ISA) regarding its role in regulating deep-sea mining in the area beyond national jurisdiction. The ISA was esta­blished under the United Nations Convention on the Law of the Sea (UNCLOS) to jointly manage mining on the international seabed and to protect the marine environment from its harmful effects.

The recommendations were developed on the basis of a round-table discussion among a group of experts from diverse backgrounds including the sectors noted above. The case studies contained herein, together with a brief parallel report on initial findings, provided background information for the round-table discussion and were circulated to the experts in advance of that discussion.

This report (“Case Studies Report”) also provides the reference material and links to further information that underpin the recommendations report: *Assuring Environmental Compliance in Deep-Sea Mining: Lessons from Industry and Regulators.*

## Study Methods and Information Sources

This Case Studies Report reviews the environmental compliance assurance practices of organizations with a broad geographic and sectoral coverage:

* national environmental and natural resource protection agencies in South Africa (Department of Environmental Affairs, DEA), New Zealand (Environmental Protection Authority, EPA), Hong Kong (Environmental Protection Department, EPD), the Pacific Islands region (Parties to the Nauru Agreement, PNA) and the United Kingdom of Great Britain and Northern Ireland (Marine Management Organisation, MMO));
* private sector companies (BP, Chevron, Shell and Rio Tinto); and
* international finance (European Bank for Reconstruction and Development, the EBRD).

The organizations were selected based on the following criteria:

* as noted above to provide a variety (regulator, industry and finance) of types of organizations that have developed environmental compliance assurance practices;
* geographic spread;
* cultural variation;
* marine activities or jurisdiction (but not exclusively so); and
* publicly available information (mainly on websites) in the English language.

Many other organizations with well-established environmental compliance assurance practices could have been added to the list; however, those eventually selected provided a manageable and balanced set of organizations.

The data sources used were primarily official publications of individual organizations and material on their public websites, together with material issued by industry organizations where relevant. For the private sector the data reviews were supplemented by discussions with participants from companies involved. Please note that links to organization websites that functioned at the time of report preparation may be subsequently superseded by website updates.

To the extent possible the case studies were fact-checked by a Pew team and reviewed by qualified current and former personnel of the organizations involved as set out below.

|  |  |
| --- | --- |
| **Case Study** | **Check/Review** |
| South Africa Department of Environmental Affairs (DEA) | Fact-check only |
| Hong Kong Environmental Protection Department (EPD) | Review by current employee and fact-check |
| New Zealand Environmental Protection Authority (EPA) | Review by current employee and fact-check |
| UK Marine Management Organisation (MMO) | Review by former employee and fact-check |
| Parties to the Nauru Agreement (PNA) | Fact-check only |
| Rio Tinto | Participation and review by former employee and fact-check |
| International Oil and Gas Companies: BP, Chevron and Shell | Participation and review by current and former employees and fact-check |
| European Bank for Reconstruction and Development (EBRD) | Review by former employee and fact-check |

The review for the case studies focused on current practices and those developed in the past 10 years, noting that in some sectors and geographies compliance is well established and older material may still be relevant.

## Content of this Report

The following sections of this report contain the case studies as follows.

Regulatory:

* Department of Environmental Affairs, South Africa;
* Environmental Protection Department, Hong Kong;
* Environmental Protection Authority, New Zealand;
* Marine Management Organisation, UK; and
* Parties to the Nauru Agreement.

Industry:

* Mining (Rio Tinto); and
* Oil and Gas (BP, Chevron and Shell consolidated into a single case study).

International financial sector:

* European Bank for Reconstruction and Development.

# Department of Environmental Affairs, South Africa

## Overview

The Department of Environmental Affairs (DEA) is mandated under the Constitution of the Republic of South Africa to provide leadership in environmental management, resource use, nature conservation and environmental protection in general. In particular, the DEA has clear roles to play in priority areas identified in the National Development Plan, which maps out the vision for South Africa for the 20 years ahead, dealing with environmental protection and sustainable development. The DEA is granted specific powers under the National Environmental Management Act (NEMA) 1998 (as amended) and related acts.

The work of the DEA is supported by the following statutory bodies: the South African Weather Service (SAWS), iSimangaliso Wetland Park, the South African National Biodiversity Institute (SANBI) and the South African National Parks (SANParks). However, certain sectors are excluded from the DEA’s remit, including mining, agriculture, forestry and fisheries, and compliance activities in these sectors are led by other government agencies.

As well as its functions at the national level, the DEA is represented in nine provincial offices where its functions are usually combined with other provincial functions, for example:

* KwaZulu Natal Province—Department of Agriculture, Environmental Affairs and Rural Development; and
* Western Cape Province—Department of Environmental Affairs and Development Planning.

The South African Constitution allows for a cooperative approach to federalism and within this context the national government and the provinces are given overlapping powers in a range of functional areas, which includes the environment. The provincial offices play a role in such matters as considering EIAs, setting approval conditions and compliance enforcement, although this varies between provinces according to the different environmental management issues they have to deal with most (e.g., industry, resource use, wildlife protection).

For the purposes of this case study no distinctions are made between the national and provincial compliance assurance functions.

## The Institutional Framework

### Centralized Responsibilities

The DEA is a department of the Ministry of Environment, Forestry and Fisheries. The Director General of the DEA reports to the Deputy Minister and the Minister.

The DEA is organized in terms of three main administrative functions (Financial Management Services Unit, Internal Audit Directorate and Office of the Chief Operating Officer) and six branches (described in Table 1 below), all reporting to the Director General and each headed by a Deputy Director General.[[1]](#endnote-2)

**Table 1 The Branches of the South African DEA**

| **Branch** | **Purpose** |
| --- | --- |
| Biodiversity and Conservation | To establish, manage and maintain ecologically representative national and cross-border systems of protected areas.  Policy development and implementation regarding protected areas. |
| Climate Change, Air Quality and Sustainable Development | To improve air quality for the protection of human health.  To provide leadership and support regarding climate change mitigation and adaptation responses.  Collection, management and analysis of data to ensure informed decision-making on climate change response. |
| Chemicals and Waste Management | To manage and ensure chemical- and waste-management policies and legislation are implemented and enforced in compliance with chemical- and waste-management authorizations, directives and agreements. |
| Oceans and Coasts | To promote, manage and provide strategic leadership on oceans and coastal conservation in South Africa.  To strengthen national science programmes for integrated oceans and coastal management and contribute to effective knowledge and information management for the sector. |
| Environmental Programmes | To identify and ensure implementation of environmental programmes that employ recognized principles for contributing towards addressing unemployment by working with communities to identify opportunities that will benefit the communities.  Natural Resource Management programmes, for example, relating to water resource management, biological diversity and the functioning of natural systems whilst ensuring meaningful livelihood opportunities are supported for those employed on these programmes. |
| Legal Authorisations and Compliance Inspectorate | To promote the development of an enabling legal regime and licensing/authorization system that promotes compliance and enforcement. |

The main functions of the Legal Authorisations and Compliance Inspectorate[[2]](#endnote-3) are:

* to provide legal services enabling the DEA to protect and conserve the environment and deliver on its mandate;
* to strengthen, enhance and coordinate the environmental regulatory framework relating to environmental impact assessment and management;
* to promote compliance with environmental legislation;
* to enforce compliance with environmental legislation; and
* to provide cooperative governance and administrative support to the DEA.

The Legal Authorisations and Compliance Inspectorate has over time been involved in the progressive development of environmental management legislation and frameworks, which it continues to review and enhance where necessary. In more recent years the Inspectorate has deliberately shifted the emphasis of its activities to focus more on implementation, monitoring compliance and taking enforcement action when required.

The Inspectorate collaborates each year with its provincial counterparts and other statutory bodies to develop the National Environmental Compliance and Enforcement Report (NECER) (see Section 2.6.3.3). The report is a joint publication that provides an overview of the environmental compliance and enforcement activities undertaken by the various authorities over a financial year.

### Strategic Planning

The DEA periodically produces a strategic plan covering its areas of responsibilities. The current version covers the years 2019/20 to 2023/24 and includes the Annual Performance Plan for 2019-20 (see also Section 2.6.3.2).[[3]](#endnote-4) The strategic plan addresses each of the DEA’s programmes, including Legal Authorisations and Compliance. The Legal Authorisations and Compliance Inspectorate also has a five-year National Environmental Compliance and Enforcement Strategy (NECES) developed in 2014/15.[[4]](#endnote-5)

In addition to strategic planning for its specific functions, the DEA leads and contributes to an array of other strategic planning documents including such topics as national biodiversity, species protections, estuarine and coastal management and waste management.[[5]](#endnote-6) Many of these various strategies directly underpin delivery of the DEA’s main strategy for delivering on its responsibilities. For example, one of the goals of the National Waste Management Strategy is to “*establish effective compliance with and enforcement of the Waste Act*”.[[6]](#endnote-7)

### Funding

The DEA is primarily funded from the national treasury. It can raise funds from other sources such as sales of assets, but these are small in comparison with its overall budget. A breakdown of funding across its programmes is provided in the DEA’s Annual Report. However, it would not be a meaningful exercise to represent Legal Authorisations and Compliance as a percentage of the total as the budget is dominated by Environmental Programmes, which includes expenditure on capital projects.

Overall, the DEA is under pressure financially to deliver its responsibilities nationally and provincially (see, e.g., Western Cape Province Annual Report 2017/18[[7]](#endnote-8)), but this is in the context of the South African national economy and may not reflect on the seriousness attached to its functions by the national or provincial governments.

### Staff Resources and Training

According to the 2017/2018 DEA Annual Report, Legal Authorisations and Compliance staff made up 191 of a total DEA staff of 1,822. Additionally, there were 2,973 Environmental Management Inspectors (EMIs) across the country, comprising 2,640 national and provincial EMIs (there may be some double counting in this figure with the national Legal Authorisations and Compliance figure of 191) and 333 municipal EMIs. Of the 2,640 national and provincial EMIs, 1,723 were field rangers employed by national and provincial parks authorities.[[8]](#endnote-9)

The DEA provides formal training for its staff. Training may be aimed at specific staff functions such as the role of EMIs working in the front line of compliance enforcement.[[9]](#endnote-10) Training is also provided in specific topics such as waste management, integrated coastal management and oil spill planning so that staff are abreast of current practices in such fields.

### Ring-Fencing of Different Functions

The DEA is separate in functions and reporting lines from other South African government departments, particularly those that promote economic development and resource exploitation. The DEA is responsible to a government minister for the environment. Similar considerations generally apply at the provincial levels.

Of note is that the Environmental Management Inspectorate does not have a legal mandate regarding environmental compliance of the mining sector’s operations, or for enforcing laws relating to water; these are the responsibility of officials in the Department of Mineral Resources and the Department of Water and Sanitation, respectively.

## Compliance Promotion

### General Considerations

The DEA conducts compliance promotion both with the general public and private industry, businesses, the agricultural sector and other resource users. Its promotion activities include publication of guidance and other documents on its website, training materials and activities for the public, media releases, and seminars and conferences.

### Publications

#### Raising Awareness

Much of the DEA’s awareness-raising activity is done via the media page on its website, which includes links to audiovisual materials, speeches, press releases and a range of publications.[[10]](#endnote-11) Publications include a quarterly DEA “magazine, newspaper advertisements and supplements, posters and advisory and guidance materials. Much of this material is aimed at the general public, including schoolchildren, but not exclusively so. Some of the material demonstrates the commitment of the South African government at a high level to the aims and objectives of the DEA.

For those planning or involved in regulated activities, the website home page directs users, via “Legislation”[[11]](#endnote-12) to “Gazetted Notices”, “Guidelines and Policies” and “Acts and Regulations”, all of which are more specifically aimed at helping users understand their responsibilities and requirements under environmental legislation.

#### Providing Knowledge

As well as seeking to gather and use research evidence to inform its own policymaking and practices,[[12]](#endnote-13),[[13]](#endnote-14) the DEA publishes the results of research including evidence-based materials for various environmental topics on its website.[[14]](#endnote-15) Climate change, its implications in various sectors and mitigation and adaptation needs receive a particular degree of attention.

#### Setting Guidance

A significant body of guidance is provided in the DEA’s “Integrated Environmental Management Information Series,”[[15]](#endnote-16) which covers the topics listed below.

* Information series 0: overview of integrated environmental management
* Information series 1: screening
* Information series 2: scoping
* Information series 3: stakeholder engagement
* Information series 4: specialist studies
* Information series 5: impact significance
* Information series 6: ecological risk assessment
* Information series 7: cumulative effects assessment
* Information series 8: cost-benefit analysis
* Information series 9: life cycle assessment
* Information series 10: strategic environmental assessment
* Information series 11: criteria for determining alternatives in EIA
* Information series 12: environmental management plans
* Information series 13: review in environmental impact assessment
* Information series 14: environmental auditing
* Information series 15: environmental impact reporting
* Information series 16: environmental economics
* Information series 17: environmental reporting
* Information series 18: environmental assessment of trade-related agreements and policies in South Africa
* Information series 19: environmental assessment of international agreements
* Information series 20: linking EIA and EMS
* Information series 21: environmental monitoring committees
* Information series 22: socioeconomic impact assessment
* Information series 23: risk management

A wide range of additional topic-related guidance is provided in the context of compliance with legislation and regulations.[[16]](#endnote-17) This guidance includes procedural-related material (e.g., Guidelines on the Administration of Incidents[[17]](#endnote-18)) and practical technical guidance (e.g., Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry[[18]](#endnote-19)).

#### Communicating Best Practice

Some of the guidance produced by the DEA refers to best practice and best international practice, for example the Integrated Environmental Management series described above. On biodiversity the DEA sets out a scorecard system with criteria on what “best practices” are and how they are defined in the context of its People and Parks Programme.[[19]](#endnote-20)

In addition to its documents, the DEA also uses conferences and similar events and ministerial speeches to promote and share best practice, including for:

* waste management;[[20]](#endnote-21) and
* combatting pollution crimes.[[21]](#endnote-22)

#### Topicality and Relevance

The compliance promotion materials produced by the DEA are quite broad in the subjects addressed (which can range from rhino protection to industrial waste management), representing in turn the broad remit of the DEA and also the broad audience it is reaching out to. Generally, the material is topical; the extensive amount of climate change and sustainable development-related guidance, for example. It appears that in some areas (e.g., the marine environment) the DEA is still progressing guidance materials in comparison with some of its more traditional topics of concern (such as protected area management).

#### Appropriate to Audience

As noted above, the materials produced by the DEA are variously aimed at the general public (including schoolchildren), industries and businesses and environmental professionals. It is usually readily apparent from the nature of the material who the target audience is.

### Other Media

#### Web-Based Materials

The DEA’s compliance promotion materials referenced above are generally accessible on its website, quite often from the home page and/or via the use of search terms.

#### Interactive Web-Based Materials

The DEA website provides links to and hosts interactive GIS-based sites.[[22]](#endnote-23)

The Environmental Geographical Information Systems (E-GIS) web page[[23]](#endnote-24) provides access to baseline environmental geospatial data, map services, printable maps and relevant documents. It is mainly aimed at users of geospatial technology in national and provincial government agencies, business and the public. The DEA works with the Committee on Spatial Information and the broader community of GIS users to define the data architecture, systems, standards, policies and processes for a fully integrated and effective spatial data infrastructure for the country.

The DEA website hosts the South African Protected and Conservation Areas Map Service, an interactive map[[24]](#endnote-25) that shows protected and conservation areas of South Africa, extracted from the Protected and Conservation Areas (PACA) Database. The database and map are updated on a quarterly basis.

The DEA website also hosts (see home page) its Environmental Screening Tool.[[25]](#endnote-26) The tool is a GIS-based application that allows a project proponent intending to apply for environmental authorization under the terms of the EIA regulations to screen the proposed development site for environmental sensitivities. The tool also provides other site-specific information, e.g., on industrial development zoning.

#### Seminars and Training

Since 2006, the DEA has periodically hosted seven multi-stakeholder conferences focused on environmental compliance and enforcement.[[26]](#endnote-27) Those parties attending these conferences have included environmental authorities (international, national, provincial and local) and other relevant national departments (such as those administering water and mineral regulation); other key stakeholders in the criminal justice system, including the South African Police Services (SAPS) and the National Prosecuting Authority (NPA), are also invited to participate.

These events are seen as important to compliance promotion for several reasons, including:

* maintaining a sense of unity and common purpose among EMIs from various provinces or institutions;
* providing a national forum for EMIs to raise their key issues and concerns;
* motivating EMIs through the sharing of success stories, case studies and receiving awards;
* networking opportunities among all those involved in the environmental compliance and enforcement community; and
* building capacity among EMIs, e.g., through participation in workshops.

### Incentivization

#### Financial

Financial incentives to the regulated community are not relevant to the role and function of the DEA.

#### Approved Suppliers

The DEA was instrumental in the establishment of the Environmental Assessment Practitioners Association of South Africa (EAPASA). The EAPASA is a non-profit organization with the purpose of promoting the advancement of the practice and quality of EIA in South Africa. The EAPASA is the registration authority for EIA practitioners appointed by the Ministry of Environmental Affairs in accordance with regulations contained in NEMA. Parties conducting EIAs in South Africa must be registered.

#### Awards

As noted in Section 2.3.3.3 above, the work of the EMIs is recognized by an annual award scheme and the awards are announced at the annual “Lekgotla”. The awards recognize government officials who have made an outstanding contribution in the implementation of environmental legislation, including in enforcement.

The DEA also recognizes the performance of local administrations in its “Greenest Municipality Competition.”[[27]](#endnote-28)

## Compliance Monitoring

### Introduction

Compliance monitoring (and enforcement) is performed for a variety of sectors and regarding various environmental laws and regulations, including for protected areas and species management. This section (and Section 2.5) focuses on development planning and consents, particularly for industrial activities. Compliance monitoring requirements are usually project- or activity-specific as set out in an “environmental authorisation” and various licences (emissions to air, water and waste) received in accordance with NEMA and typically following an EIA process for certain types of project.

This review was unable to determine whether the DEA or provincial departments publish environmental authorizations and licences or provide public access to their content. Some private sector companies publish their content on their own websites.[[28]](#endnote-29)

An external review of compliance monitoring and enforcement in South Africa noted difficulties in monitoring and enforcement stemming, for example, from the drafting of monitoring requirements and the attitude of parts of the regulated sector, for example, seeing compliance as partially negotiable.[[29]](#endnote-30) It is assumed, as noted in Section 2.2.1, that the Legal Authorisations and Compliance Inspectorate is responding to these trends by shifting the emphasis of its activities to focus more on implementation, monitoring compliance and taking enforcement action when required.

### Self-Monitoring

Holders of environmental authorizations under NEMA (and other acts, such as the Waste Act) are required to undertake monitoring in accordance with the terms of the authorization and provide reports to the DEA.

### Regulator Audits and Inspections

The DEA, its provincial environmental departments and other provincial and municipal administration employ EMIs, a network of environmental enforcement officials from various national, provincial and municipal government departments created under NEMA. The EMIs have the power to enter premises and make inspections. There appears to be an element of reactivity to regulator inspections in terms of responding to incidents and complaints; however, the DEA has stated it intends to shift to a more proactive approach.

### Independent Verification

Operating an EMS that is accredited to ISO 14001 provides a business or operation with a means to demonstrate independent verification of its systems and environmental performance. While ISO 14001 is mentioned in the DEA’s Integrated Environmental Management Information series 20: “linking EIA and EMS,” the standard does not appear to be directly advocated on the DEA website or any other core documentation.

### Targeting/Prioritizing Strategies

Proactive compliance monitoring and enforcement work tends to be prioritized by sectors, namely:

* ferro-alloy, steel and iron;
* refineries;
* power generation; and
* identified landfill sites.

Priorities may also be identified in relation to other strategic projects that require regulation involving the issuing of environmental authorizations.

## Compliance Enforcement

### Introduction

As noted above, compliance enforcement is undertaken by EMIs on behalf of the DEA, its provincial environmental departments and other provincial and municipal administrations. EMIs are the front line in seeing to environmental legislation being followed and enforced.

The EMIs have powers that include the following (although not all these activities would relate to industrial premises or development projects).

* Investigate: including questioning witnesses, inspecting and removing articles, taking photographs and making audiovisual recordings, taking samples and removing waste.
* Seize evidence of criminal activity in the course of making monitoring inspections.
* Enforce: by searching premises, containers, vessels, vehicles, aircraft, etc.; seizing evidence and contraband; establishing roadblocks and making arrests.

### Administrative Enforcement (Including Financial)

Administrate enforcement includes issuing compliance notices and admission of guilt fines.

### Criminal Enforcement

The EMIs (and the police) can initiate criminal proceedings under NEMA and related acts. The EMIs cannot prosecute cases in court. All cases are delivered over to the National Prosecuting Authority (NPA) for prosecution; however, the EMIs do work closely with prosecutors towards the successful prosecution of offenders. In addition, the South African Police Service plays a role in compliance enforcement working with EMIs in the investigation of environmental crimes. Under the terms of NEMA, all police officers have the powers of an EMI.

### Other Sanctions

Other sanctions available include confiscation orders and the confiscation of goods and equipment, for example the confiscation of heavy machinery in actions against illegal sand mining.[[30]](#endnote-31)

## Reporting, Accountability and Transparency

### Internal Reporting

It is assumed there is a degree of internal reporting, but this review found no specific information on its nature or content.

### External (Public) Reporting

The key DEA reports from a public and stakeholder perspective are:

* Annual Reports;[[31]](#endnote-32)
* Strategic Plans/Annual Performance Plans;[[32]](#endnote-33) and
* National Environmental Compliance and Enforcement Reports (NECER)[[33]](#endnote-34).

Together, these reports contain a significant amount of information on the DEA’s activities, plans and performance.

The DEA website also provides access to a wide range of other reports, for example informing about activities in the spheres of biodiversity and nature conservation, management of protected areas and national parks, climate change and sustainable development.[[34]](#endnote-35) Part of the value of these latter sets of reports is to provide greater insight into the policies and activities of the DEA than is provided in the more summary annual reports.

### Scope and Transparency of Reporting

#### Annual Reports

The Annual Report includes information on the DEA’s performance for each of its programmes (including Legal Authorisations Compliance and Enforcement) against strategic objectives and performance indicators. Areas of underperformance are identified, and strategies are set out for addressing them in the coming year. Performance is also reported in the context of budgets. The report addresses governance matters in terms of systems of financial, risk management, internal controls and the outcome of internal audit by the audit committee.

Approximately half of the annual report is given over to financial information.

#### Strategic Plans/ Annual Performance Plans

The current Strategic Plan (2019/20 to 2023/24) begins with a “situational analysis”, which states that:

“*The 2006 South African Environment Outlook Report and findings from the 2012 report indicate that the overall condition of South Africa’s environment continues to deteriorate.*”

The situational analysis sets out “problem statements” (e.g., South Africa’s transition to a low-carbon economy) and key responses by the DEA. The report goes on to consider matters related to the DEA’s capacity and organization and its mandate under various legislative instruments. Budgetary matters are set out and strategic outcome-oriented goals that are common across the organization are described.

In the context of the above matters the report sets out in tabulated form for each of its programmes (including Legal Authorisations Compliance and Enforcement) for the plan period:

* the strategic objective;
* objective statement;
* baseline (2017/18);
* performance indicators; and
* target 2023/24.

The above is supported by an annual performance plan for each programme (with breakdown to quarterly targets) which also includes previous years’ performances and corrective actions for where previous performance fell short of targets.

#### National Environmental Compliance and Enforcement Reports

The NECER reports on compliance activities across what it refers to as the “green, blue and brown sectors”, which are the biodiversity and protected areas (green), integrated coastal management (blue) and pollution, waste and EIA development (e.g., power stations) (brown) subsectors respectively. It should be noted that the NECER does not reflect the compliance and enforcement work being undertaken by other sectors such as agriculture, forestry and fisheries, and mining.

The NECER is quite a wide-ranging report that opens with a summary of the key findings and highlights for the year. It then goes on to describe the capacity and profile of the Environmental Management Inspectorate; later in the report, capacity-building activities for EMIs are described (along with others involved in compliance enforcement). Data are presented on national compliance and enforcement statistics followed by a breakdown per institution and province. Information is presented on key court cases for environmental infractions, and recent legislative developments are reviewed. Where statistics are presented, they are compared with previous years. Operational compliance enforcement activities are summarized for each of the brown, green and blue subsectors, as well as joint operations with other agencies. The nature and scope of environmental complaints and incidents received through the national hotline are described. The report closes with an account of stakeholder engagement and sets out plans for the year ahead.

### Whistle-Blowing

Individuals and communities are encouraged to report wildlife crime, especially rhino poaching, with rewards to people whose information leads to the arrest and successful conviction of perpetrators. The DEA also provides a hotline for reporting wildlife and other environmental crimes,[[35]](#endnote-36) as do the provincial departments.[[36]](#endnote-37) However, there does not seem to be any other formal mechanisms within the DEA or whistle-blowing policies in general.

### Complaints Procedure

Complaints concerning the activities or conduct of the DEA can be made in writing, by telephone or via e-mail.[[37]](#endnote-38) The DEA commits to promptly addressing all complaints within a reasonable time frame.

## Effectiveness

### Internal Assessment

Internal assessment of the effectiveness of the DEA is primarily performed in the context of measuring performance against the targets it sets itself in Strategic Plans/Annual Performance Plans. The Annual Report also sets out performance achieved against targets and notes each area where the planned target has not been achieved. Where targets have not been achieved, corrective measures are identified. These measures are implemented and monitored in the context of the Annual Performance Plan. Progress on the corrective measures is then reviewed on a quarterly basis through the next financial year to assess their effectiveness and determine the need for further management intervention if required.

The NECER also presents some internal assessment of the effectiveness of the DEA in pursuing its compliance assurance activities, particularly with respect to enforcement. The NECER describes ongoing enforcement cases (some of which have run for several years) and accounts of prosecutions.

### External/Independent Assessment

The DEA does not appear to undertake an external assessment of its performance, however it is worth noting it is in the process of commissioning such work regarding the activities of the EMI in respect of its implementing the National Environmental Compliance and Enforcement Strategy.[[38]](#endnote-39)

Although not an assessment of the effectiveness of the DEA, the Centre for Environmental Rights (CER)[[39]](#endnote-40) in South Africa has looked at environmental compliance issues in South African industries. The CER study, “Full Disclosure”,[[40]](#endnote-41) looked at 20 listed South African companies, assessing the extent of their compliance with environmental laws. The study also looked at the extent to which non-compliance with environmental laws was disclosed to their shareholders. The study covered the period 2008 to 2014, and while it included many mining companies (who as noted earlier are not within the DEA’s remit), other sectors were represented as well.

The main conclusions from the CER study regarding the effectiveness of South Africa’s environmental compliance monitoring and enforcement system were as follows.

* Some environmental authorizations were difficult to monitor due in part to the way that authorizations are drafted. Monitoring difficulties also stemmed from inspections being often done by relatively junior officials (with limited technical expertise doing inspections across a range of different types of facilities) dealing with experienced operators, some of which were seeking to avoid detection of violations, or to tie authorities up in lengthy and complex disputes about whether violations have in fact occurred.
* One outcome of the above was often a lengthy period (sometimes years) elapsing between an inspection and an associated enforcement action.
* The enforcement regime did not allow regulators to promptly impose financial penalties that accurately reflect the cost of environmental violations to society.
* Private sector companies viewed the culture of engagement between themselves and regulators as one where compliance with environmental laws was a matter of negotiation with authorities, with actual compliance to be achieved at an indeterminate future date.
* There were pressures on the budgets for environmental compliance monitoring and enforcement activities among the enforcing authorities.
* There was a general lack of respect within the private sector for the skills and expertise of environmental regulators.
* The private sector adopted a position, generally unchallenged by government, that transparency is dangerous or undesirable because releasing information to the public concerning environmental non-compliances and enforcement activities would threaten a company’s commercial interests.
* Environmental compliance in the mining sector was monitored and enforced by the Department of Mineral Resources, rather than the DEA, and would appear to be executed with less rigour and without the DEA’s level of compliance assurance practices.

# Environmental Protection Department, Hong Kong

## Overview

The Hong Kong Environmental Protection Department (EPD) was first established in 1986 and in 2005 the Environment Branch of the then Environment, Transport and Works Bureau, also responsible for environmental policymaking, was merged with the EPD. In 2007, as part of a reorganization of government bureaux, a new Environment Bureau was formed. The Environment Bureau oversees both the development and the implementation of policies for environmental protection, conservation, energy use and sustainable development in general. The Permanent Secretary for the Environment under the Secretary for the Environment is also the Director of Environmental Protection. This means the EPD is in the position of both determining and implementing environmental policies.

The EPD is responsible for developing policies covering environmental protection; nature conservation; monitoring environmental quality; enforcing environmental legislation; providing collection, transfer, treatment and disposal facilities for various types of waste; advising on the environmental implications of town planning and new policies; handling pollution complaints and incidents; and raising awareness and support in the community for environmental initiatives. The EPD’s responsibilities cover six programme areas, as follows:[[41]](#endnote-42)

* Air Programme;
* Environmental Assessment and Planning Programme;
* Nature Conservation Programme;
* Noise Programme;
* Waste Programme; and
* Water Programme.

## The Institutional Framework

### Centralized Responsibilities

Under its constitutional document, the “Basic Law”, Hong Kong is an autonomous Special Administrative Region of the People’s Republic of China (other than in matters of defence and foreign affairs). The Basic Law provides for a system of governance led by a Chief Executive and an Executive Council, supported by a two-tiered system of representative government and an independent judiciary.

The Chief Executive is the head of the Hong Kong Special Administrative Region and is responsible for implementing the Basic Law, signing bills and budgets, promulgating laws, making decisions on government policies and issuing Executive Orders. The Chief Executive is assisted in policymaking by the Executive Council.

The Executive Council is made up of 16 principal officials and 16 non-official members and includes the Secretary for the Environment. All members are appointed by the Chief Executive from among the senior officials of the executive authorities, members of the Legislative Council and public figures.

The main administrative and executive functions of government are carried out by 13 policy bureaux and 56 departments. One of the policy bureaux is the Environment Bureau, which has one department, the Environmental Protection Department, together with an Energy and Sustainable Development Branch. The Permanent Secretary for the Environment heading the Environment Bureau is also the Director of Environmental Protection, heading the EPD.[[42]](#endnote-43) The Permanent Secretary for the Environment reports to the Secretary for the Environment.

**Selected Duties and Responsibilities of the Permanent Secretary for the Environment/ Director of Environmental Protection**

* To be the statutory authority for the various environmental protection and pollution control ordinances.
* To lead in the formulation of recommendations on policies, strategies, programmes and plans relating to environmental protection, energy and sustainable development.
* To assist in explaining policies to the community, and in securing the support of the public and the Legislative Council.
* To oversee the planning, project identification, outline specification and project coordination of the Government’s programme for the treatment and disposal of wastes.
* To oversee the Government’s strategic and regional planning for sewage collection, treatment and disposal infrastructure.
* To formulate departmental programme plans, objectives, standards and procedures in relation to the implementation and enforcement of pollution control legislation.
* To formulate the department’s strategy and guidelines on the assessment of the environmental impact of significant new developments, plans and policies.
* To liaise, advise and consult at a senior level with representative industrial, trade and community groups on all relevant matters relating to environmental protection, energy and sustainable development.

Four Deputy Directors of Environmental Protection, each with specific remits, report to the Permanent Secretary for the Environment/ Director of Environmental Protection:

* Deputy Director (1), Community Relations, Central Prosecution, Environmental Assessment, Environmental Compliance, Corporate Affairs, Water Policy;
* Deputy Director (2), Waste Infrastructure Planning, Nature Conservation, Environmental Infrastructure, Waste Reduction and Recycling;
* Deputy Director (3), Air Policy, Cross-boundary and International; and
* Deputy Director (Special Duties), Waste Management Policy, Waste Management (Special Duties).

**Main Duties and Responsibilities of the Deputy Director of Environmental Protection (1)**

* To steer the department’s work in the field, including environmental assessment and environmental compliance.
* To steer the setting of environmental policy goals in the area of environmental impact assessment.
* To steer the initiation, development and finalization of appropriate policies, strategies and programmes for the attainment of relevant policy goals in the field of environmental impact assessment.
* To formulate departmental policies and procedures in relation to the implementation and enforcement of environmental legislation.
* To steer the government’s community relations programme in the environmental protection field, including environmental education.

The Assistant Director of Environmental Protection (Environmental Compliance) reports to the Deputy Director of Environmental Protection (1).

**Main Duties and Responsibilities of the Assistant Director of Environmental Protection (Environmental Compliance)**

1. To direct, manage and coordinate the activities of the constituent technical groups of the Environmental Compliance Division.
2. To oversee the formulation of departmental policies, procedures and guidelines in relation to the implementation of pollution control legislation.
3. To oversee the integrated enforcement of relevant pollution control legislation at both the territorial and local levels and ensure a consistent, impartial and professional approach to such enforcement at all levels.
4. To establish channels of communication with business and trade associations impacted by environmental protection legislation and develop and implement initiatives to assist their members and other affected parties in achieving compliance with the law, and minimizing pollution and public nuisance.
5. To ensure adequate liaison with District Councils on local pollution control issues, establish and implement procedures for the effective and speedy handling of pollution complaints, and direct and coordinate the outreach work of the Regional Offices in each district.
6. To keep under constant review the effectiveness of local environmental protection legislation, analyse deficiencies and provide feedback to the policy formulation process.
7. To direct the government’s environmental education and community promotion programmes and supervise the provision of secretarial support to the Environmental Campaign Committee and the Environment and Conservation Fund.
8. To keep abreast of developments in relevant professional knowledge, technical and scientific fields relating to the enforcement of environmental protection laws and the application of technology to facilitate compliance with such laws.

The reporting lines in terms of their relationship to centralized responsibilities and hierarchy can be summarized as follows:

* Assistant Director of Environmental Protection (Environmental Compliance) to;
* Deputy Director of Environmental Protection (1) to;
* Permanent Secretary for the Environment/ Director of Environmental Protection to;
* Secretary for the Environment to;
* Chief Executive.

### Strategic Planning

The EPD, through its dual function of policy development and implementation, is an integral part of strategic planning for matters relating to the regulation of environmental performance and associated compliance issues. The strategic planning is reflected in several ways, including the existence and function of the Environmental Compliance Division and the activities of the Compliance Assistance Centre as described in subsequent sections of this case study.

### Funding

The EPD’s estimated budget for 2018/2019 was in excess of 6 billion Hong Kong dollars (circa 0.8 billion US$),[[43]](#endnote-44) allocated across its six programmes as follows.

* Waste—HK$3,664 million;
* Air—HK$1,889 million;
* Noise—HK$139 million;
* Water—HK$320 million.
* Environmental Assessment and Planning—HK$116 million; and
* Nature Conservation—HK$41 million.

### Staff Resources and Training

The staff numbers for 2018/2019 across the EPD’s six programmes were as follows:[[44]](#endnote-45)

* Waste—861;
* Air—466;
* Noise—178;
* Water—442.
* Environmental Assessment and Planning—138; and
* Nature Conservation—35.

All EPD staff are given on-the-job training in the various aspects of the department’s work.[[45]](#endnote-46) Training covers such matters as the writing of technical reports, laboratory practices, the planning and execution of field studies, and the use of different types of scientific equipment. Staff may also be given financial support to attend external training courses, both within Hong Kong and overseas. As well as formal training courses, staff are also encouraged to attend conferences and seminars, in order to maintain professional knowledge in their field.

### Ring-Fencing of Different Functions

As noted in Section 3.2.1, the EPD has a reporting line directly through the Secretary for the Environment to the Chief Executive. Development control, approval of EIAs, monitoring and enforcement all sit within its remit and are separate from other government functions.

## Compliance Promotion

### General Considerations

The EPD is proactive in promoting compliance. Although the main pieces of Hong Kong legislation addressing air, noise, solid waste and wastewater place the onus on polluters (e.g., by imposing fees and fines on polluters to redress the damage) the EPD recognizes that fines or punishment alone cannot cure pollution problems effectively. The EPD therefore deploys active compliance facilitation approaches that are complementary to enforcement efforts and which it considers are effective as they help regulated parties to be compliant or return to compliance.

A large part of the compliance promotion is via the Compliance Assistance Centre (CAC).[[46]](#endnote-47) The CAC offers a wide range of services, which include:

* advice on regulatory requirements;
* how to address common pollution issues;
* producing and making available up-to-date compliance guides, good environmental practices and environmental management tools across a range of industries.

The CAC also encourages businesses and operators to go beyond compliance by implementing ISO 14001 EMS, reporting their own environmental performance and carrying out their own environmental audits. Guidance on how to go about such initiatives is also provided.

It is also worth noting that it is a stated duty and responsibility of the Assistant Director of Environmental Protection (Environmental Compliance):

*“To establish channels of communication with business and trade associations impacted by environmental protection legislation and develop and implement initiatives to assist their members and other affected parties in achieving compliance with the law, and minimizing pollution and public nuisance.”*

### Publications

#### Raising Awareness

Users of the EPD website are directed to “Compliance Assistance” from the home page and thence to the Compliance Assistance Centre,[[47]](#endnote-48) which among other matters provides the compliance promotion functions noted above.

Raising awareness is also undertaken via workshops and seminars (see Section 3.3.3.3).

Awareness of environmental performance requirements and compliance is also raised on the main Hong Kong government website.[[48]](#endnote-49)

#### Providing Knowledge

Taking the construction industry as an example, the EPD website provides information on four key environmental topics (air, noise, waste and water), together with nature conservation and EIA and planning.[[49]](#endnote-50)

Taking noise as an example, the website goes on to provide information of various types including the following:

* study reports of past projects;
* innovative noise mitigation designs and measures;
* educational packages on environmental noise;
* data and statistics; and
* references (e.g., to codes of practice and the “Noise Control Ordinance”).

#### Setting Guidance

Developing and providing guidance is a significant aspect of the EPD’s compliance promotion activities.

Guidance is provided for achieving compliance with requirements for all six programme areas and covering a wide range of topics within each and readily accessible from the website hope page.[[50]](#endnote-51) Guidance is provided on the planning and licensing process for new projects, EIA, specific activities related to sectors and programme areas, and monitoring. As noted in Section 3.3.3.1, guidance can be accessed via multiple routes on the EPD website.

Guidance is also provided for industry and businesses on how to develop their own ISO 14001, or similar, environmental management systems, including self-auditing, monitoring and reporting.[[51]](#endnote-52)

#### Communicating Best Practice

The guidance published by the EPD includes a series of Guidance Notes on Best Practicable Means (BPM) for Specified Processes.[[52]](#endnote-53) The Guidance Notes cover a range of industrial, processing and manufacturing activities including:

* various metal processing works (aluminium, copper, ferrous, lead, zinc, etc.);
* cement production and use;
* chemical incineration;
* electricity generation;
* municipal and sewage sludge waste incineration; and
* petrochemical works.

Typically, best practice (or best practicable means) is set out in terms of the standards or limits to be met, control measures (including design aspects) to be applied in meeting them, operational procedures and monitoring requirements. The Guidance Notes also serve as advice for applicants making an application for a “Specified Process” licence.

Since air quality is a significant issue in Hong Kong, continuous emissions monitoring is a requirement for the majority of operating facility monitoring programmes and is addressed by its own specific guidance note on best practicable means.[[53]](#endnote-54)

#### Topicality and Relevance

One of the responsibilities of the Compliance Assistance Centre is to offer up-to-date and updated compliance guides, green practices and environmental management tools.

The guidance materials provided are specifically relevant to businesses and operations set in a Hong Kong regulatory context and address matters that are most relevant to environmental performance in Hong Kong, for example across the six programme areas.

#### Appropriate to Audience

Guidance materials and other publications are variously aimed at a cross section of business managers, environmental professionals and the public in general. Since many of the materials are specific to certain sectors and activities within those sectors they are especially targeted on the respective audiences.

### Other Media

#### Web-Based Materials

The EPD website hosts the various guidance documents, study reports and other information in a readily accessible manner.

Typically, there are several routes to a document or piece of information, including the following.

* The “Resource Centre” on the home page directs the user to “Publication” and thence “Guidance”. The “Guidance” page allows a general search of programme areas (air, noise, water, etc.) and topic and keyword search terms.[[54]](#endnote-55)
* The six programme areas on the home page direct the user to programme area-specific guidance.[[55]](#endnote-56)
* “Compliance Assistance” on the home page directs the user to sectoral pages, such as “Construction Industry” and thence to “Reference Materials”, which includes guidance and other information broken down by programme area.

Essentially guidance materials can be navigated to on the EPD website via multiple routes starting from the home page.

#### Interactive Web-Based Materials

The EPD runs an Internet-based Electronic Service Delivery (ESD) Scheme under a secured electronic transaction platform for businesses to apply for licences and permits. The system also allows the members of the general public to request specific environmental data in an interactive way.[[56]](#endnote-57)

The EPD website provides downloadable “Apps”[[57]](#endnote-58) for the public to allow them access to:

* Real-time air quality data from the 16 monitoring stations run by the EPD; and
* information to help manage waste, for example the nearest waste recycling collection points for various types of waste.

The Hong Kong government also provides interactive environmental educational materials for the public.[[58]](#endnote-59)

#### Seminars and Training

The CAC undertakes workshops and seminars.[[59]](#endnote-60) These are generally organized around specific topics and/or aimed at particular sectors. Topics covered include such matters as energy efficiency and saving, water saving and recycling, pollution control technologies and sharing of environmental experiences.

#### Other

The Environmental Compliance Division (ECD) liaises and works closely with the district councils and local communities in various ways, including:

* participation in various environment-related committees and regular meetings in the 18 districts;
* conducting joint site visits with district councillors, local communities and other local representatives, such as residents, owners’ committees and rural committees, to address their concerns on the environment.
* participation in and organizing other activities such as environmental promotional activities with community groups, including talks, seminars, exhibitions, prize-giving ceremonies, environmental campaigns and competitions.

### Incentivization

#### Financial

Financial incentives (other than avoiding being fined) are not relevant to the compliance promotion activities of the EPD. However, it is worth noting that tax deductions are allowed for capital expenditure on environmental protection facilities.[[60]](#endnote-61)

#### Approved Suppliers

The EPD does provide lists of companies that are ISO 14001 accredited, together with lists of consultancies providing services in environmental management, audit and EIA. However, these cannot be regarded as approved suppliers or recommendations by the EPD.

#### Awards

The EPD, together with the Environmental Campaign Committee and other main chambers in Hong Kong, organizes the Hong Kong Awards for Environmental Excellence (HKAEE) and Hong Kong Green Organization Certification (HKGOC). The aim of these awards is to encourage organizations to implement environmental management and measure their environmental performance, and to recognize organizations with excellent performance on environmental management. For example, the “Wastewi$e Certificate” under the HKGOC encourages businesses/organizations in adopting measures to reduce the amount of waste generated during their operation, manufacturing process and/or provision of services.

## Compliance Monitoring

### Introduction

In addition to compliance monitoring, the EPD operates an ambient environmental monitoring programme aimed at understanding the wider environmental health of the region (see Section 3.6.2).

### Self-Monitoring

Environmental permits to “construct and operate a designated project” are awarded in accordance with the Environmental Impact Assessment Ordinance. Under the permit there are various environmental monitoring and audit requirements of the permit holder which are set out in an environmental monitoring and audit (EM&A) programme, which also sets out the requirements for reporting to the EPD. Although these can be regarded as self-monitoring it is important to note the roles of the principal persons who implement the programme and develop its detail, which are as follows.[[61]](#endnote-62)

* The permit holder must establish an environmental team (ET) by a specified time in advance of the commencement of construction of the project. The ET cannot be in any way an associated body of the contractor or the independent environmental checker (see below) for the project. The ET is headed by an ET Leader, who has a specified number of years of experience (e.g., at least seven years) in environmental monitoring and auditing or environmental management. The ET and the ET Leader are responsible for the implementation of the EM&A programme.
* An independent environmental checker (IEC) must be appointed by the permit holder by a specified time in advance of the commencement of construction of the project. The IEC cannot be in any way an associated body of the contractor or the ET for the Project. The IEC must also have a specified number of years of experience in EM&A or environmental management. The IEC is responsible for various duties set out in the EM&A programme, including auditing the overall EM&A performance.

By the nature of these roles, although not fully independent, the responsibility for monitoring, auditing and reporting is one place removed from a permit holder and contractor.

The EM&A programme is typically developed from the EM&A Manual included with the EIA as part of an application for a permit.[[62]](#endnote-63) The EM&A reports are provided to the EPD and are publicly available on its website.[[63]](#endnote-64)

As part of its compliance assurance promotion the EPD also provides guidance on auditing on its website.[[64]](#endnote-65)

### Regulator Audits and Inspections

The EPD itself carries out field inspections, sampling and monitoring of water, noise and air emissions in order to verify compliance by individual operations. Where there is thought to be a likelihood of deliberate non-compliance it will also undertake “ambushes” (i.e., unannounced/unscheduled inspections) and video surveillance.

### Independent Verification

There does not appear to be an independent verification process (and this would be unusual for a regulatory body). However, the EPD encourages Hong Kong businesses to develop environmental management systems and to be ISO 14001 accredited. The result is quite a high and steadily increasing uptake by companies operating in the region.[[65]](#endnote-66) Companies with an accredited ISO 14001 system would be expected to have some level of independent verification of their environmental performance.

It is also worth noting that the general public has a role and the EPD encourages reports of apparent violations of environmental laws and provides a ready means to make reports on its website.

### Targeting/Prioritizing Strategies

Compliance monitoring is focused through a combination of the project-specific impacts and mitigation that emerge from the EIA process and those requirements that stem from the programme areas (especially air, noise, waste and water) and related ordinances. In general terms, compliance monitoring focuses on the areas of highest risk to the environment as well as on more general overall compliance.

## Compliance Enforcement

### Introduction

The EPD enforces the main environmental and anti-pollution laws primarily through the activities of the Environmental Compliance Division (ECD). The ECD also carries out inspections and responds to complaints. From a compliance perspective the main laws include:

* Air Pollution Control Ordinance;
* Noise Control Ordinance;
* Waste Disposal Ordinance;
* Water Pollution Control Ordinance;
* Environmental Impact Assessment Ordinance;
* Dumping at Sea Ordinance;
* Ozone Layer Protection Ordinance; and
* Hazardous Chemicals Control Ordinance.

Offenders must be caught in the act for enforcement measures to proceed.

The EPD undertakes enforcement according to a set of principles as follows.[[66]](#endnote-67)

1. *“Enforcement must be conducted in a fair, consistent and transparent manner.*
2. *Enforcement priorities are based on the public health risk, the sensitivity of the receiving environment and the pollution loads.*
3. *Operators are encouraged to adopt self-monitoring programme1s and to act promptly to rectify any pollution problems. The public is encouraged to report any violation to the EPD's Customer Service Centre or their Regional Offices.*
4. *Prosecution of environmental offences is regarded as a means to deter others, as well as punish polluters who break the law.”*

Enforcement activities and statistics are published on the EPD website.[[67]](#endnote-68)

### Administrative Enforcement (Including Financial)

It is the responsibility under the law for potential polluters to put in place effective control measures, monitor their own emissions at agreed intervals, promptly rectify any non-compliances and report regularly (e.g., monthly) to the EPD.

The EPD also investigates complaints by members of the public which may lead to notices on the activity involved or prosecution (see below).

Notices may be given to cease work associated with damage to the environment until remedial action has been taken.

The EPD can also suspend, vary or cancel an environmental permit.

### Criminal Enforcement

When a suspected violation is encountered, the ECD enforcement team analyses the evidence and initiates a prosecution if it is warranted. The EPD has finite resources for compliance enforcement so enforcement actions are generally focused on non-compliances that involve heavy pollution loads, a high potential for harming public health and a high risk to a sensitive environment.

The EPD regards the decision to prosecute for an environmental offence as an important one. The decision to prosecute is only taken after the evidence and related factors have been fully evaluated. The departmental prosecutors of the Central Prosecution Unit of the EPD are responsible for making the ultimate decision whether to proceed. The basis for a possible prosecution may have been brought forward by a member of the public or a community, so decisions on proceeding with prosecutions must also be transparent.

The EPD has a “Statement of Prosecution Policy for the Environmental Protection Department” aimed at ensuring there is fair and consistent decision-making by the departmental prosecutors, and to make the process more understandable and open to the public.[[68]](#endnote-69)

Criminal enforcement can result in fines or imprisonment or both.

### Other Sanctions

There are no other sanctions apparent from a review of the EPD website.

## Reporting, Accountability and Transparency

### Internal Reporting

There appears to be no distinction between internal and external reporting where environmental compliance assurance functions are concerned.

### External (Public) Reporting

Each year the EPD publishes its annual report summarizing its work and achievements over the previous year and looking ahead to key future actions.[[69]](#endnote-70) The report summarizes performance and shows trends in:

* air quality;
* noise;
* water quality;
* waste and waste management;
* EIA and environmental compliance;
* energy;
* sustainable development; and
* nature conservation.

The report is aimed at the general Hong Kong public and as such is approachable and presented accordingly.

In addition to its annual report the EPD website hosts a vast amount of environmental information that is publicly accessible and described further below. Much of that environmental information is used to develop its annual report and allows ready verification of its summarized findings.

The EPD website home page also directs users to recent reports (“Highlights”) on environmental topics.

### Scope and Transparency of Reporting

Access to large amounts of environmental information is available via the EPD website.

Its six programme areas on the home page direct the user to up-to-date and historical information that includes the topics summarized in Table 2.

**Table 2 Hong Kong EPD Programmes Areas and Information Reported**

| **Programme Area** | **Available Information** |
| --- | --- |
| Air | * Air quality health index forecast and past records * Pollutant data for 16 monitoring stations as hourly real-time data for past 24 hours, past records, monthly summary, etc. * Annual air quality reports * Reports on trends in air quality * Pollutant-specific reports (e.g., dioxins, respirable particles) * Numerous topic-specific study report |
| Noise | * Data and statistics (e.g., on effectiveness of design and mitigation) * Exposure of the population to noise * Links to real-time monitoring of airport noise * Study reports (e.g., of the effectiveness of road noise mitigation, health effects of noise) |
| Water | * Data and statistics (e.g., on beach water quality trends, annual rankings of bathing beaches, achievement of water quality objectives in Water Control Zones, marine sediment quality) * Water quality monitoring data for marine, rivers and beaches * Reports and data for specific determinands (e.g., *E. coli*, toxins, biological indicators) |
| Waste | * Data and statistics (e.g., on waste recycling, solid waste, chemical waste, sewage sludge) * Environmental performance of waste treatment centres * Study reports on specific topics (e.g., dioxins) |
| EIA and Planning (under EIA Ordinance) | * EIA reports and associated documents for applications submitted to the EPD * Decisions on projects * Conditions attached to projects approved * Environmental permit applications (and variations) * Environmental permits issued * Environmental Monitoring and Audit (EM&A) Programmes for projects * Monthly EM&A reports submitted to the EPD |
| Nature conservation | * Biodiversity action plans * Endangered species information |

Individuals may also subscribe to receive notifications of the availability of project profiles and EIA reports for comment.[[70]](#endnote-71)

In addition to information made publicly available on its website, the EPD will also, on request, provide additional information relating to its areas of responsibility, with certain exceptions. This includes access to information held for, or provided by, a third party under an understanding that it would not be further disclosed. If the EPD considers that the public interest may require disclosure, the third party would be so advised and invited to consent to, or make representations against, disclosure within a fixed time period. On receipt of consent from the third party, the information may be disclosed. If the third party makes representations against disclosure, or fails to respond within the stipulated time, the EPD will decide whether the information should be disclosed on the grounds that the public interest served by disclosure would outweigh any harm or prejudice that would result to the third party.

The EPD may refuse to disclose information under certain circumstances which are generally limited to where there is an ongoing prosecution action which could be prejudiced by disclosure.

### Whistle-Blowing

There is no apparent EPD policy on “whistle-blowing. Proposals to provide statutory protection to whistle blowers were put forward in the Hong Kong Legislative Council in 2018 and it is assumed that this is proceeding but nothing is yet in place.[[71]](#endnote-72)

There is, however, encouragement of and mechanisms for the general public to report potential environmental violations (see below).

### Complaints Procedure

The EPD recognizes the role of the community in protecting the environment, e.g., by reporting pollution incidents. Quite often it is a member of the public who is first to see or experience a pollution issue, and rapid reporting of incidents to the EPD can allow action to be taken to limit the possible damage to the environment and help identify the source of the pollution so that appropriate follow up action can be taken.

Online forms are provided to record complaints for:[[72]](#endnote-73)

* general pollution incidents, including air pollution, wastewater discharge, illegal waste disposal and fly-tipping and noise nuisance from an industry or business); and
* smoky diesel vehicles.

For the latter the online form provides an option to become a “volunteer spotter”.

Reports can also be made by phone on a Customer Service hotline or by mail to a Regional Office.

## Effectiveness

### Internal Assessment

The annual report of the EPD, as referenced above, reports on progress in the previous year and makes comparisons with previous years for a range of indicators across the programme areas. Although there are clear ongoing improvements across a range of environmental indicators, the report does not explicitly set out how effective the EPD and its actions and programmes are in influencing environmental performance in the region.

### External/Independent Assessment

This review was unable to find any sources providing an external or independent assessment of the performance of the EPD.

# Environmental Protection Authority, New Zealand

## Overview

The Environmental Protection Authority (EPA) is New Zealand’s national environmental regulator. The EPA’s main areas of responsibility, all of which have a national environmental reach or application, are:

* administering nationally significant proposals;
* managing chemicals in New Zealand;
* regulating activities in the Exclusive Economic Zone (EEZ) (other than those related to transport and fisheries);
* monitoring compliance with resource management consents;
* administering the New Zealand Emissions Trading Scheme and Register;
* making decisions about new organisms;
* raising public awareness; and
* providing science leadership.

The EPA is required to work in a way that:[[73]](#endnote-74)

* *“contributes to the efficient, effective and transparent management of New Zealand’s environment and natural and physical resources; and*
* *enables New Zealand to meet its international obligations.”*

The EPA also has specific responsibilities under the environmental acts that it manages. For relevance and brevity this case study will focus mainly on compliance assurance in the EEZ and the EPA’s responsibilities under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act).

The EPA is responsible for managing the effects of specific marine activities in the EEZ. Like all coastal nations, New Zealand’s EEZ starts 12 nautical miles from the country’s coast out to 200 nautical miles (with continental shelf extensions in places) and makes up one of the largest EEZs in the world. The EPA regulates oil and gas activities, marine scientific research, submarine cables, seabed mining, discharges and dumping activities in the EEZ (and the continental shelf).

The following points are worth noting for the purposes of this case study.

* The EEZ Act setting out the EPA’s responsibilities is a relatively recent one (enacted in 2013).
* The amount of regulated activity (oil and gas, seabed mining, at-sea disposal) in the EEZ is small compared with the UK, for example.
* The above two factors combined are to some extent reflected in the EPA’s compliance assurance approaches for the EEZ.

## The Institutional Framework

### Centralized Responsibilities

The EPA is an independent Crown Agent established under the Environmental Protection Authority Act 2011. This Act sets out the EPA’s objective (noted in Section 4.1) and functions. The other relevant legislation is the Crown Entities Act 2004, which applies to all New Zealand’s Crown agencies and includes governance and reporting requirements. In effect, this means the EPA has a Board that is responsible for its work and has a Minister to whom it is accountable.

The Minister for the Environment and the Associate Minister for the Environment are the EPA’s accountable Ministers. The EPA also keeps the Minister for Climate Change informed on issues relevant to their respective portfolios. The Ministry for the Environment, as the government’s principal adviser on environmental policy and legislation, monitors the activities and performance of the EPA. The EPA is an operational entity, not a policy agency.

The EPA Board is supported by a number of standing advisory groups and decision-making committees including :

* Ngā Kaihautū Tikanga Taiao (EPA Māori Advisory Committee); and
* Hazardous Substances and New Organisms Committee.

The EPA appoints decision-making committees and delegates responsibility to them for deciding certain marine consent applications under the EEZ Act.

The EPA also provides administrative and secretarial support to boards of inquiry or special tribunals appointed by the Minister for the Environment to make independent decisions on certain applications under the EEZ Act and resource management proposals of national significance.

A number of other government agencies are involved in EEZ activities subject to the nature of the activity and its stage (e.g., exploration or production)[[74]](#endnote-75) as shown in Figure 1.

**Figure 1 Government Agencies Involved in Administering the New Zealand EEZ**



### Strategic Planning

The EPA Board sets the strategic direction and monitors performance. Board members are appointed by the Minister for the Environment.

On a regular basis, at least every four years, the EPA publishes a Statement of Intent document, the current version being for the years 2019 to 2023.[[75]](#endnote-76) The Statement of Intent is effectively a strategy document setting out plans and areas of focus for the coming years and is one of the EPA’s key accountability documents against which its performance is measured.

The EPA sees its role as a proactive regulator underpinning the strategy for the 2019 to 2023 period with these goals:

* *“anticipate challenges and problems;*
* *set clear regulatory and enforcement boundaries that drive a change in behaviour;*
* *are risk and evidence based;*
* *consider future challenges as we act and plan today;*
* *monitor global issues and collaborate with international communities; and*
* *are independent, transparent, confident in our decisions, and set our own agenda.”*

The EPA’s overarching objective over the next four years is to move from mainly focusing on processing applications and related work, to placing greater emphasis on compliance monitoring and enforcement, and in engaging stakeholders (communities and consent applicants).

On a yearly basis the EPA publishes its “Statement of Performance Expectations”, which sets out what the EPA is committed to delivering during the coming financial year, the anticipated cost of delivery and funding allocations, and how the EPA intends to measure its performance, setting out the performance indicators and also the previous year’s performance.

### Funding

The EPA as an agency is funded through a mix of Crown funding and third-party revenue.

Crown funding is provided through three appropriations:

* EPA Decision Making;
* EPA Monitoring and Enforcement; and
* Emissions Trading Scheme.

The EPA also raises revenue from third parties through charges for processing applications for consents and other services, including marine consents. Charges for EEZ Act functions are set out under the Exclusive Economic Zone and Continental Shelf (Fees and Charges) Regulations 2013. When these were set, the principles that applied to the charges were:

* reflecting actual costs;
* not discouraging applicants;
* ensuring predictability;
* recognizing public benefits;
* enabling the EPA to anticipate planned legislative change; and
* not being a barrier to growth and innovation.

The allocation of Crown funds for the EPA’s EEZ responsibilities in 2020/21 is $2.2 million for decision-making and $1.8 million for compliance.

### Staff Resources and Training

The EPA employs approximately 170 people. The Land and Oceans Applications team (managing marine consent applications under the EEZ Act and Nationally Significant Proposals under the Resource Management Act 1991) comprises 13 staff, and there is also a seven-member EEZ Compliance team. Support is provided from within the EPA for services such as legal, communications, finance and advice from Kaupapa Kura Taiao (KKT). KKT provides advice on Māori engagement and incorporating Māori perspectives into the work of the EPA.

However, it should be noted that the EPA’s role in the EEZ is focused only on consent processing, monitoring and enforcement and there are several other government agencies with marine environmental management responsibilities (as noted in Section 4.2.1).

The EPA aims to invest in the order of 2.75% of its annual budget in staff training and professional development (see 2018 Annual Report).

The EPA is part of the Government Regulatory Practice Initiative (G-Reg)[[76]](#endnote-77) to enhance the capability of regulatory and compliance staff through participation in a tiered learning programme leading to a New Zealand Certificate in Regulatory Compliance.[[77]](#endnote-78)

### Ring-Fencing of Different Functions

New Zealand Petroleum & Minerals manages petroleum block offers and minerals tenders and promotes investment in New Zealand in accordance with the Crown Minerals Act 1991. It is an agency of the Ministry of Business, Innovation and Employment (MBIE) and is the only agency that can grant access to New Zealand’s oil, gas and Crown-owned minerals, including those in the EEZ and continental shelf. The agency also manages compliance with the requirements of the Crown Minerals (Petroleum) Regulations 2007 (as opposed to environmental compliance) and collects royalties on behalf of the Crown.

The role and functions of the EPA in considering and granting marine consents are therefore entirely separate from the promotion of exploration and extraction activity. The reporting lines into the New Zealand government are also entirely separate.

## Compliance Promotion

### General Considerations

The EPA states that it is committed to promoting compliance through regular engagement with the public, industry and other regulators.

The EPA works on the basis that most people and organizations want to follow the rules for protecting the environment. The EPA seeks to assist compliance by regulated parties by providing good information and ensuring they know they can freely approach the EPA when they need help understanding the rules. The EPA employs various means of assistance such as: providing information sheets relating to specific activities; holding targeted workshops; and sending out staff to conferences and industry meetings, and regular one-on-one operator meetings.

The EPA has developed an “EEZ Engagement Strategy and Plan” for the above engagement process, which is aimed at making sure people and organizations are being targeted with an appropriate level of engagement. The plan also directs the EPA in how it should engage with each stakeholder, so that awareness raising, provision of knowledge, feedback and the overall relationships are adapted to the particular needs of regulated parties and stakeholders.

The EPA intends to work with industry to encourage use of environmental management systems that are aligned with modern international practices (e.g., ISO 14001), go beyond minimum regulatory requirements and contribute to improved environmental performance.

Overall it would appear that the EPA relies less on providing large amounts of published guidance and best practice documents for activities in the EEZ and more on direct engagement with regulated parties as part of the marine consenting process and in exercising any consent. This is possible because of the quite small number of consent holders and potential applicants.

### Publications

#### Raising Awareness

The EPA raises awareness of its work and compliance issues through a combination of its website and the engagement programme outlined above.

The home page of the website directs users, including the general public, to latest news[[78]](#endnote-79) and also to alerts (albeit with a strong present focus on hazardous materials).[[79]](#endnote-80)

#### Providing Knowledge

The EPA has a team of scientists and technical experts who contribute to science leadership both in New Zealand and internationally. The main means of providing knowledge is via advice on government environmental policy, legislation and regulations, and directly into assessment of applications/consents.

Information on the marine environment is available elsewhere but does not appear to be clearly referenced from the EPA website, e.g., the Ministry of Environment.[[80]](#endnote-81)

#### Setting Guidance

The EPA provides some guidance documents aimed at industry and regulated parties on its website in relation to marine activities, for example in relation to seismic survey work.[[81]](#endnote-82),[[82]](#endnote-83)

Guidance is also provided on the marine consenting process and the EPA’s compliance activities and approach, for example guidance on the EPA’s decision-making criteria when considering an application.[[83]](#endnote-84)

A significant amount of the EPA’s guidance provided to the general public is generally related to use of materials that are hazardous to people and the environment (for example, see this link about “painting your boat”[[84]](#endnote-85)).

Guidance on EEZ is also produced by other government agencies such as the Department of Conservation; however, such guidance does not seem to be always clearly linked or referenced on the EPA website.

#### Communicating Best Practice

Some best practice is contained in guidance (e.g., that related to marine seismic surveys and marine mammal protection as referenced above).

#### Topicality and Relevance

The guidance material produced by the EPA is relevant to its role and function and appears to be up to date and/or regularly updated.

#### Appropriate to Audience

The guidance materials produced by the EPA are aimed at regulated industries through to the general public. By the nature of the material it is generally clear which audience is being targeted.

### Other Media

#### Web-Based Materials

As noted in the above sections, the EPA website hosts various materials related to environmental compliance and this is the primary means of providing information to the public. Regulated parties are also targeted with web-based materials.

The EPA is also active on:

* Facebook/EPAgovtNZ;
* Twitter/EPAgovtnz;
* LinkedIn.com;
* Vimeo.com;
* Instagram/epagovtnz; and
* Youtube.com.

#### Interactive Web-Based Materials

There does not appear to be any use of interactive web-based material in the context of compliance assurance for the EEZ.

#### Seminars and Training

EPA sees attendance at conferences and other industry forums that relate to EEZ operations and compliance as being beneficial to both the EPA as the regulator and the regulated parties and stakeholders. Conferences provide the opportunity to share knowledge and develop mutual understandings of the difficulties often faced on either side in the administration, enforcement of, and compliance with the EEZ Act.

When there are areas of concern about compliance matters that are similar for or common to several regulated parties or stakeholders, workshops are regarded as an appropriate tool to engage and resolve concerns. Workshops also provide an opportunity to interactively discuss technical issues and a good forum for information sharing.

### Incentivization

#### Financial

Not relevant to the functions of the EPA in the EEZ.

#### Approved Suppliers

The EPA is part of a whole-of-Government approach to procurement of goods and services. There is a pre-approved Government Supply Panel that is heavily used by the EPA for a wide range of services, including for EEZ work.

#### Awards

There are national awards schemes for the environment, but it appears that nothing specific is organized by the EPA.

## Compliance Monitoring

### Introduction

The EPA undertakes compliance monitoring by reviewing information that is routinely provided from offshore operators to meet their consent and regulatory requirements.[[85]](#endnote-86) The EPA also uses its powers under the EEZ Act to undertake inspections, visiting onshore offices and going offshore to visit structures and ships working in the EEZ on a planned basis coordinated with other regulators such as Maritime NZ and WorkSafe.

A risk-based approach is adopted to determine the level of planned monitoring and set out in the EEZ Compliance and Enforcement Programme. The EPA reviews the plan regularly to re-evaluate risks and identify priority areas, where extra focus may be required.

The use of data collected from operators and others is in accordance with the EPA’s Transparency Statement,[[86]](#endnote-87) which sets out how the EPA gathers and uses information for regulatory compliance, law enforcement and other purposes.

### Self-Monitoring

Offshore operators are required to monitor and report their effects on the environment in accordance with the marine consent they are granted by the EPA.

### Regulator Audits and Inspections

There are four ways in which the EPA checks that offshore operators are following the rules and complying with their specific marine consent conditions.

* *Assessments*: Operators may have to submit information to meet their legal obligations. The EPA assesses the information to see if it meets legal or consent requirements, before deciding whether to accept the information.
* *Desktop monitoring*: The EPA receives a wide range of regulatory information from operators and reviews it to feed into informed, risk-based decisions about whether a compliance response is needed.
* *Inspections*: The EPA conducts inspections to monitor and promote compliance with requirements of the EEZ Act, regulations, and marine consents granted under the EEZ Act. This involves EPA staff visiting an installation, office or site to conduct audits and other checks.[[87]](#endnote-88)
* *Investigations*: The EPA conducts investigations when there has been a serious environmental incident and breaches of regulations or consent conditions likely to require an enforcement action.

Physical inspections can be undertaken when:

* a new operator undertakes a particular activity in the EEZ for the first time;
* a significant statutory change affects an activity (e.g., new or changes to conditions of a marine consent);
* after the issuing of an abatement notice, enforcement order or prosecution; and
* if the EPA determines during desktop monitoring that an inspection is required due to potential unlawful activity, adverse environmental effect, or impact on an existing interest.

Planned inspections are also made in accordance with a risk-based inspection frequency described further in Section 4.4.4.

### Independent Verification

There is no formal process of independent verification. It is to be expected that regulated parties that are accredited to ISO 14001 will be subject to independent verification audits outside of the cycle of self-monitoring and EPA audits and inspections.

### Targeting/Prioritizing Strategies

The EPA focuses its compliance efforts on key priority areas to best use its finite regulatory resources. These areas of additional focus may include the following:

* cases where a cluster of similar, related or recurring incidents is found; or
* when an issue or incident affects multiple teams within the EPA and/or other government agencies; or
* when an issue or incident has caused serious community concern.

When focusing on a priority area, the EPA develops context-specific strategies and draws from the range of regulatory tools available to the agency. Clear objectives and success measures are set and internally monitored to ensure the EPA has been effective in addressing the issue. Success factors are reviewed each year and decisions made about whether to continue with a priority area and/or focus on another.

In some cases, there is a clear need for regular inspections under the strategy. The frequency of these inspections is arrived at through a risk-based approach that considers potential environmental consequences, compliance history and attitude of the operator. This feeds into an annual plan setting out specific details of which activities will be inspected, how and when.

The following steps are involved in setting the inspection frequency for discretionary inspection activities under the EEZ Act; the steps are then reviewed on a regular basis.

Step 1 involves identifying the worst-case consequence of the subject activity in the absence of any measures taken to avoid, remedy or mitigate an adverse effect (see Table 3).

**Table 3 New Zealand EPA’s Environmental Consequence Definitions**

|  |  |  |
| --- | --- | --- |
| **Environmental consequence** | **Environmental effect** | **Existing interest** |
| Severe | Extensive, regionwide impact, irreversible ecosystem damage, including species loss. Contamination that will have an ongoing residual effect. | Complete loss of trust by affected community threatening the continued viability of businesses |
| Major | Impact beyond the expected area of interest, long-term ecosystem effects endangering survival at the population level. | Long-term community unrest and outrage significantly impacting businesses |
| Moderate | Localized damage to the environment within the area of interest but no long-term impact on the ecosystem. | Many complaints requiring substantial attention |
| Minor or Insignificant | The environment will not be affected, or the predicted effect is short term or imperceptible. | Complaints from one or two interested parties |

Reproduced from the EPA’s EEZ Compliance and enforcement programme July 2018

Step 2 involves considering the nature of the operator in terms of attitude to compliance and past compliance record (see Table 4).

**Table 4 New Zealand EPA’s Operator Compliance Factors**

|  |  |
| --- | --- |
| **What is the attitude of the operator?** | |
| Poor | Deliberate decision not to comply and/or do not want to comply |
| Reasonable | Tries to comply but doesn’t always succeed |
| Good | Willing and able and does the right thing |
| **What is the compliance history of the operator?** | |
| Poor or Unknown | Poor history of compliance with requirements, or new operator with minimal compliance history |
| Reasonable | Only occasional issues with compliance |
| Good | Good compliance history and responsive to advice and recommendations |

Reproduced from the EPA’s EEZ Compliance and enforcement programme July 2018

Step 3 involves applying the risk matrix to assess overall risk (see Table 5).

**Table 5 New Zealand EPA’s Risk Matrix for Targeting Compliance Activities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Environmental Consequence** | **Operator Factors** | | |
| **Good** | **Reasonable** | **Poor** |
| **Severe** | High | Very High | Very High |
| **Major** | Medium | High | High |
| **Moderate** | Medium | Medium | High |
| **Minor or insignificant** | Low | Low | Medium |

Taken from the EPA’s EEZ Compliance and enforcement programme July 2018

Step 4, the inspection frequency then follows from the risk matrix:

* Very High, inspection every 6 months;
* High, inspection every 12 months;
* Medium, inspection every 18 months; and
* Low, inspection every 5 years (if at all).

## Compliance Enforcement

### Introduction

When a non-compliance is detected, the EPA investigates and works with the regulated party to ensure the environment is protected from damage and a return to compliance is prioritized (see also Exclusive Economic Zone Compliance and enforcement programme July 2018[[88]](#endnote-89)).

Generally, the EPA expects that regulated parties will take measures to understand the rules and follow them, and a key part of the EPA’s role is to help them do this. However, if a regulated party breaks the rules, the EPA pursues one or more of the following options:

* work with them to make sure they understand their obligations;
* use non-statutory tools such as correspondence or change of inspection frequency;
* use statutory tools such as abatement notices; and
* prosecution.

The EPA develops tailored compliance strategies for each regulated community and/or certain operators aimed at helping them understand their obligations, support disclosure of unintentional non-compliances, and engage with their views on the strategies and information that would be most effective.

Using enforcement tools to direct compliance or penalize offending are actions taken after careful consideration of the desired outcome and are taken in accordance with guidance in the EPA compliance policy document.

### Administrative Enforcement (Including Financial)

Administrative enforcement is made up of a range of approaches that includes the following:

* correspondence or meetings on specific matters/minor non-compliances;
* following assessment of a non-compliance, changing the frequency of inspection;
* automatic penalties;
* placing additional conditions on a consent;
* changing, suspending or cancelling approvals (i.e., right up to removal of the right to operate).

### Criminal Enforcement

A prosecution is the ultimate sanction and is only initiated when the EPA is satisfied that specific tests are met:

* if the evidence is sufficient to provide a reasonable prospect of conviction (the “Evidential” test); and
* a prosecution is required in the public interest (the “Public Interest” test).

The Evidential test is considered first.

A prosecution may not necessarily always proceed, even when both tests are met, if it is considered that a different compliance enforcement response is more appropriate.

The EPA Board is advised of any decision to seek a prosecution.

The EPA operates a Prosecution Policy,[[89]](#endnote-90) the purpose of which is to set out the guidelines, decision-making process and standards to be followed by EPA staff when deciding whether to prosecute and thereafter in conducting prosecutions. The policy also sets out the role of other parties, e.g., Solicitor-General’s office, that are involved in the process.

## Reporting, Accountability and Transparency

### Internal Reporting

The EPA produces regular updates and quarterly reports to its ministers. The reports address compliance matters among other things, including how the agency is doing in terms of delivering on its Performance Expectations.

Although these reports are produced as part of internal reporting, they are also publicly available on the EPA website.[[90]](#endnote-91)

At its monthly meetings, the EPA Board receives a summary of activities, risks and issues from the Chief Executive in an Organizational Update Report. The Board also receives a Dashboard Report that tracks progress against key Statement of Performance Expectation metrics.

For each consent application determined by a Decision-making Committee or Board of Inquiry there are a number of project management reporting tools used to monitor risks and issues, and at the release of a decision, a formal Close Out Report is completed. These reports are provided to the relevant Executive Manager.

### External (Public) Reporting

The EPA produces an Annual Report each year which is made available on its website. The 2018 Annual Report contained information regarding:

* statements from the EPA leadership;
* introducing the strategic framework, the Statement of Intent to be prepared for 2019 to 2023;
* a statement of performance (see Section 4.6.3);
* its internal capacity in terms of staff and related matters such as health and safety;
* financial information; and
* an auditor’s statement.

The Annual Report is underpinned by an annual “Statement of Performance Expectations”, the role and content of which is discussed further in Section 4.7.

Aside from annual financial and performance reporting, a range of other reporting is available on the EPA website mainly regarding current and past applications for marine consents,[[91]](#endnote-92) monitoring and reporting data (albeit mainly addressing non-EEZ matters such as hazardous chemicals),[[92]](#endnote-93) and on specific topics.[[93]](#endnote-94)

### Scope and Transparency of Reporting

The Annual Report is focused on the performance of the EPA in terms of its organizational functions, how it has done versus stated performance expectations and how it has served the New Zealand taxpayers and users of its services. The report therefore focuses on organizational performance and not environmental performance (see Section 4.7.1 for more information).

EEZ applications can be searched via the “Database” page on the EPA website.[[94]](#endnote-95) All documents not restricted by the Official Information Act, or otherwise considered to include sensitive information under the EEZ Act, are published on the EPA website.

Taking the Chatham Rock Phosphate application,[[95]](#endnote-96) for example, the following types of documents and reports are publicly available:

* the application documents, including the EIA and nearly 40 technical annexes to it;
* external advice and reports commissioned by the Decision-making Committee including from other government agencies;
* all public submissions;
* evidence reports and witness statements, including technical documents and reviews prepared by the applicant and other interested parties; and
* transcripts of public hearings.

Decision reports are published for marine consent applications providing the background to the application, the post-submission process and outcomes, and the rationale for the EPA’s decision. These can be substantial documents; for example, the Decision Report for the Chatham Rock Phosphate project exceeds 300 pages.

Where a consent is granted, the consent conditions are also published.

The EPA invites public participation and comment on certain EEZ (and other) applications that are required to be publicly notified via the “Public Consultations” page on its website. For those seeking to comment or make submissions, access is available to various reports and information including:[[96]](#endnote-97) the application documents (EIA, etc.); reports and advice that the EPA has sought, including topic reports prepared by experts; evidence submitted by the applicant; other submissions; and correspondence.

### Whistle-Blowing

The EPA has an internal Protected Disclosures Policy.

This policy is in place to provide protection in certain circumstances for EPA employees who disclose or “blow the whistle” on serious wrongdoing in their workplace.

The legislation that underpins this policy, the Protected Disclosures Act 2000 (the “Act”), is in place to promote the public interest by facilitating the disclosure and investigation of matters of serious wrongdoing in or by an organization. The Act and this policy provide protections for employees who follow this procedure to disclose information about serious wrongdoing within or by the EPA.

### Complaints Procedure

There is a complaints mechanism, but this seems to relate only to complaints or providing feedback about the EPA’s information-gathering activities, as set out in its Transparency Statement (see Section 4.4).

## Effectiveness

### Internal Assessment

The Statement of Performance Expectations (see, e.g., the statement for 2018-2019[[97]](#endnote-98)), as well as containing financial information and looking to the year ahead, also has a more detailed account of how the EPA has performed against its expectations than that which is presented in the Annual Report.

The Annual Report contains a section that describes the EPA’s performance against the measures and targets set out in the relevant Statement of Performance Expectations, e.g., for 2017 to 2018.[[98]](#endnote-99) The Statement of Performance Expectations provides greater detail on performance versus indicators set out in a performance framework. The performance framework links EPA’s activities in any one year with longer-term outcomes relating to the EPA’s Strategy. The performance measures relate to the three appropriations (EPA Decision Making, EPA Monitoring and Enforcement and Emissions Trading Scheme) and are grouped under the strategic goals and strategic intentions of the EPA. They are designed to cover the desired outcomes across all the EPA’s work, together with how the organization is doing in terms of the planned strategic shifts it is making.

An extract from the Statement of Performance Expectations (2018-2019) is provided in Figure 2 below.

**Figure 2 Extract from the New Zealand EPA Statement of Performance Expectations (2018-2019)**



### External/Independent Assessment

The EPA’s annual report is audited by Audit New Zealand,[[99]](#endnote-100) a government agency, in what can be regarded as an external or independent assessment of the EPA’s performance. The audit examines both accounting matters and the overall performance against the performance indicators set out in the relevant Statement of Intent. The audit findings for the most recent annual report stated that the performance information *“presents fairly, in all material respects, the EPA’s performance for the year ended 30 June 2018, including:*

* *for each class of reportable outputs:*
  + *its standards of delivery performance achieved as compared with forecasts included in the* *statement of performance expectations for the financial year; and*
  + *its actual revenue and output expenses as compared with the forecasts included in the statement of performance expectations for the financial year; and*
* *what has been achieved with the appropriations; and*
* *the actual expenses or capital expenditure incurred compared with the appropriated or forecast expenses or capital expenditure.”*

Essentially the audit findings are that the performance in terms of compliance assurance delivery was in accordance with both the Statement of Intent and the funding of the EPA.

It is also worth noting that some of the assessment of performance versus expectations contained in the Statement of Performance Expectations is based on surveys of the general public, stakeholders and customers and can therefore be considered as at least partly independent.

The Annual Report and a statement from Audit New Zealand are also publicly examined by the Local Government and Environment Select Committee of Parliament. The Board Chair, Chief Executive and senior staff appear before the Select Committee. The media is also usually present.

# Marine Management Organisation, UK

## Overview

The Marine Management Organisation (MMO) licenses, regulates and plans marine activities in the seas around England with the objective that they are carried out in a sustainable way. The MMO is an executive non-departmental public body, sponsored, among others, by the Department for Environment, Food & Rural Affairs (Defra) a UK government department. The MMO was created by an act of Parliament: The Marine and Coastal Access Act 2009.

In addition to various aspects of fisheries management, compliance and assurance, the MMO, along with other partners, is responsible for:

* planning and licensing for marine construction, deposits and dredging that may have an environmental, economic or social impact;
* making marine nature conservation by-laws;
* dealing with marine pollution emergencies, including oil spills;
* producing marine plans to include all marine activities, including those that the MMO does not directly regulate; and
* enforcing wildlife legislation and issuing wildlife licences.

For the purposes of brevity and focus, this case study reviews the aspects of the MMO’s compliance assurance practices other than those related to fisheries management.

The MMO has its own environmental compliance and enforcement strategy aimed at ensuring that the environment, public health and legitimate uses of the sea are properly protected. The MMO also seeks to provide assurance to the public that through its regulatory processes, any development in or resources extracted from the sea are executed in a sustainable manner. The MMO has a wide remit and is responsible for delivering legal functions concerning the protection of the marine environment and protected species, marine spatial planning and the licensing of marine activities and development. As a consequence of this broad range of functions, the stakeholders whose activities the MMO regulates are similarly varied; the MMO’s monitoring of compliance and enforcement activities applies to corporations, partnerships and individuals.

The MMO works in accordance with established UK principles and codes for regulators—including the Hampton Principles of Better Regulation as set out in the UK Regulators’ Compliance Code, the Legislative and Regulatory Reform Act 2006 (as amended), the principles as set out in the Investigators’ Convention (2009) and the Prosecutors’ Convention (2009). In the context of these principles and codes the MMO will use its best endeavours to ensure that monitoring activity is planned and undertaken as set out below.

1. *“Proportionate*—*Any action taken by the MMO, including monitoring, compliance or investigation, is proportionate to specific, identified, risk or need for MMO’s intervention.*
2. *Targeted*—*Those involved in high risk marine activities, those carrying out activity in high risk areas such as in or adjacent to a marine protected area, those involved in novel or complex activities, and/or those with a previous history of non-compliance can expect a greater level of monitoring.*
3. *Accountable*—*The MMO is accountable for its regulatory activity—to its stakeholders, its parent department, Ministers, the public at large and the courts;*
4. *Consistent*—*The MMO’s actions are consistent, in that it should make similar (but not necessarily the same) decisions about activity in similar circumstances, in accordance with its delegated responsibilities, statutory objective and guidance;*
5. *Transparent*—*The MMO’s regulatory actions are transparent, by publishing information to its regulated stakeholders indicating how it will, for example, process applications for licenses and what enforcement action it can take and may take in appropriate circumstances (for example by publication of this document); and*
6. *Statutory*—*When considering undertaking monitoring and compliance checks or enforcement action the MMO will have due regard to the principles contained in section 2 of the Environment (Principles and Governance) Bill when enacted.”*

To facilitate compliance across industries and users of the marine environment, the approach taken by the MMO adopts the principles of inform, educate and enforce. The MMO’s regulatory interventions which implement these principles are based on guidance, monitoring and enforcement.

## The Institutional Framework

### Centralized Responsibilities

The main decision-making and management bodies at the MMO are the MMO Board and the Executive team.

The MMO Board is made up of non-executive directors who all have the relevant experience to support the management of activities in the marine environment and the sustainable use of the seas. The MMO Board is the highest decision-making body at the MMO. The board meets regularly every one to two months and meeting minutes are placed on public record.

The board is responsible to the UK Government for a number of matters which include the following:

* determining the policy of the MMO to enable it to carry out its responsibilities and duties under the Marine and Coastal Access Act 2009 and all other relevant legislation and directions, together with guidance on sustainable development and other guidance from government ministers;
* developing and approving the short- and long-term strategy of the MMO and the means for its implementation;
* allocation of resources including financial;
* approving the Corporate Plan, Business Plan and Annual Report;
* monitoring the performance, finances, general conduct and propriety of affairs of the MMO to ensure that it is an economic, efficient and effective organization; and
* establishing and maintaining a Scientific Advisory Group and Audit and Risk Committee.

The Executive team is responsible for the day-to-day management of the MMO and is led by a Chief Executive Officer (CEO).

Fisheries management and administrative functions aside, the MMO is then made up of several teams as follows.

* The *Legal Team* advises the MMO (particularly the board and the CEO) on the performance of its functions as a regulator so that they are carried out lawfully, proportionately and openly. The team provides its advice based on the best available evidence with regard to every aspect of the MMO’s functions.
* The *Evidence Team* engages with stakeholders to collect robust research-based information to help inform an evidence-based approach to decision-making. This enables the various MMO teams to make informed recommendations and decisions on how they manage activities in the marine environment.
* The *Coastal Team* is within Compliance and Control, part of the Operations Directorate. The team is based in 14 coastal offices and works with stakeholders in all marine industries to provide guidance on compliance with regulatory requirements. It also implements control procedures, undertakes monitoring and inspections of activities, and enforces rules by addressing non-compliant activities.
* The *Marine Planning Team* is responsible for preparing, implementing and monitoring marine plans in the UK. Marine plans inform and guide marine users and regulators across the UK, managing and facilitating sustainable development in the marine and coastal environment.
* The *Marine Licensing Team* is responsible for consenting and regulating the activities under its remit in British waters that occur below “mean high water springs” level and which require a marine licence.

Figure 3 illustrates the general structure of the MMO.

### Strategic Planning

At a high level, strategic planning takes place within central government in terms of such matters as policy and direction regarding sustainable development, renewable energy and bringing EU Directives into UK Law and other activities that affect the marine environment.

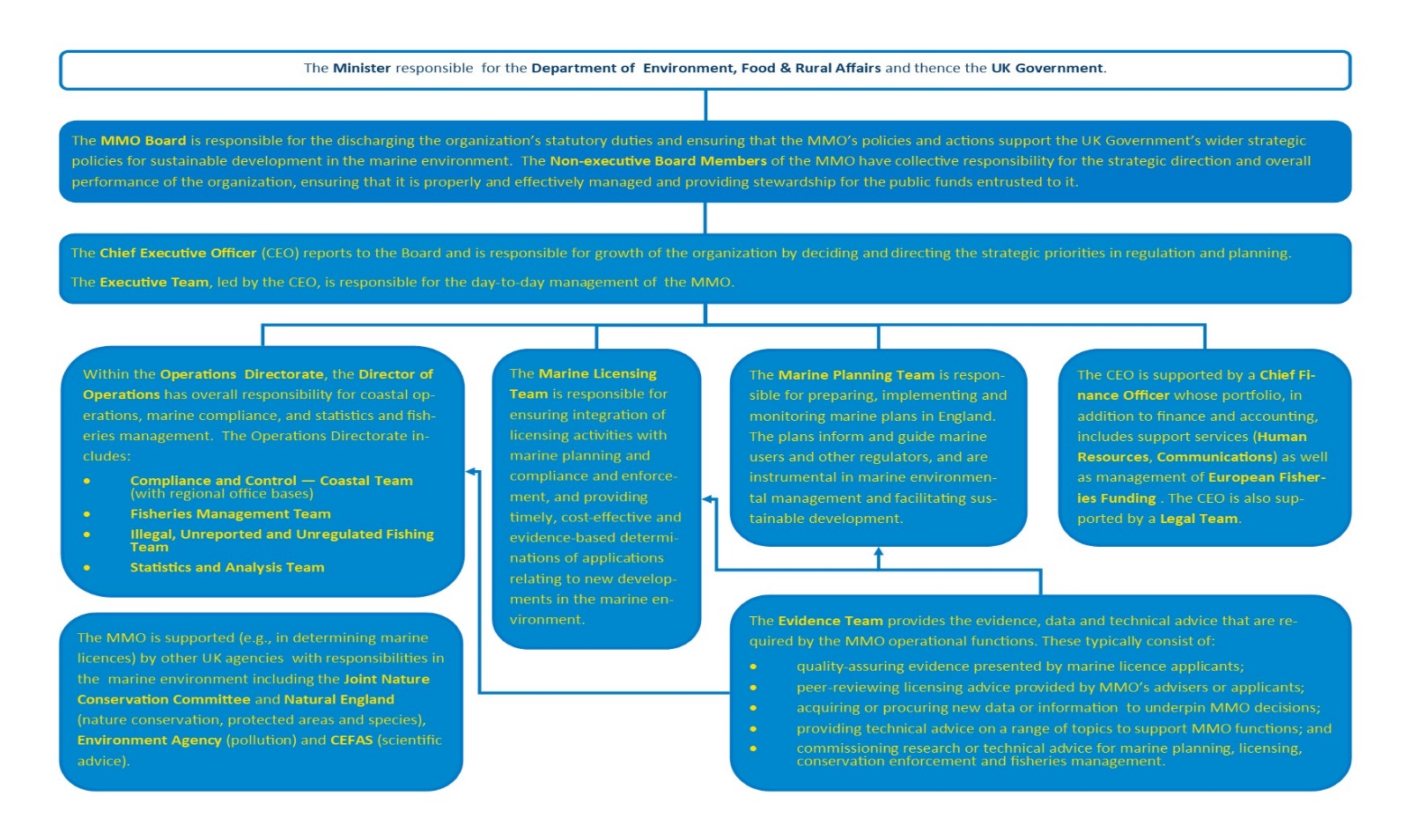
As noted in Section 5.2.1 the MMO Board is responsible for determining the policy of the MMO and developing the short- and long-term strategy for its implementation.

Strategic planning also takes place within the MMO in other ways, including marine spatial planning and the Marine Pioneer initiative (both discussed further below) and also in its approach to evidence planning (see Section 5.3.1.2).

The MMO develops marine plans based on evidence and consultation with interested and affected stakeholders. Marine plans include Implementation and Monitoring plans (IMP)[[100]](#endnote-101) which take account of the requirements in the Marine and Coastal Access Act and set out the MMO’s approach to marine plan implementation and monitoring. The IMP is relevant to other organizations that make decisions affecting the marine environment and undertake enforcement activities such as local and national government departments, nature conservation agencies and the MMO’s own decision-makers. The IMP describes what is required, alongside suggestions as to how these requirements may be met.

The IMP also provides links to tools, particularly the Marine Information System (see Section 5.3.3.2) and evidence reports.

**Figure 3 Organization of the MMO**



The MMO is also trialing Marine Pioneer, a project looking at how to apply a “natural capital” approach, in two test areas. The natural capital approach is a method that identifies resources and the risks to them so that decision-makers can try to balance different uses of the environment. The Marine Pioneer project works with local steering groups and project officers to demonstrate how to apply the approach and share lessons learned in the process. As well as identifying natural resources and risks to them, the approach also:

* looks at options and trade-offs between activities (fishing, tourism, industry, etc.) that require or affect natural resources; and
* facilitates discussion among interest groups leading to decisions on ways of protecting and restoring natural resources.

In looking at options and trade-offs it is not just monetary values that are considered but also value of places and nature to people and animals, and the overall environmental balance.

The Marine Pioneer project is part of a strategy for how marine policy will be delivered in the future.

### Funding

The MMO operates a system of charges relating to processing marine licences, requests to vary them once granted and monitoring activities being carried out under the licence post-consent.[[101]](#endnote-102) The main aim of the charging process is to recover costs from industry incurred by the MMO when carrying out its work for licence-related activities (marine planning is funded from a core budget, as is evidence, pioneer and other functions). In 2014 it was estimated by the MMO that charging for licence variations and monitoring activities alone would save the UK Government, and the taxpayer, around £5m over 10 years.

Fees and further information are published by the MMO on its website based on an hourly rate for staff and a capping system for less complex licence variations.

### Staff Resources and Training

The MMO is made up of approximately 300 staff with a headquarters in Newcastle upon Tyne, operations in London and a local presence around the English coastline in 14 provincial towns and cities.

The MMO encourages continuing professional development for its staff.

The MMO is also able to call upon the considerable resources of the Centre for Environment, Fisheries and Aquaculture Science (Cefas)[[102]](#endnote-103) for technical and scientific advice and related inputs, together with other organizations such as the Joint Nature Conservation Committee (JNCC) and Natural England.

### Ring-Fencing of Different Functions

The function of the MMO as a body involved in compliance monitoring and enforcement is effectively separated from other government functions by its creation under the Marine and Coastal Access Act 2009 and its general objectives as set out in the act.[[103]](#endnote-104) The MMO can be influenced on how it goes about meeting its objectives by guidance issued by the relevant secretary of state. Such guidance is required to be put to each house of Parliament for approval or not as the case may be.

Overall the MMO’s functions in compliance monitoring and enforcement can be viewed as independent within the context of the controls over government regulatory bodies that exist within any open democratic system.

## Compliance Promotion

### General Considerations

A key aspect of the way the MMO works is to try to ensure that all regulated parties understand what rules apply to their particular industry, together with the rationale behind the regulation.[[104]](#endnote-105) Where parties are not aware of the rules that apply to them, or require further guidance to ensure they are compliant, the MMO assists them by providing guidance and undertaking awareness-raising activities, where possible, as a first step to achieving compliance. When new or complex legislation or rules are introduced, the MMO endeavours to provide an appropriate “education period” where regulatory effort is focused on guiding industry and providing clarity to facilitate compliance.

### Publications

#### Raising Awareness

In addition to the proactive measures taken by the MMO noted in Section 5.3.1 above, it also provides awareness-raising materials on its website. Key topics related to compliance promotion (and assurance) are accessible directly from the MMO web page, with onward links to additional information and document resources thereafter. The key topics include:

* marine planning;
* marine licences;
* protected sites and species;
* marine pollution;
* regulations: monitoring and enforcement; and
* evidence register and reports.

Awareness raising is reinforced by various web-based materials and other use of media (see Section 5.3.3).

#### Providing Knowledge

The MMO recognizes the need to better understand complex marine ecosystems and the effects of human activity on them and that to do so access to high-quality evidence is critical. An evidence base of up to date research allows better-informed decisions to be made.

The MMO identifies topics for enhancing and adding to the evidence base in its “Evidence Strategy 2015 to 2020”. The strategy sets out the MMO’s evidence requirements and how they will be delivered, and there is a dedicated team and leadership input to achieving this: the Evidence Team.

* Part 1 of the strategy, regularly updated, identifies and prioritizes evidence gaps and sets out existing delivery functions and the associated evidence base for these functions.
* Part 2 of the strategy, regularly updated, sets out how knowledge exchange, partnership and influencing research will be used to deliver the future evidence requirements.

Development of the strategy included a review of evidence requirements and then preparation of a more detailed Evidence Delivery Plan for each requirement. The plans include research requirements, how the evidence will be used, a proposed method for filling the gap and a summary of existing evidence and current activity. In keeping with the MMO strategy of knowledge sharing and collaboration, all the evidence reports are published and available online in terms of both ongoing and completed work.[[105]](#endnote-106)

In excess of 50 evidence reports have been published, contributing to the increasing evidence base supporting marine management. Many of the reports also provide a useful evidence base for undertaking EIAs of new proposed developments.

In addition, the MMO has:

* established two Natural Environment Research Council “Knowledge Exchange Fellowships” to support the update of marine science into management;
* multiple universities currently working with the MMO to deliver evidence to support marine management; and
* three PhD researchers and a number of MSc students supported by the MMO to work on relevant topics for the evidence base.

The MMO maintains a “Master Data Register” tool for data management which contains information, a large part from third-party sources, to support its regulatory and decision-making functions and which is also a good reference point for marine licence applicants in planning their projects and undertaking EIAs.[[106]](#endnote-107)

#### Setting Guidance

The MMO provides guidance on several matters on its website.[[107]](#endnote-108) The majority of non-fisheries guidance covers procedural matters for developers rather than recommending practices they should adopt in actually executing their activities in the marine environment. It should be noted that in addition to general guidance provided by the MMO there is also a larger body of guidance published by industry bodies and other government agencies (such as national nature conservation organizations).

Where an EIA is required in support of an application for a marine licence, guidance is provided on aspects of the EIA process itself and matters related to it:[[108]](#endnote-109)

* the EIA process itself including screening and scoping;
* Environmental Statement review, an optional pre-application review of documents by the MMO; and
* how the application and Environmental Statement are considered and the factors involved in the decision.

Some specific parts of the marine environment benefit from protection in law including marine conservation zones (MCZs), European protected sites and protected species’ habitats. In addition, laws and regulations also exist to protect the environment from specific types of harm stemming from the Water Framework Directive (WFD) and Waste Framework Directive (WaFD). Further guidance addresses these:

* Marine Conservation Zone assessment (Stage 1 and Stage 2 Assessment);
* Habitats Regulations assessment;
* Water Framework Directive (WFD); and
* Waste Framework Directive (WaFD).

The MMO also provides more detailed guidance on matters that it is very directly involved in such as the Water Framework Directive application in estuarine and coastal waters[[109]](#endnote-110) and derogation provisions (i.e., exemption or relaxation of requirements) under the Habitats Regulations.[[110]](#endnote-111)

Applicants are required to supply information of sufficiently high quality to allow the MMO to make a decision about the environmental impact. The MMO is prepared to actively advise on the evidence required during the pre-application phase and direct applicants to relevant parts of its own evidence base.

The MMO also provides specific guidance on sediment monitoring, sampling and analysis.[[111]](#endnote-112) The sediment sampling and analysis guidance is supplemented by stringent requirements set out by the MMO for bodies providing these services (see Section 5.3.4.2).

Generally, the MMO does not provide guidance to developers on how to go about their activities where such guidance already exists as materials issued by industry sector bodies (such as the British Marine Aggregate Producers Association[[112]](#endnote-113)) or other government bodies (such as the JNCC[[113]](#endnote-114) and the MMO’s key adviser, Cefas[[114]](#endnote-115)). The MMO website does, however, provide links to relevant guidance.

#### Communicating Best Practice

Good and best practice guidance in the UK marine sector tends to be produced by industry and industry associations rather than developed by the MMO. However, the MMO does contribute to the development of some best practice guidance and also puts its name to it.[[115]](#endnote-116)

#### Topicality and Relevance

The MMO previously developed and implemented a Framework Agreement for Marine Scientific Advice.[[116]](#endnote-117) This agreement provided for the commissioning in an open and transparent manner by the MMO of high-quality research and technical advice. It focused on priority areas and evidence relevant to the MMO’s decision-making.

Eighteen consultants and scientific organizations (typically forming small consortia for each topic) were selected to provide these services, which the MMO regarded as being important in underpinning its decisions with high-quality science, best available evidence and technical advice.

The “Technical advice” topics comprised:

* marine and coastal ecology and biodiversity;
* marine and coastal physical characteristics and processes;
* marine chemistry, biogeochemistry and ecotoxicology; and
* terrestrial impacts from marine-based activities.

The “Research” topics comprised:

* social science and economics;
* co-location and cumulative effects;
* marine fisheries; and
* ecosystem services.

Subsequent to the above initiative, the MMO now commissions all evidence through an open and transparent commissioning process including promoting needs and advertising potential contracts on open access central government tendering systems.

#### Appropriate to Audience

The MMO’s compliance promotion materials are aimed at developers planning activity in the marine environment (and those involved in fishing activity), together with persons and organizations advising developers in, for example, undertaking EIA or monitoring work. The material varies from providing “roadmaps” through the requirements and procedures to detailed scientific studies that make up an evidence base.

### Other Media

#### Web-Based Materials

The MMO website hosts a large number of materials that support compliance promotion that can be readily navigated to from the home page.[[117]](#endnote-118)

Several web pages (including Guidance and Regulation[[118]](#endnote-119)) allow users to subscribe to feeds and/or email alerts.

The MMO also makes use of social media including Twitter, Facebook, LinkedIn, marine Developments Blog and YouTube.

#### Interactive Web-Based Materials

The MMO makes use of interactive materials that are based on geographic information system (GIS) approaches.

The Marine Information System (MIS) displays the appropriate marine policy documents for all of England’s marine plan areas in an accessible online, quick reference format.[[119]](#endnote-120) It is aimed at interested parties seeking to understand marine plans, particularly in the context of proposals. The MIS is also designed to provide support to public authorities in their use of marine plans in decision-making.

Within MIS, the marine plan policies have been allocated into categories relating to the various considerations addressed by each adopted marine plan and the UK Marine Policy Statement (MPS). Within each policy category a map shows data related to each policy of adopted marine plans, alongside text setting out considerations that will aid in the interpretation of marine plan policies in the context of any given interest or proposal.

The MIS also contains an interactive map that allows a user to layer marine plan policy data relating an area of interest alongside information related to marine licences.

The MMO also maintains a marine planning evidence base which presents information on all sectors and activities submitted to support the development of marine plans, including environmental, economic and social data.[[120]](#endnote-121) Data included in the evidence base comes from a range of sources, including the MMO itself, other regulatory bodies and industry.

Other types of evidence are used to also support the development of marine plans including reports and academic papers (see Section 5.3.2.2 and the MMO’s Evidence Strategy).

By providing access to the marine planning evidence base the MMO can ensure that data is robust, fit for purpose and relevant to marine planning. The evidence is accessible via an interactive map which allows a user to view spatial data relating to an area of interest. Users are able to submit data to the MMO to be added to the database and also suggest changes; online guidance is provided for users wishing to do this.

#### Seminars and Training

Over the years the MMO has undertaken a number of activities that have included:

* outreach to industry around approaches to marine licensing;
* workshops and seminars on policy, marine planning, issues and evidence and other subjects.

The latter type of activity included hosting regional events all around the country.

### Incentivization

#### Financial

As with any regulatory organization, there is no direct financial benefit from the MMO for compliance as far as regulated parties are concerned.

#### Approved Suppliers

The MMO does not adopt an approved supplier approach in the context of its own suppliers having an influence on environmental performance. However, in order to advance data integrity, the MMO operates a laboratory validation process in consultation with Cefas for laboratories that undertake analysis of samples in support of marine licence applications and compliance monitoring.

In order to become a validated laboratory, specific information must be submitted to the MMO for review through the MMO’s Marine Case Management System. This information includes the following.

* A Laboratory Capability Statement must be provided confirming that minimum standards are met.
* Methodological Statements must be provided with details in the performance characteristics of the methods within the methodological statement. Laboratories are able to use methods other than those specified by the MMO but must demonstrate they are fit for purpose. Sediment analysis outputs must be comparable with those obtained using the methods detailed set out by the MMO.

Laboratories seeking validation are encouraged to engage with the MMO before applying and are also subject to various specific requirements and an ongoing competence review. The MMO and Cefas charge for validating laboratories.

Failure to comply with the expectations of the MMO results in the MMO withdrawing validation, meaning the laboratory will no longer be allowed to analyse marine sediments to inform marine licence applications.

#### Awards

Presenting awards or running award schemes is not an activity that the MMO is involved in.

## Compliance Monitoring

### Introduction

The MMO has a compliance and enforcement strategy.[[121]](#endnote-122)

The MMO uses the various monitoring and enforcement measures at its disposal to:

* protect the marine environment;
* ensure that no party engaged in regulated activity gains an unfair market advantage by breaking the rules; and
* ensure that no party is disadvantaged by being compliant.

The MMO is in the process of developing a “trusted customer” model aimed at benefitting those regulated parties whose businesses are conducted in the marine environment in a compliant manner. This strategy is also aimed at helping the MMO to build a reliable database of evidence of compliance and non-compliance aimed at informing the effectiveness, consistency and proportionality of the MMO’s regulatory activities in the future.

### Self-Monitoring

When a marine licence is awarded by the MMO it comes with a set of conditions and included in the conditions is a range of monitoring work to be undertaken by the licence holder. This will include pre-activity baseline surveys, monitoring the impacts of specific activities and periodic monitoring at specified intervals. An extract from some typical licence conditions is provided in Table 6.

**Table 6 Extract from MMO Marine Licence Conditions for Sand and Gravel Extraction**

| **Topic** | **Wording of Licence Condition** |
| --- | --- |
| Seabed monitoring | Unless otherwise stated, reports of the operational stage monitoring will be submitted to those bodies listed in condition 5.2.53 within 9 months of completion of monitoring surveys. The programme must initially include the following surveys, unless otherwise agreed with the MMO:  (i) Bathymetry: a full coverage swath bathymetric survey of the area dredged, plus a 500 m buffer around the area dredged, must be undertaken in Year 2, 4 and 9. The extent of the survey must be determined with reference to EMS track plot data and must be approved by the MMO. The data must be compared with previous datasets to assess any significant changes to the seabed and monitor the thickness of resource on the substrate. XYZ files must be provided with all reports.  **Reason**: understanding the thickness of deposits feeds into compliance with (iii) below.  (ii) Seabed Features: a full coverage sidescan sonar survey of the area dredged, plus a 500 m buffer around the area dredged, must be undertaken in Year 2, 4 and 9. These must be interpreted to produce a seabed features chart and any observed changes noted. The extent of the survey must be determined with reference to EMS track plot data and must be approved by the MMO. The data must be compared with previous datasets to assess any significant changes to the seabed.  **Reason**: to secure the effective environmental monitoring of the dredging in the interests of protecting the marine environment and to assess whether dredging operations are consistent with the predictions made in the EIA.  (iii) Resource Assessments: the licence holder must assess remaining sediment thickness using baseline resource data and bathymetric data in conjunction with bathymetric monitoring data collected in Year 2, 4 and 9 confirming the depth and extent of sand and gravel resource remaining. The data shall be interpreted to produce updated resource information for the marine licence area. Charts must be produced clearly indicating any areas where coverage of resource is 0.5 m or less, as averaged over a 250 m by 250 m grid centred on 125 m nodes.  **Reason**: to identify Exclusion Zones for areas of resource thickness of 0.5 m or less and to ensure that sufficient habitat is retained to allow benthic re-colonisation of the active dredge zone (ADZ) upon cessation of dredging activity.  (iv) Seabed Sediment Sampling: a seabed sediment grab sampling survey must be undertaken during Year 4 and 9, in conjunction with the benthic ecology survey.  **Reason**: to secure the effective environmental monitoring of the dredging in the interests of protecting the marine environment and to assess whether dredging operations are consistent with the predictions made in the EIA.  (v) Benthic Ecology Survey: a survey must be undertaken by the licence holder in Year 4 and 9. The specification and scope of the survey is to be agreed with the MMO in advance and must be based on the area dredged since the last survey as indicated by EMS data.  Geophysical survey data commissioned by the licence holder must be assessed by an accredited and professionally qualified marine archaeologist as a component of any ongoing monitoring programme or post-dredge survey.  **Reason**: to secure the effective environmental monitoring of the dredging in the interests of protecting the marine environment and to assess whether dredging operations are consistent with the predictions made in the EIA. |
| Annual report | The licence holder must produce an annual report on compliance with the conditions to which this marine licence is subject. The report must detail any monitoring undertaken during the previous year. The licence holder must submit copies of the compliance report to the MMO and to those bodies listed in condition 5.2.53 within 3 months of the end of each 12-month period following the date of commencement of dredging.  **Reason**: to ensure that the MMO is kept informed in a timely manner of the licence holder’s compliance with the conditions to which the licence is subject. |

### Regulator Audits and Inspections

The MMO undertakes monitoring through desk-based review of information submitted by the licence holder and/or site-based inspection to measure the level of compliance with the terms and conditions set by the MMO as the regulator to support the regulated party to comply with their legal requirements.

Monitoring may include determining whether the holder of a licence is complying with any conditions attached to that licence. Monitoring will also include ensuring that other activities are being carried out in a manner which complies with the overarching regulatory framework. Where the MMO undertakes monitoring activities, it seeks to place the minimum practicable burden on the regulated party, except to the extent that it is believed necessary to achieve compliance.

The MMO’s own monitoring activities usually take three forms as described below.

* *Administrative monitoring*: This type of monitoring activity includes an administrative check of automated licences that have been granted to ensure any requirements are met. It may also include, where appropriate, the use of digital systems to enable those regulated to self-monitor.
* *Assessment of data and information*: This includes reviewing data which are provided by users as part of any condition or licence to assure that the necessary data submissions or returns are correct. This could include cross-checks against another separate data sources to verify the information.
* *Inspections*: This includes inspections from Marine Enforcement Officers (MEOs) to premises and vessels in order to undertake checks that the required licence conditions or any legislative requirements are being adhered to. The requirement to undertake inspections varies. For example, more routine inspections are undertaken to provide necessary checks to ensure that legislative rules which underpin environmental performance requirements are complied with. More targeted inspections are required where the MMO’s risk and intelligence processes indicate that there are compliance issues which need to be addressed.

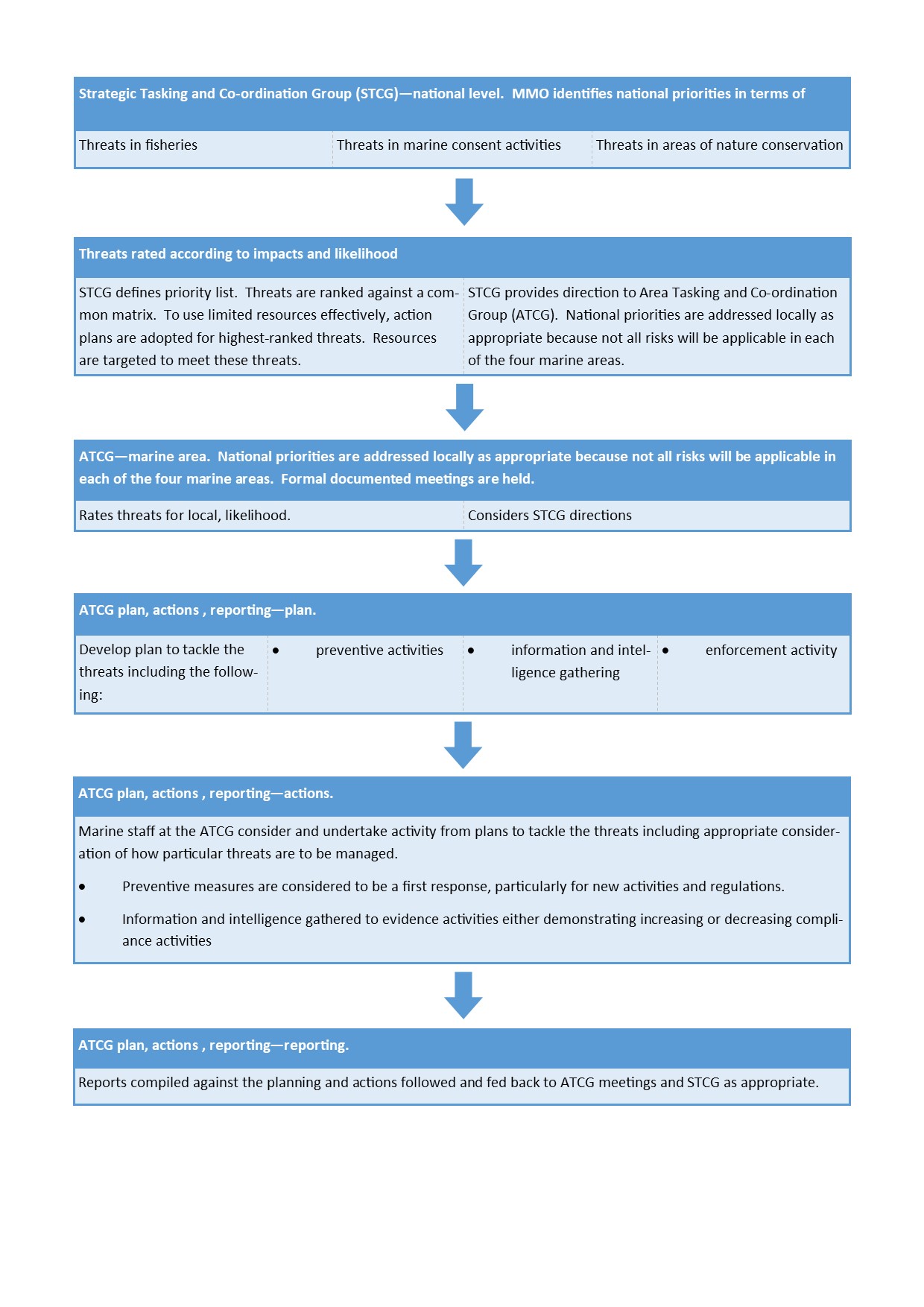
### Independent Verification

To some extent the MMO inspections can be regarded as an independent check on the performance of a business operating in English waters. However, it is also worth noting that there is a high take-up of ISO 14001 accredited environmental management systems by companies and their contractors working in English waters. For those companies that are ISO 14001 accredited, independent verification of operating businesses is done through ISO 14001 verification audits which are conducted by an external independent party.

### Targeting/Prioritizing Strategies

The MMO targets and prioritizes its compliance activities through an approach it refers to as intelligence-led risk-based enforcement (ILRBE). The approach is set out in the paper: *Risk-based enforcement process: Risk monitoring of non-compliant behaviours* and summarized in Figure 4.

**Figure 4 The MMO’s** **intelligence-led risk-based enforcement process**



## Compliance Enforcement

### Introduction

Enforcement is where a formal investigation is undertaken to establish whether a regulatory or legislative breach has taken place regardless of whether enforcement action is taken against any person by the MMO under statutory or common law powers; but does not include oral warnings or advisory notices designed to educate and help stakeholders achieve compliance.

### Administrative Enforcement (Including Financial)

The range of administrative enforcement tools which the MMO may use in order to achieve compliance in relation to its functions are set out below.

With its powers under the Marine and Coastal Access Act 2009, the MMO has the ability to issue a variety of notices in relation to marine licensable activities.[[122]](#endnote-123) These are:

* stop notices;
* emergency safety notices;
* remediation notices;
* variation notices;
* revocation notices; and
* suspension notices.

In the marine aggregate extraction sector, administrative enforcement options are typically contained in a marine licence associated with substantive reviews of the effects of dredging. At intervals specified in the licence (e.g., the fifth and tenth years), the licence holder must submit to the MMO and others a substantive review of the dredging operations that have taken place, summarizing the results of the monitoring undertaken to that date and detailing such matters as:

* the impact of dredging operations on the marine environment;
* the effectiveness of the conditions imposed on the dredging operations and recommending any variations to the dredging operations as may be necessary to protect the environment; and
* any recommendations of variations to the monitoring programme as may be necessary to ensure that effective environmental monitoring of the dredging is maintained.

The licence holder is required to cease dredging whilst the substantive reviews are being considered if:

* the data collected or analysis undertaken to inform the substantive review fails to conform to the agreed specifications and in consequence there is insufficient evidence for the MMO and others to determine whether unacceptable impacts have occurred; and/or
* the MMO has outstanding concerns during the substantive review process that unacceptable effects on the environment have occurred that were not originally predicted in the EIA; and/or
* the MMO confirms in writing to the licence holder that unacceptable environmental damage has occurred as a result of aggregate dredging.

For most marine activities where there is evidence that an offence has been committed but it is not appropriate to implement formal prosecution proceedings, an official written warning letter may be sent to the regulated party, outlining the alleged offence, when it occurred and what regulation(s) were breached. It will also set out that it is a matter which could be subject to prosecution should the same behaviour occur in the future. This may be sent without prejudice to other purely civil remedies.

The MMO has a range of powers available to it regarding the prevention of offences and investigation of offending. Many of these powers are common to the investigation of suspected offences relating to wildlife and environmental matters undertaken by other regulators. Among the more frequently used powers by the MMO are:

* the power to enter and search business premises and, in exceptional circumstances, dwellings;
* the power to require production of and to inspect documentation;
* the power to seize items, including computers, where necessary;
* the power to detain vessels or marine installations; and
* the power to monitor licensed activities or development to ensure compliance with licence conditions.

The MMO will exercise its powers appropriately and in a manner proportionate to the particular situation.

### Criminal Enforcement

Under the Marine and Coastal Access Act 2009 the MMO has powers as a public prosecutor.[[123]](#endnote-124) Criminal prosecutions are regarded as an important tool in discouraging non-compliance.

Criminal enforcement is used where the non-compliance (i.e., offending):

* Is considered particularly serious;
* is repetitive;
* may cause significant harm to the environment;
* has resulted in significant unlawful profit;
* has caused a disruption of the market concerned to the disadvantage of other legitimate operators; or
* requires serious action when all the circumstances relating to the alleged offending and the offender are considered.

A prosecution may be commenced where it is felt that the matter is too serious or not suitable for another form of sanction such as an official written warning or fixed administrative penalty. A prosecution will proceed when (a) the MMO is satisfied that there is sufficient evidence of the alleged offending and (b) that there is a clear public interest in proceeding with the prosecution.[[124]](#endnote-125)

### Other Sanctions

Where monitoring identifies minor infringements and there is an opportunity to secure compliance the MMO uses the following approach.

* Oral Advice: This will take the form of informing the regulated party what needs to be done or changed to become compliant.
* Advisory Letter or Report: Where it is believed that minor regulatory breaches may have been committed and it is appropriate to do so, an advisory letter or report may be sent setting out the minor infringements and reminding the regulated party of the need to address the issue. This communication may occur without prejudice to other purely civil remedies.

On the occasions where the above tools do not resolve the compliance issue, the matter will then be investigated in line with the MMO’s Risk Based Enforcement Process.

## Reporting, Accountability and Transparency

### Internal Reporting

The monitoring and other reports provided by licence holders are reported internally within the MMO and although they are shared with other agencies they are not open to public scrutiny. The MMO does add the date generated by such monitoring and reporting to its overall evidence base.

### External (Public) Reporting

The MMO publishes an annual report which contains a “Performance Report” and “Accountability Report”[[125]](#endnote-126) (see also Section 5.7.1).

The MMO also has a public register of current applications for marine licences and associated decisions, EIA documents (including screening and scoping opinions) and Wildlife licences issued.[[126]](#endnote-127)

The MMO publishes responses made to “freedom of information” requests.[[127]](#endnote-128)

The MMO reports on how it is contributing to the management of marine protected areas (MPAs).[[128]](#endnote-129)

### Scope and Transparency of Reporting

#### Public Register

Users of the MMO website (including the general public) are able to view and download pending applications for marine licences and wildlife licences.[[129]](#endnote-130) The information available for each marine licence includes a case summary, all EIA-related reports and data, public representations (and the facility to make a representation) and consultation outcomes.

#### Freedom of Information Requests

The scope of reporting under freedom of information is relatively broad and includes such matters as pending applications for development projects and details of the MMO’s internal approach to topics such as its Evidence Strategy. Any party is able to make a freedom of information request.

#### Marine Protected Areas

The MMO works with partners and advisers to support the UK government’s aim of having a well-managed network of MPAs. The MMO encourages stakeholders to input evidence and provide feedback to help it assess and review potential risks. The MMO publishes information about the MPAs, including an outline of the designated features, and relevant statutory nature conservation advice. It also describes some of the key areas of relevant management activity it is engaged in along with a summary of current priorities.

### Whistle-Blowing

The MMO has in place a Disclosures in the Public Interest (Whistle Blowing) Policy and Procedure and encourages staff to use the procedures to raise concerns about any past, present or imminent wrongdoing. The MMO commits to take all concerns seriously, that all allegations will be promptly investigated and that appropriate, and proportionate, action will be taken. An audit completed in June 2016 concluded from testing that the MMO’s approach was consistent with best practice guidance.

### Complaints Procedure

The MMO operates a complaints process for its customers, including applicants for marine licences.[[130]](#endnote-131) The process involves a staged approach to investigation and resolution with timescales set out by the MMO. It is not clear if this complaints procedure extends to the general public and NGOs.

## Effectiveness

### Internal Assessment

As noted in Section 5.6.2, the MMO Annual Report includes a report on performance.

The MMO’s contribution to the UK Government’s vision for clean, healthy, safe, productive and biologically diverse oceans and seas is set out in an Action Plan for 2018/19.[[131]](#endnote-132) The Action Plan describes how the MMO intends to contribute to the achievement of UK Government’s strategic objective of Environment: A cleaner, healthier environment, benefiting people and the economy. The MMO supports the delivery of this strategic objective by contributing to relevant underpinning aims and its performance is reviewed against these aims. For example, performance regarding the aim of “cleaner, healthier, more productive and biologically diverse seas” is considered in terms of activities and achievements in marine planning, marine licensing, marine conservation and other environmental objectives.

For the review year, the MMO identified a range of measures and associated key performance indicators to monitor and measure performance in support of the strategic objectives and track delivery of the Action Plan. Through the year, performance of the Action Plan was regularly assessed by the MMO’s Delivery Review Group (DRG) and the MMO Board considered performance at each meeting.

One of the MMO’s duties is to review and report on the effectiveness of its marine plans. This is done at intervals of not more than three years after each marine plan is adopted. After each review, decisions will be made whether or not the marine plan needs to be amended or replaced (see, e.g., East Inshore and East Offshore Marine Plans Executive Summary[[132]](#endnote-133)).

### External/Independent Assessment

An external review of the MMO is undertaken every three years.[[133]](#endnote-134) However, this review assesses “form” (how the organization is structured and governed) and “function” (what the organization does and how it does it). It does not measure the effectiveness in terms of “an improved marine environment”.

There is also an annual internal audit plan to provide assurance in specific items of relevance (e.g., the use of evidence at the MMO) with audits conducted by a third party.

# Parties to the Nauru Agreement

## Overview

The Parties to the Nauru Agreement (PNA) controls the world’s largest sustainable tuna purse seine fishery. The PNA members are the Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands and Tuvalu. The PNA controls approximately 50% of the global supply of skipjack tuna, the most commonly canned tuna and a resource of significant economic value to the PNA nations.

The focus of PNA efforts to sustainably manage tuna is through the “Vessel Day Scheme” (VDS). PNA members agree on a limited number of total fishing days for the year; the actual number each year being based on scientific advice on the status of the tuna stocks. Fishing days are then allocated by PNA country and sold to the highest bidders, which may include foreign flag vessels. The Pacific islanders of the PNA states therefore gain economic benefits from their sustainable management of tuna.

The Agreement has three Implementing Arrangements which set out the specific rules for tuna fishing.

In 2011, the PNA skipjack tuna caught without using FADs was certified by the Marine Stewardship Council as sustainable, creating the world’s largest sustainable tuna purse seine fishery.

The well-managed fishery is noted to have a number of important conservation measures and other benefits including: high seas closures to fishing, controls on Fish Aggregating Devices, protection for whale sharks and active efforts in limiting bycatch of other species (for example dolphins) caught in PNA waters.

## The Institutional Framework

### Centralized Responsibilities

Overall fisheries management decisions, setting of rules and allocating the total fishing days for the year are made as a collective with minister-level representation from all the member states of the PNA.

Day-to-day administration of the work of the Fisheries Observers and related activity is implemented at the individual member state level.

### Strategic Planning

A key aspect of strategic planning relates to scientific monitoring and analysis of stock status. This in turn feeds into a decision on the total number of fishing days in the coming year to be allocated among the member states and thence auctioned to fishing vessel operators.

Broader strategic planning is undertaken by the member state Ministers representing the PNA addressing such matters as strengthening the PNA and the cooperation between the Parties and increasing the PNA influence on regional tuna fisheries management.[[134]](#endnote-135)

### Funding

Revenue is generated from licence fees paid by fishing vessels and observer (see Section 6.4) fees. It is assumed that funding of the administration of the Agreement, including scientific monitoring of tuna stock status, is drawn from this revenue.

### Staff Resources and Training

Each member state contributes to the administration of the Agreement, including provision of observers. Taking the Marshall Islands as an example, 55 Fisheries Observers were active in 2017, although the figure had been higher for 2016 at 65.[[135]](#endnote-136)

The Marshall Islands Marine Resource Authority (MIMRA) held two observer training sessions in 2016 and 2017, adding 32 newly trained observers to the MIMRA Fisheries Observer team. MIMRA runs an observer training programme in association with the College of the Marshall Islands. In recent times the programme has targeted unemployed youth and high school dropouts, encouraging them to see the fisheries sector as a career path they enter by going through the Observer Programme. Since 2015, MIMRA and the College have employed a full time Pacific Islands Regional Fisheries Observer (PIRFO) Trainer. This has helped increase the number of training programmes annually and build capacity in the MIMRA Observer Programme.

### Ring-Fencing of Different Functions

Although the PNA could be viewed as promoting fishing, receiving revenue from it and regulating it all within one administration (albeit spread across the member states), its context is important: to manage a sustainable fishery such that all the islanders of the member states can benefit equally now and in future years.

## Compliance Promotion

Compliance promotion is not especially relevant. The Implementing Arrangements set clear rules (see Section 6.4) and licence holders are required to abide by them.

## Compliance Monitoring

### Introduction

The 1st, 2nd and 3rd Implementing Arrangements of the Agreement contain various rules and other requirements that fisheries are required to adhere to. These cover such matters which include (but are not limited to):

* the requirement to carry the licence at all times;
* the requirement to carry an observer (referred to as “Authorised Personnel” in the 1st Implementing Arrangement) on all vessels and make provision to facilitate the discharging of their duties;
* the requirement to have a functioning automatic location communicator (or mobile transmitting unit) on the vessel at all times and specified procedures to adopt in the event the equipment fails or becomes faulty;
* FAD closure requirements;
* mesh size specifications;
* daily recording of catch and maintenance of a logbook;
* notice of entry to and exit from the fishing zone;
* vessel identification marking, including radio call sign;
* trans-shipment of catch at sea;
* bunkering at sea; and
* targeting tuna that are in association with whale sharks.

### Self-Monitoring

There are various items of information that the vessel operators are required to record and report in accordance with the various rules set out in the Implementing Arrangements.

In addition to automatic transmission of vessel position, reporting requirements include:

* daily effort and catch records in specified formats;
* times of entry to and exit from fishing zones of the PNA member states along with catch data; and
* provision of reports in specified formats within specified times after completion of a trip.

### Regulator Audits and Inspections

Under its Observer Programme the PNA member states have observers on board all licenced purse seine fishing vessels in PNA waters. The observers are trained independent monitors of what is taking place at sea and on board the vessel and have a key role in ensuring compliance by vessel operators with PNA conservation and management rules.

More recently, as part of extending the Vessel Day Scheme to long-line tuna fisheries, the PNA has considered the use of on-board videos.

### Independent Verification

There is no additional independent on-board verification above and beyond the role of observer.

### Targeting/Prioritizing Strategies

Since the PNA was first established in 1982, the Parties have reviewed their priorities periodically as represented by the three Implementing Arrangements, the third of which was amended in May 2019, bringing in new requirements around FADs, for example.

The recent move to extend the Vessel Day Scheme to long-line fisheries represents a new priority.

## Compliance Enforcement

### Administrative Enforcement (Including Financial)

Under the Palau Arrangements for long-line and purse seine fisheries, transgressions of certain rules can result in a vessel being removed from the regional register of long-line[[136]](#endnote-137) or purse seine[[137]](#endnote-138) fishing vessels. Similarly, administrative enforcement measures can be applied in regard to failure of a vessel’s Automatic Location Communicator, up to a requirement for a vessel to cease fishing and calling a vessel into port.

Imposition of additional FAD closures by a Party are provided for in the 3rd Implementation Arrangement.

### Criminal Enforcement

Arrest, criminal prosecution and fines are among the compliance enforcement measures available.

## Reporting, Accountability and Transparency

A number of internal reports, including an Annual Report, are accessible on the PNA website but require a user to log in.

## Effectiveness

### Internal Assessment

The main aspect of internal assessment is assumed to be the scientific monitoring of stock status, alongside analysis of data provided from catch recording.

In addition, the implementing arrangements include provision for a review by the Parties to establish the effectiveness of the measures.

### External/Independent Assessment

Possibly the most relevant measure of effectiveness by an external independent party is accreditation from the Marine Stewardship Council (MSC). The MSC notes in its 2017-18 Annual Report (“Seafood for future generations: The MSC Annual Report 2017-2018”)[[138]](#endnote-139) that:

*“The PNA skipjack tuna fishery is the largest MSC certified tuna fishery in the world, and being able to sell their product with the MSC ecolabel has given these small island states a significant economic boost.*

*The certified fishery uses purse seine nets on free-swimming schools of tuna, which results in very little bycatch of other species or juvenile tuna.*

*With the majority of the global tuna catch caught using FADs, the fishing industry and NGOs in PNA and elsewhere are working to reduce the impacts of this fishing technique.”*

# Rio Tinto

## Overview

Rio Tinto is a globally operating mining company with particular focus on aluminium, iron ore, copper, diamonds and other minerals, including uranium.

## The Institutional Framework

### Centralized Responsibilities

Rio Tinto’s board of directors is responsible for the stewardship and long-term success of the group. Through the independent oversight of management, the board is accountable to shareholders for Rio Tinto’s performance, while also recognizing its wider responsibility to the interests of employees, customers, suppliers and other stakeholders. The board is also required to consider the impacts of Rio Tinto’s operations on local communities and the environment, as well as the desirability of maintaining a reputation for high standards of business conduct.

Among the roles and responsibilities of the board are such matters as:

* setting the group’s purpose and strategic vision;
* monitoring the performance of delivery of the approved strategy;
* the oversight of risk (including environmental and social); and
* reviewing the group’s governance framework.

The board has four established subcommittees responsible for audit, remuneration, sustainability and nominations issues, which support the board in maintaining the desired standards of corporate governance across the group. Each committee is governed by terms of reference, set and approved by the board, and which are reviewed annually.

The Sustainability Committee assists the board with overseeing strategies designed to manage social and environmental risks, overseeing management processes and standards and achieving compliance with social and environmental responsibilities and commitments. The Committee reviews the effectiveness of management policies and procedures relating to safety, health, employment practices, relationships with neighbouring communities, environment, human rights, land access, political involvement and sustainable development.[[139]](#endnote-140)

### Strategic Planning

Safety, health, environment and social strategic planning occurs at the corporate level in terms of policy direction and setting standards and is a function of the Corporate HES Team. The head of HES sits on the Executive Committee. The Board Sustainability Committee owns the standards and management system. These are then filtered out to the businesses so that they do not create their own.

Standards are all internally published and shared with all contractors to ensure consistent application by them. They are focused on defining expectation as opposed to instructing on what to do or how to do it. The guidance behind the standards is results-orientated and is not mandatory on how something should be done. Performance against the standards is audited on a regular basis to ensure compliance.

There are also strategic reviews of long-term risk to a defined programme. These are paid for by the businesses. It is not necessarily mandatory to act on or adopt the results although in some instances high risk findings may become mandatory.

### Funding

The central HES team used to be a large one and provided “consultancy type” support services to assets. The costs of the central team were back charged to the businesses. Currently, the central HES function has more to do with administrative direction setting but it also goes out to the business and operating units and “free consultancy” advice and direction is provided in the process. The HES function has also become centrally managed by the group executive responsible for it. It was previously separately run by each business as a separate function.

HES in business units and operating units is funded by product lines and their own resources. There are also regional HES support teams in geographic hubs supporting assets and operating units.

Overall costs are generally centralized but constrained.

Costs for the compliance assurance audit programmes are ring-fenced and paid for centrally; assets and operating units are not required to contribute.

### Staff Resources and Training

The central audit team is three persons: two lead auditors and one coordinator. Audit teams going out to the operating businesses are drawn from permanent operating unit staff such as general managers, HES specialists and subject matter experts (i.e., not necessarily entirely made up of HES professionals with a desire for participation from operational staff, particularly at general management level). Training as an auditor is provided three or four times per year at different geographic locations.

A typical audit team visiting an asset comprises a lead auditor from the corporate centre with personnel drawn from other operating units. Audits typically include an element of “learning while doing.” The composition of the team (i.e., the inclusion of staff from other operating units) provides a peer assist—peer review function and also means auditors may take valuable learnings back to their own operating units.

This is a good model in theory but can encounter challenges in terms of availability and commitment regarding operating units releasing staff to participate in training and in audits.

### Ring-Fencing of Different Functions

In theory the HES function is independent and with its own reporting line. This does not necessarily mean all audit findings are accepted; they could sometimes be challenged and overruled by the businesses, but with agreement from senior HES management.

## Compliance Promotion

### General Considerations

Rio Tinto is a founding member of the International Council on Mining and Metals (ICMM). As such Rio Tinto is committed to ICMM’s 10 principles for sustainable development and the associated performance expectations.[[140]](#endnote-141) In order to help member companies to meet the performance expectations the ICMM has produced a large body of guidance across the range of environmental issues that are relevant to the industry.[[141]](#endnote-142) As a member company, Rio Tinto subject matter experts are involved in the development of ICMM guidance in collaboration with other member companies. The environment topics focused on in this guidance are summarized in Table 7.

**Table 7 Selected International Council on Mining and Metals Guidance Topics**

|  |  |
| --- | --- |
| **Topic** | **Selected Subtopics** |
| Water | Water management and stewardship in general  Guidance and disclosure frameworks for water reporting  Guidance on Catchment-Based Water Management |
| Climate change | Guidance for companies on designing Climate change policy  Reducing greenhouse gas emissions  Climate change adaptation |
| Biodiversity | Managing biodiversity  Mining and protected areas  Good Practice Guide for Mining and Biodiversity  Links to the Cross Sector Biodiversity Initiative[[142]](#endnote-143) |
| Mine closure | Good practice guidance for integrated mine closure  Land rehabilitation  Financial concepts of mine closure |
| Tailings management | General information  Link to work on establishing an international standard for the safe management of tailings storage facilities |
| Managing metals sustainably | Sustainable sourcing of goods  Product stewardship and life cycle  Chemicals management |

As well as its own internal compliance promotion activities and tools, Rio Tinto therefore also benefits from the wider activities of the ICMM.

Rio Tinto places a strong emphasis on safety management and performance and the company would view its approaches as best practice. However, this does mean that environment (and social) get secondary attention from senior management and this is reflected in such matters as guidance and other aspects of compliance promotion. Having Health, Environment and Safety combined into one function is an influencing factor on the overall approach to environmental compliance assurance.

Compliance promotion at Rio Tinto therefore tends to focus on what matters most: safety.

Partially in response to this Rio Tinto has a strong internal environmental (and social) network of subject matter experts and environmental and social management professionals. Although the network is an informal function, it gets actively involved in providing leadership on environmental matters and “educating” general managers at the operational unit/asset level. There is also an increasing push on compliance promotion from the Board Sustainability committee, much of this in response to external events and stakeholder pressure (including investors).

### Publications

Rio Tinto publishes a variety of documents on its website, including policies, standards and how it approaches certain issues. The “approach” documents set out the priorities for a topic and what is done to achieve them for a series of topics including:

* Approach to closure;
* Approach to communities and social performance;
* Approach to environmental management; and
* Approach to managing mineral waste and acid rock drainage.

The “Approach to Climate Change” provides an extensive account of Rio Tinto’s approach to this particular topic.[[143]](#endnote-144)

Rio Tinto also publishes standards and procedures, including:

* Standard D5—Management of tailings and water storage facilities, August 2015;[[144]](#endnote-145)
* Group Procedure D5—Management of tailings and water storage facilities, March 2017;[[145]](#endnote-146) and
* Standard Rio Tinto management system, December 2014.[[146]](#endnote-147)

Historically, all standards were published.

#### Raising Awareness

Central to awareness raising is the company’s code of conduct as set out in “*The way we work,*”[[147]](#endnote-148) which sets out the behaviours the company expects of its staff. It is supported by a number of group policies and standards. The policies and standards are adopted after wide consultation and communicated globally across the group’s operating businesses, together with related procedures, guidelines and other resources necessary to support implementation. The line (i.e., management and workforce in general) are required to adhere to these policies and standards, along with mandated procedures, and monitor their effectiveness. Rio Tinto’s policies and standards address a variety of topics important to the company, some of which as noted above are published on its website.

In situations (e.g., non-operated joint ventures) where Rio Tinto does not have responsibility for an operating business, Rio Tinto’s policies and standards are communicated to the operator and partners who are encouraged to adopt similar policies and standards of their own.

Rio Tinto employees are required to undertake training on the requirements of “The way we work” and various policies and standards.

Awareness raising tends to be strongly focused on safety; environment and social tend to get secondary attention.[[148]](#endnote-149) This means that although standards, guidance and good practice exist for environment and social there is not the same drive from the senior management level of directing or encouraging staff toward the information as there is for safety.

Certain actions have raised awareness. For example, in 2004, Rio Tinto made a public commitment to a “net positive biodiversity impact”. The company worked toward this commitment for circa 10 years but there were difficulties in establishing fundamental matters such as: defining net positive impact; understanding the business case; and understanding the conservation case. Although by setting this commitment it meant there was one clear environmental issue that the Executive Committee took an interest in and promoted, ultimately the company backed away from the commitment, although it continued to maintain biodiversity management approaches.[[149]](#endnote-150)

Making focused commitments and setting limited numbers of clear targets/KPIs is another method for raising awareness in terms of personnel than actively seeking out company information, guidance, etc. that will help them achieve targets and KPIs.

Simply placing large amounts of information on the company intranet has been shown to lead to information overload.

Rio Tinto also undertakes awareness raising at a local level, e.g., through water targets set at an operating site/asset level.

#### Providing Knowledge

In addition to material available from the ICMM, knowledge provision at Rio Tinto generally falls into two categories:

* “good practice” case studies; and
* lessons learned.

The former category tends to be from specific projects and assets and published on the website. The act of putting them together also tends to be a type of voluntary/spare time activity.

The greater focus internally is on the latter, with lessons learned from something that has gone wrong and what needs to be done differently in the future in terms of standards, systems and behaviours. This is hardwired into the management system (Element 14: Incident and action management). Again, there is a stronger emphasis on safety than for environment and social, to the extent of having a central (safety) team involved in drawing these together.

#### Setting Guidance

All standards are mandatory and set expectations for the level of performance. Standards do not set out specific quantified performance requirements, but rather the intent for what the outcomes should be.

There are threshold levels for standards to avoid an inappropriate burden on a smaller operation where the issues the standards address are immaterial. Group procedures are mandatory requirements setting out consistent methods for meeting the requirements of the respective standard.

Rio Tinto includes a limited amount of guidance on certain matters on its public website,[[150]](#endnote-151) for example managing mineral waste and acid rock drainage and managing tailings and water storage. Further material is available internally and also from the ICMM.

#### Communicating Good/Best Practice

Rio Tinto presents good practice examples in various aspects of its activities, some of which are presumed to be transferrable from one operating business to another, on the “Environment” page of its website. Typical examples are:

* protecting biodiversity;[[151]](#endnote-152)
* minimizing water use;[[152]](#endnote-153) and
* ensuring air quality.[[153]](#endnote-154)

Generally, it is the intent that good/best practice is captured in guidance and outline descriptions of Rio Tinto’s approach to certain matters[[154]](#endnote-155) (see also Section 7.3.2.1).

#### Topicality and Relevance

Subject matter experts maintain internal and external networks to stay abreast of industry and external trends. Participation with peer companies in industry associations is an important source of information. Partnerships with third-party organizations, industry groups, NGOs, etc., provide valuable external perspectives and insights.

Through its membership of ICMM especially, participation in the preparation of ICMM guidance, etc., Rio Tinto maintains compliance promotions materials that are up to date and focused on its needs. Other processes such as internal networking and the roles of subject matter experts also play a role.

#### Appropriate to Audience

Rio Tinto’s internal guidance is aimed specifically at professionals (employees, contractors and consultants) who are engaged in activities that affect environmental and social performance management. All contractors and third-party providers are expected to meet the same standards as Rio operators.

### Other Media

#### Web-Based Materials

Rio Tinto has a strong focus on its compliance programme, and online tools available to staff reflect this with access to such matters as:

* business integrity;
* ethics;
* human rights; and
* governance.

Generally, the tools employed are powerful, but safety focused.

#### Interactive Web-Based Materials

As noted above, interactive web-based tools are used as part of compliance activities. They are also used for e-learning.

#### Seminars and Training

Seminars and informal training take place within the environmental network; however, visibility beyond the expert group is weak.

See also Section 7.2.4 regarding training of auditors.

Rio Tinto operates a contractor learning portal on its website;[[155]](#endnote-156) however, only contractors can log in to see the learning topics and the required training that are covered by this service. The company does, however, set out its expectation of suppliers in a code of conduct (see Section 7.3.4.2).

### Incentivization

#### Financial

Safety performance is a significant element of the senior management remuneration “scorecard” and this helps it get the attention it receives. Sustainability performance is not included in the scorecard. Part of the reason for not including sustainability was difficulties in measuring it in a way that would be compatible with the scorecard approach. It was also a concern that if there are too many elements on a scorecard that each of the elements is so diluted as to become irrelevant.

#### Approved Suppliers

Rio Tinto sets out its general expectations and requirements of its contractors in a supplier code of conduct.[[156]](#endnote-157) Suppliers are required to have environmental (and other) management systems that are aligned with Rio Tinto’s and this is a significant element in contractor selection. Notwithstanding this, Rio Tinto will help potential contractors improve their management systems where it is prudent to do so (e.g., to make use of a host-country resource).

#### Awards

Rio operates an award scheme (e.g., best performer, most improved) for individuals, teams and operating units/assets. These are known to positively influence performance and are taken seriously. However, they are wholly safety oriented.

## Compliance Monitoring

### Introduction

Each Rio Tinto business is required to establish a Health, Safety, Environment, Communities and Social Performance (HSEC) (or similar) management system in accordance with the Rio Tinto management system standard.[[157]](#endnote-158) Rio Tinto also has several HSEC standards and Group procedures that address specific areas of risk and are mandatory for all Group businesses. Where appropriate, these too must be addressed in the management system.

The management system standard makes provision for monitoring, inspections, audit and assurance processes for projects being developed and for operations. Inspections, audits and reviews are undertaken in accordance with the mandatory HSEC Assurance Group procedure.[[158]](#endnote-159)

For projects being developed, Technical Evaluation Guidance is applied as part of a stage gate process. A significant part of this is related to environment and social and can run alongside an ESIA process. The process is very powerful for sensitive projects and can even stop them.

For operating units/assets, taking the management of tailings risks as an example, Rio Tinto has a structured approach with three levels of governance and assurance that are applied to all facilities as described in the following sections.

### Self-Monitoring

Overall self-monitoring is one part of a suite of assurance processes and is undertaken within the context of a management system (or management and monitoring system) that has been approved and signed off on by Rio Tinto HES managers in line with Rio Tinto’s own management system requirements. Rio Tinto’s requirements for monitoring are set out in Element 13 (“Monitoring and measuring”) of the management system. These require each operating business to have a process for regularly measuring and monitoring the key characteristics of the business and its work activities that could have significant environmental (and other) risks. Element 13 goes on to set out other requirements including for monitoring equipment, analysing and reporting data, data quality and dealing with non-conformances.

In addition to monitoring, Element 16 (“Performance assessment and auditing”) of the management system requires operating businesses to have a process for conducting regular inspections of facilities to verify the effectiveness of the controls for managing risks associated with the specific activities at the facility. The results of previous inspections must be considered and inspections should identify additional risks if present. Inspection requirements are defined more fully in the HSEC Assurance Group procedure.

Taking the management of tailings risk as an example, Rio Tinto’s first level of assurance takes place at the facility level with the main tenets being effective design, comprehensive operational controls that include monitoring and regular reviews.

### Company Audits and Inspections

Element 16 of the management system also sets a requirement for conducting audits (internal and external) and reviews of an operating business to evaluate the effectiveness of controls and check compliance, including compliance with legal and other requirements (e.g., Rio Tinto standards and system requirements). Internal audits can be considered to be part of self-monitoring although they are performed by the HES function of the operating asset.

Company audits and inspections (i.e., external audits in the terminology of the management system) are led by a corporate centre Lead Auditor and an audit team drawn from audit-trained managers, HES professionals and subject matter experts from third-party operating units/assets.

The detailed requirements for auditing are defined in the HSEC Assurance Group procedure. An operating business is required to define an annual schedule of planned internal and external audits. At the completion of an audit (internal or external), a report must be provided to the manager responsible for the operating business and corrective actions identified in an audit must be addressed as soon as is reasonably practicable.

Taking management of tailings risk as an example, Rio Tinto’s second level of assurance is periodic Business Conformance Audits and Technical Reviews against the Rio Tinto Standard. Business Conformance Audits are audits of a business or operation to assess conformance to the Rio Tinto HSEC performance standards and Management System according to protocols established by the HSEC Assurance Group procedure.

### Independent Verification

Independent verification takes place in two contexts.

At an operating unit/asset level, and again taking the management of tailings risk as an example, Rio Tinto’s third level of assurance is independent of site management and normally conducted by third parties. Rio Tinto Group Internal Audit works with external auditors to provide assurance that the systems for risk management, internal control and governance are adequate and effective.

Rio Tinto also operates a more strategic assurance process that is undertaken independently. This aspect of independent verification focuses on business processes and includes HES assurance in terms of auditing the management system and standards.

All Rio Tinto managed facilities, whether active or inactive, have an external engineer of record or design engineer which provides a degree of independent external assurance.

### Targeting/Prioritizing Strategies

Generally, the audit programme for a particular operating unit/asset is determined by combinations of the following: risk to the environment, people and workforce; level of external concern and scrutiny; potential business impact.

As an area of potential high risk, tailings management has its own specific approach involving a Tailing Board and the invariable adoption of an audit programme that includes independent verification.

Where international finance is involved this can in turn drive specific approaches in the audit programme.

## Compliance Enforcement

### Administrative Enforcement (Including Financial)

Contractors have environmental and other performance requirements contained in their contracts. Breaching these can lead to various administrative sanctions under the terms of the specific contract involved up to and including removal from the contract. Safety is a critical focus for contractor performance requirements; however, if the contract was an environment-related service, a performance standard would normally be included in it.

### Criminal Enforcement

Rio Tinto’s staff code of conduct requires personnel to report anything that might break the law or go against “The way we work” (or any of the company’s policies and standards). Any breaches of law and regulations would be reported to the regulator and due process would be followed.

### Other Sanctions

Rio Tinto’s “The way we work” makes clear that if personnel break the law, the company’s code of conduct, or any of the company’s policies and standards, the person involved will face disciplinary action. That action may include dismissal or termination of contract.

Contractors breaching environmental and social performance terms in their contracts would be removed from supplier lists.

## Reporting, Accountability and Transparency

### Internal Reporting

In accordance with the Rio Tinto Management System Standard, incidents (including non-conformances and near misses) must be reported by the operating businesses to Rio Tinto in accordance with the time frames and other requirements set out in the HSEC performance data recording Group procedure.[[159]](#endnote-160) Depending on the seriousness of the incident, the time frame for internal reporting could be as little as 24 hours.

Certain aspects of routine environmental performance (e.g., emissions, water use, tailings management) must also be reported by the operating businesses in accordance with the HSEC performance data recording Group procedure.

### External (Public) Reporting

There is limited to no reporting of internal audits and reviews. Public reporting is focused on regulatory reporting and voluntary environmental, social and governance reporting.

Rio Tinto’s main means of reporting on its environmental performance is via its annual Sustainable Development Report; the most recent issue is for the year 2018.[[160]](#endnote-161)

Other reporting on the website includes:

* archived reports from previous years;
* various other reports underpinning the Sustainable Development Report, e.g., on climate change[[161]](#endnote-162) and how Rio Tinto has implemented its commitments in the context of the ICMM Sustainable Development Framework.[[162]](#endnote-163)

### Scope and Transparency of Reporting

Rio Tinto prepared its 2018 annual Sustainable Development Report in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards (Core option),[[163]](#endnote-164) the GRI Mining and Metals Sector Supplement and the International Council on Mining & Metals Sustainable Development Framework.[[164]](#endnote-165) Independent external assurance on selected sustainable development subjects was undertaken by PricewaterhouseCoopers LLP to provide assurance to the Rio Tinto board; this is explained in the independent limited assurance report contained in the Annual Report[[165]](#endnote-166) and key conclusions presented in Section 7.7.2 below.

Rio Tinto has approximately 140 tailings facilities that are either operational or are closed/being rehabilitated. In February 2019, Rio Tinto disclosed detailed information on each of its global tailings facilities and published both the company’s Group Procedure and its Standard for “Management of tailings and water storage facilities”.[[166]](#endnote-167)

Rio Tinto published its first climate change report in 2019. The report was informed by the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD).[[167]](#endnote-168) TCFD recommendations are aimed at developing consistent climate-related financial risk disclosures for companies to use in providing information to their investors, lenders, insurers and other stakeholders.

### Whistle-Blowing

”Talk to Peggy” is the Group’s confidential and independently operated whistle-blowing programme[[168]](#endnote-169). It offers an avenue through which employees, contractors, suppliers and customers of Rio Tinto managed sites can report concerns anonymously if they so choose, subject to local law. This can include any significant concerns about the business, or behaviour of individuals, including suspicion of violations of financial reporting, safety or environmental procedures or business integrity issues generally. The programme features telephone and web submissions, a case management tool to manage cases, and a reporting tool to allow for improved analysis of case statistics and reporting.

### Complaints Procedure

Rio Tinto’s Communities and Social Performance (CSP) standard requires operating businesses to establish a complaints, disputes and grievance process that local communities can understand and readily access aimed at allowing complaints and disputes to be resolved proactively before they escalate further. As a result, there are individual sites that have established community grievance programmes where community interactions occur and in response to requests from communities.

An example of the standard in action is provided by an Australian operating business, Pilbara Utilities electricity and water services.[[169]](#endnote-170)

Complaints can also be made through the “Talk to Peggy” system described above.

## Effectiveness

### Internal Assessment

Some internal assessment of effectiveness is carried out at the operating business level. Element 17 (Management review) of the management system make provision for considering the effectiveness of activities involved in HES management, including assurance. Under Element 17, a process is required for review of the management system by senior management at planned intervals. The review must consider a number of factors including the following:

* objectives, targets and performance indicators;
* the effectiveness of the management of change process;
* environmental monitoring;
* the status of corrective actions;
* performance statistics, including environmental monitoring results;
* communication and feedback from employees and community complaints;
* continued suitability of policies;
* external factors such as changing legal and other requirements, stakeholder expectations;
* changes in the products or activities of the organization;
* findings of completed audits and reviews;
* recommendations and opportunities for improving the effectiveness of the management system.

The management review is required to evaluate any need for change and establish actions to improve the system, its processes and the resources needed to implement it.

### External/Independent Assessment

As noted in Section 7.6.3 above, independent external assurance on selected sustainable development topics covered by the annual report was undertaken by PricewaterhouseCoopers LLP (PWC) to provide assurance to the Rio Tinto board. PWC conducted its external assurance in a way that sought to minimize the risk of making material misstatement. PWC did this through approaches that included the following:

* making enquiries of relevant management personnel regarding the processes and controls for capturing, collating and reporting the performance data for the selected subject matter to be assured;
* evaluating the design and effectiveness of the above processes and controls;
* for safety aspects, validating the operation of controls over the accuracy of injury classification and assessing the final injury classification applied for a sample of injuries reported during the year;
* testing the numerical accuracy of a sample of calculations of performance data;
* assessing the appropriateness of the greenhouse gas (GHG) emission factors applied in calculating the total GHG emissions and emissions intensity;
* selectively testing performance data at both an operational and a corporate level, including visiting a selection of five operations from across the Group’s businesses;
* undertaking analytical procedures for the performance data; and
* making enquiries of relevant management and reviewing a sample of relevant management information and documentation.

Overall this represents a degree of independent assessment of compliance; however, the assurance was very focused on relatively limited aspects of environmental compliance, such as greenhouse gas emissions.

The overall compliance and governance systems are audited by third parties every few years.

# International Oil and Gas Companies

## Overview

This case study was prepared from a review of the practices of three large international oil and gas companies (IOGCs). Each company has a diverse portfolio of business activities; this case study is primarily focused on upstream, i.e., oil and gas exploration and production, activities.

The material presented in the case study is a combination of materials published on the company websites together with the outcomes of interviews with members of each company. Publicly available information was used primarily to complete the sections on “Institutional Framework”, “Compliance Promotion”, “Reporting and Transparency” and “Effectiveness”. The interviews particularly focused on “Compliance Monitoring” and “Compliance Enforcement”. These latter inputs have been merged to represent the environmental compliance assurance practices of a “typical international oil company”. None of these practices should be interpreted as being the particular practice of any one company.

Compliance assurance practices in international oil companies are well established and have two main objectives:

* assurance that the law and host-country regulations will be complied with; and
* assurance that the companies’ own standards, procedures and commitments to shareholders and stakeholders will be complied with.

## The Institutional Framework

### Introduction

IOGCs typically have governance systems of internal controls that require their staff to act in ways that are consistent with applicable host-country laws and regulations, together with company-specific requirements, performance standards (e.g., for health and safety, the environment, climate change, biodiversity and relationships with local communities), values and behaviours, for example:

* the BP Code of Conduct;[[170]](#endnote-171)
* the “Chevron Way”;[[171]](#endnote-172) and
* the Shell Code of Conduct.[[172]](#endnote-173)

These governance systems are further underpinned by an operating management system (OMS) of some type (for example BP’s Operating Management System,[[173]](#endnote-174) Chevron’s Operational Excellence Management System (OEMS)[[174]](#endnote-175) and the Shell Health, Security, Safety, Environment and Social Performance (HSSE & SP) Control Framework[[175]](#endnote-176)).

The primary responsibility within IOGCs for identifying and managing risks and deploying the necessary resources to do so lies with the “operating businesses.”[[176]](#endnote-177) The operating businesses verify their own conformance with environmental performance requirements or standards. They are also subject to independent scrutiny and assurance from elsewhere within an IOGC.

**Chevron Example**

In order to meet Chevron’s operational excellence objectives, the OEMS systematically manages six focus areas comprising: workforce safety and health; process safety, reliability and integrity; environment; efficiency; security; and stakeholders.

Environment is one of the six focus areas of Chevron’s OEMS. The objective for the Environment Focus Area establishes the priority for all projects and operations to assess and manage their significant environmental risks throughout project lifetime and during closure.

To drive consistency in meeting the Environment Focus Area expectations, Chevron has an Environmental Stewardship (ES) process. The ES process requires operating businesses to create an inventory of how their activities interact with the environment. These environmental aspects and their related potential impacts are then used to identify, assess and prioritize environmental risk and improvement opportunities.

In addition to the ES process, Chevron has an impact assessment process. The impact assessment process is designed to consistently identify and address potentially significant project-related environmental, social and health impacts as a project moves through its design phases. Chevron has used its impact assessment process in the planning and implementation for capital projects worldwide since 2007.

Chevron has nine environmental standards, which are intended to allow a consistent level of rigour to be applied in managing its environmental risks and impacts. Specific to its upstream business, Chevron has six environmental performance standards (EPSs) for managing emissions to air, flaring and venting, natural resources (including water, land use and biodiversity), offshore drilling fluids and cuttings management, produced water and waste management. The EPSs are applied across Chevron’s upstream operating businesses and capital projects with the objective of providing consistent operating practices and environmental performance.

IOGCs proactively plan their environmental compliance assurance activities and have staff and teams dedicated to compliance assurance at the group, central business and operating business levels.

**Note on terminology**: IOGCs are structured in similar but slightly different ways. For the sake of convenience, the following terms are used to reference elements within the organizational structure.

* *Group* refers to the corporate centre of an organization that contains several businesses (e.g., upstream, downstream, chemicals, shipping).
* *Central business* refers to the overall management of a business, in this instance the upstream business.
* *Operating business* refers to a specific operating entity, which could be an IOGC’s national presence in one country or an operating facility or asset.
* *Project* refers to an operating facility or asset at the pre-development stage.
* *HSE* (Health, Safety and Environment) refers to the function that facilitates and oversees environmental performance.

### Centralized Responsibilities

An IOGC’s board has responsibility for the overall conduct of the group’s business, monitoring performance against the company’s long-term strategy and confirming that adequate processes are in place for legal compliance and identifying and managing key environmental (and other) risks. Environment is addressed at board level through inclusion within the remit of board committees.

* A safety, ethics and environment assurance committee is one of BP’s six board committees. The committee looks at the processes that BP’s executive team use to identify and mitigate operational and non-financial risk.
* Chevron’s Public Policy Committee charter includes assisting the Board “*in fulfilling its oversight responsibility for the Corporation’s broad enterprise risk management program by periodically assessing and responding as appropriate to risks that may arise in connection with the social, political and environmental, and public policy aspects of the Corporation’s business.*”[[177]](#endnote-178)
* Shell’s Corporate and Social Responsibility Committee (CSRC) reviews and advises on Shell’s sustainability policies and practices to ensure that these are discussed, understood, owned and promoted at Board level[[178]](#endnote-179). The CSRC also visits different Shell operations each year to engage with Shell staff, contractors and suppliers, as well as local community members and other external stakeholders. The CSRC shares its observations from these engagement activities with the Board and with the management responsible for the particular operation visited.

Generally, the board committees are responsible for such matters as developing and setting out company requirements and standards (e.g., for health, safety, security, the environment, social responsibility, stakeholder engagement and operational reliability) that are common across the group. These requirements and standards are typically set out in an operating management system (OMS) or similar. The board committees also review company policies and performance against high-level commitments (e.g., as set out in BP’s and Shell’s Codes of Conduct and the Chevron Way) and standards, especially mandatory ones. The board committee may also monitor major issues of public concern, especially global concern, that are relevant to the company.

An OMS is delivered via clear governance structures aimed at achieving legal compliance and meeting the company’s own standards.[[179]](#endnote-180) Any variations in the application of an OMS, for example to meet local regulations or circumstances, are subject to strict governance processes.

Facilitating the delivery of the OMS usually involves three broad levels of HSE function (providing knowledge, advice, expertise and audit capacity) within an IOGC:

* at group level;
* at central business level;
* at operating business level.

Responsibility and accountability for environmental and social performance is cascaded down the operational line. Typically, the operating business HSE function advises the operating business and reports via both the line and to the central business HSE function. The line is responsible for delivering environmental performance.

### Strategic Planning

At a high level, an IOGC’s approach to compliance assurance is based on complying with legislation and meeting the company’s own standards, principles and commitments (see Section 1.2.2). To some extent strategic planning begins with setting company standards, etc., together with a framework (e.g., through following an OMS) for delivering them.

Focusing on standards, these are typically developed for several purposes, the key ones being:

* to set a level of performance that addresses risks to the environment, people, staff and reputation;
* to achieve a consistent level of performance across the group or business; and
* to make a commitment to the public as part of a “licence to operate”.

The measures necessary to delivery and providing assurance that delivery is effective and non-compliances are addressed (monitoring, reporting, inspection, auditing, enforcement) then follow.

Generally, the long-term strategy of an IOGC is set by its board and reviewed on a periodic basis. However, the board requires assurance that required performance is being delivered in an ongoing manner and so an IOGC typically takes a proactive approach to managing compliance as part of its OMS (see Section 8.4.1), including teams that are strongly or even purely focused on compliance assurance.

Strategic planning may also occur at other levels within an IOGC. For example, within Chevron strategic planning is part of the leadership team roles and individual roles of the staff involved in execution of the OEMS.

Shell has three strategic ambitions that guide it in pursuing its overall business purpose. One of these is to sustain a strong societal licence to operate. Good, and continually improving, environmental and social performance is therefore a strategic matter for Shell and addressed accordingly in major decisions and in its assurance processes. In addition, as part of a long-term and ongoing process, Shell adopts a “scenario” approach to challenge executives’ perspectives on the future business environment.[[180]](#endnote-181) These are designed to stretch management to consider even events that may be only remotely possible.

Although no actual document examples were picked up in the review of the IOGCs’ procedures, compliance assurance is also something that is planned for on a project-specific basis. The Trans Adriatic Pipeline project, for example, sets out an assurance plan[[181]](#endnote-182) that addresses:

* a three-tiered process, namely self-verification, oversight and assurance;
* the contractor’s self-verification programme;
* the company’s oversight and assurance programme;
* reporting, non-conformances and corrective actions;
* change management; and
* key indicators.

### Funding

Accountability for environmental performance and compliance lies with the line and it is given clear targets to meet; therefore, funding of compliance assurance is not a separate issue but is hardwired into budgets. A project or operating business will have a budget to deliver all it needs to do in order to be compliant.

Separate budgets may be held by central business HSE and compliance teams to provide advice and undertake audits, for example.

Group audits tend to be group funded.

Operating businesses may commission specific pieces of work from the technical centres of excellence (or similar) which they then self-fund. However, this tends to be more project- or operation-specific and not necessarily directly related to compliance activities.

### Staff Resources and Training

Staff resources for compliance assurance are not readily quantifiable as the role of staff involved directly or indirectly in compliance is spread across:

* the line who are responsible for delivering performance;
* HSE personnel at group, central business and operating business who are involved in facilitating and auditing performance; and
* staff fully allocated to compliance assurance teams.

The latter two categories can also be supplemented by subject matter experts and personnel from centres of technical excellence (or similar).

At an operating business level, the number of dedicated staff varies according to the size, complexity and risk associated with the operations; one IOGC operational business has approximately 30 environmental and compliance staff, for example.

Training of staff involved in compliance is usually undertaken within the framework of a structured development programme.

* HSE professionals receive specific training according to discipline (safety, environment, social, etc.), together with training in topics that all disciplines have to be trained in as part of a company’s requirements.
* Non-HSE personnel (managers, etc.) are trained in HSE matters to allow them to perform in a front-line supervisory role, and this training may go right up to the head of an operating business.

### Ring-Fencing of Different Functions

At the operating business level, the HSE function is separate from the line, and although it may report via the line it also has its own reporting procedures via the central business ultimately to group and the respective board committee.

Some companies have other independent assurance processes that:

* independently review risk;
* can intervene and escalate issues to senior management;
* provide their own deep technical expertise; and
* have input to setting standards and practices.

These are totally independent of the line and have a separate reporting line, ultimately to the board committee that has oversight of environmental compliance.

Another level of ring-fencing can be provided by a group audit function that is separate from the group HSE function. Group audit’s remit may be under finance and tax, but with a mandate to inspect that is completely independent of the businesses, and includes a range of non-financial “risk topics” such as environment.

At Shell a level of ultimate assurance is the responsibility of the Corporate HSSE & SP and process assurance team, who are independent from the business and mandated at Board level by the Corporate Social Responsibility Committee (CSRC)[[182]](#endnote-183). The team develops and carries out compliance audits that cover a variety of possible risks in assets and projects. Outcomes from these audits and the response from Shell’s management are shared with the relevant parts of Shell and the CSRC. The actions taken to address the audits’ findings are also monitored within Shell.

## Compliance Promotion

### General Considerations

As with most IOGCs, compliance promotion is primarily made up of the following:

* production of proprietary materials (i.e., materials that are not made publicly available) and undertaking of activities such as training internally within the company, centrally directed and aimed particularly at company staff in operating businesses;
* including obligations in contracts with suppliers and contractors as well as providing them with access to proprietary guidance and standards materials and training;
* similarly providing consultants, e.g., those involved in Environmental Impact Assessment services, with access to proprietary materials;
* referencing sector-specific guidance and related materials that have been developed (usually with IOGC participation) by international industry organizations such as the International Association of Oil and Gas Producers (IOGP) and the International Petroleum Industry Environmental Conservation Association (IPIECA); and
* providing some open access materials on the group or country websites.

### Publications

IOGCs contribute to the development of materials published by IOGP and IPIECA.

IOGCs also produce their own internal guidance on specific matters such as impact assessment. These materials tend to be proprietary to the companies and not published on their websites.

Chevron’s website mentions the existence of various internal guidance documents the company has developed itself and the context for their use. These include for example Resettlement Guidance, Indigenous Peoples Guidance, Impact Assessment Guidance.

IPIECA’s publications are free to download and available at: <http://www.ipieca.org/resources/>. The documents are themed (e.g., “Environment,” “Oil Spill”) and then categorized (“Case Study,” “Good Practice”), and searches for documents can be filtered accordingly. Many IPIECA documents are produced jointly with IOGP.

Similarly the majority of IOGP’s publications are free to download and are available at: <https://www.iogp.org/bookstore/> (which also includes many of the IPIECA documents as well as the jointly produced ones).

#### Raising Awareness

A primary means of raising awareness is via the Codes of Conduct and the Chevron Way (see Section 8.2.1). These materials are mandatory reads for staff and also introduce staff to the respective OMS and further materials. Chevron provides a concise overview of its OEMS specifically for the workforce as a means of raising awareness.[[183]](#endnote-184)

Staff in the line are made aware of their role in compliance assurance by cascading requirements and standards down to the operating businesses where specific requirements are then identified. HSE staff embedded in operational businesses (and projects) have day-to-day responsibilities for supporting environmental compliance and communicate accordingly to the line. Generally, HSE staff are expected to take leadership on environmental matters and be proactive in raising awareness and communicating standards, practices and other environmental and social performance requirements into the operating businesses.

Serious compliance (or non-compliance) issues may be communicated to all staff by senior management on behalf of the board.

One of the categories in IPIECA’s document Resources is “Awareness Briefing”, covering topics such as:

* Biodiversity and ecosystem services fundamentals: A summary;
* Mapping the oil and gas industry to the Sustainable Development Goals: An Atlas;
* A-Z of Biodiversity Terms; and
* Cross Sector Biodiversity Initiative (CSBI) Charter.

#### Providing Knowledge

IOGCs maintain formal centres of excellence or practice communities and networks of subject-matter experts that are available to support central businesses and operating businesses. Knowledge sharing is encouraged both within and between businesses and regions and also to facilitate the learning from one project or operation to others. Such networks direct staff to the available resources and information in one part of the business that may aid other parts of the business.

One IOGC maintains a formal network of practitioners responsible for compliance, with active participation of operating business and central business compliance staff. The network encourages information sharing and is backed by support tools.

IPIECA’s document “Resources” provide a series of “Case Studies” and “Fact Sheets” describing applications of good practice and generally providing background information, for example:

* Reducing risks to western gray whales: Sakhalin Energy case study;
* Developing a Biodiversity Action Plan through an integrated and phased approach; and
* Tracking the winter range of the critically endangered western gray whale.

IPIECA also provides access to evidence-base material via its Marine Geospatial Bibliography (see Section 8.3.3.2).

#### Setting Guidance

BP has group-wide and business-wide policies, procedures and practices that establish its environmental mandatory requirements and standards. These are supported by specific internal guidance documents that set out how to go about being compliant.

Chevron provides public access to some of its internally produced guidance on its company website.[[184]](#endnote-185) For example, one document is Chevron’s grievance management guidance, which is based on the 2015 IPIECA “Community grievance mechanisms in the oil and gas industry: A manual for implementing operational-level grievance mechanisms and designing corporate frameworks”. The guidance is aimed at helping those involved in managing social performance (stakeholder or community engagement) at operations level to develop and implement systems for formally dealing with community comments and complaints.

The Shell Control Framework can be regarded as guidance in itself as it sets out a large number of standards and directs staff to further guidance on how to go about meeting a standard.

Shell also internally publishes various other internal guidance documents such as:

* Various aspects of Corporate Social Responsibility, e.g., social investment;
* Environmental Social and Health Impact Assessment;
* livelihood restoration;
* stakeholder consultation;
* addressing ecosystem services; and
* providing net environmental benefits.

One of the categories in IPIECA’s document Resources is “Good Practice,”[[185]](#endnote-186) which includes guidance documents covering topics such as:

* A guide to developing biodiversity action plans for the oil and gas sector;
* Good practices for the collection of biodiversity baseline data;
* A cross-sector guide for implementing the mitigation hierarchy; and
* Ecosystem services guidance: biodiversity and ecosystem services checklists.

#### Communicating Good/Best Practice

To some extent, good practice is captured in the standards and requirements adopted by IOGCs.

* BP publishes project case studies on its website that are used to illustrate good practice.[[186]](#endnote-187)
* Shell provides several examples of good practice in its projects that are publicly accessible on its website, for example different types of approaches to biodiversity.[[187]](#endnote-188)
* Chevron provides good/best practice case studies on its website. Generally, these are taken from experiences of managing environmental and social issues in projects or areas that gave significant challenges. Examples are provided for a variety of projects such as Marcellus Shale gas[[188]](#endnote-189) and Barrow Island LNG (liquefied natural gas).[[189]](#endnote-190) Environmental engineering standards and guidance containing good practice are developed in Technical Centres of Excellence covering such matters as wastewater management, sewage treatment and cuttings management.

It is also worth noting that a lot of good and best practice in terms of environmental protection measures is hardwired into operational controls, processes and procedures.

As noted above, one of the categories in IPIECA’s document Resources is “Good Practice,” which includes documents covering topics such as:

* Operating Management System Framework for controlling risk and delivering high performance in the oil and gas industry;
* Alien invasive species and the oil and gas industry; and
* Biodiversity and ecosystem services fundamentals.

#### Topicality and Relevance

All procedures, practices and guidance documents produced by IOGCs undergo regular review either according to set timelines and/or external events (such as a serious incident or a step change within the wider industry on a particular issue). Subject-matter or technical experts are consulted in the review process and are required to maintain their technical competencies and share knowledge and lessons learned. Subject-matter experts are also expected to work with and within external networks and industry organizations such as IOGP and IPIECA to stay abreast of current issues and topics (this is a two-way process with the outside world whereby an IOGC shares its good practices and learnings as well as vice versa).

Subject matter experts tend to work in the context of formal or informal practice communities around key topics including such matters as:

* biodiversity and ecosystem services;
* impact assessment;
* waste management; and
* water resources.

IOGCs also tend to maintain dialogue with a range of stakeholders including non-adversarial NGOs. Where specific expertise is required at a project/asset level, partnerships with external expert organizations are often developed (such as Shell’s association with the International Union for the Conservation of Nature (IUCN)[[190]](#endnote-191)).

Part of IPIECA’s role as an industry association is to anticipate challenges for the industry by scanning and assessing emerging issues and developing actions. One way in which it does this is through engagement with external stakeholders, drawn from civil society, academia and financial institutions. Among the key objectives are to:

* understand stakeholders’ view of emerging issues facing the oil and gas industry and how the industry should respond; and
* gain stakeholder perspectives on IPIECA’s thematic strategies.

This approach helps ensure the guidance and other materials produced to help its members deliver good environmental performance is focused on material and current/emerging issues that are important to both the industry and its stakeholders.

#### Appropriate to Audience

IOGC internal guidance is aimed specifically at HSE and non-HSE professionals (employees, contractors and consultants) who are engaged in activities that affect environmental and social performance management.

Materials produced by IPIECA and IOGP are primarily aimed at environmental and management professionals working in the industry but are also suitable to inform others such as host-country regulators and consultants.

### Other Media

#### Web-Based Materials

IOGCs maintain their internal guidance and related compliance promotion materials on intranets accessible to all staff. Materials can generally be navigated to from dedicated pages and via key awareness-raising documents such as Codes of Conduct (BP and Shell), the Chevron Way, OMS (BP), OEMS (Chevron) and the Control Framework (Shell).

All the materials produced by IOGP and IPIECA are available to download, most of them free. They are hosted on the organizations’ websites and searchable by theme and topic.

In some circumstances compliance actions themselves are managed and disseminated through online systems (see Section 8.4.1).

#### Interactive Web-Based Materials

IOGCs make use of informal and formal learning, with dedicated e-learning modules available through their intranets to support HSE and non-HSE staff (see also below).

As noted in Section 8.4, some compliance assurance processes are software and web based.

IPIECA has compiled a Marine Geospatial Bibliography (MGB).[[191]](#endnote-192) The MGB is designed as a GIS-based knowledge-sharing platform collecting and making available information on oil, gas and the environment for industry, science and the public. Much of the information is focused on peer-reviewed evidence-based material on the impacts and effects of the industry’s activities. The user can search for information through the map or search fields and can also help add to the bibliography by submitting a resource.

#### Seminars and Training

Formal learning is provided to HSE practitioners from when they join an IOGC (e.g., as graduates). Usually this is part of a mandatory programme. Ongoing on-the-job learning is provided, supported by dedicated formal and informal training, peer-to-peer learning and “mentoring” by SMEs. As part of training, some IOGCs operate a formal process of exposing staff (especially graduate joiners) to practices in different operating businesses. Specific training around compliance is provided.

One IOGC requires its subject-matter experts to deliver a specified number of days’ formal training per year.

Opportunistic learning is further encouraged through participation in webinars and attendance at seminars or conferences.

**Shell examples**

Shell staff are encouraged to broaden their skills by volunteering to work with other organizations on environmental and social projects.[[192]](#endnote-193)

Shell works with many other organizations worldwide[[193]](#endnote-194) and this helps raise awareness of environmental issues among its staff both in general but also specific to local operations.

Shell also holds events for its staff to participate in, for example marking the International Day for Biological Diversity showcasing work with Earthwatch to offer Shell staff the chance to contribute to environmental conservation efforts around the world.

Both voluntary and mandatory and training records are maintained by IOGCs. Mandatory training is tracked, and reminders are issued to staff and line managers.

IPIECA provides web-based training[[194]](#endnote-195) and awareness-raising webinars.[[195]](#endnote-196)

### Incentivization

#### Financial

Executive pay is usually linked in some way to aspects of company performance other than financial performance alone, including environmental performance but usually more focused on safety. Environmental and safety performance are factors in corporate executive and operating business manager scorecards and remuneration.

Clear targets are set and reviewed by a remuneration committee (or similar) and inputs sought from other committees (e.g., those with environmental remits) on performance against targets.

However, it should be noted that the metrics are usually more to do with reportable (safety) incident frequency and CO2 emissions, i.e., performance indicators that are readily quantifiable and comparable across the group and between years.

How to really incentivize environmental performance in less quantifiable areas is regarded as a challenge.

#### Approved Suppliers

Suppliers and contractors are required to deliver an expected level of environmental and safety performance, have their own management system (accreditation to ISO 14001 is strongly encouraged) and possibly a bridging document to align with the requirements of the IOGC and deliver their work to the IOGC’s own standards. These are typical contractual requirements.

IOGCs take measures to assist their suppliers, especially in countries with less capacity for environmental management practices. For example, BP holds sessions with suppliers to help them understand the BP Code of Conduct and how the company does business. In 2018, BP held an event in Trinidad and Tobago with approximately 50 suppliers to share BP’s expectations of working with them.[[196]](#endnote-197) Topics covered included anti-bribery and corruption, conflict of interest scenarios and grievance processes.

#### Awards

Some IOGCs operate awards schemes for staff that recognize excellent environmental and social performance practices and major accomplishments; these do not extend to contractors.

## Compliance Monitoring

### Introduction

Environmental performance compliance monitoring is an aspect of a company’s environmental management system (EMS). Typically, the EMS will be aligned with or accredited to ISO 14001 and sit within an operating management system (OMS). IOGP and IPIECA[[197]](#endnote-198) provide general guidance on the OMS frameworks and the context of an EMS, although there is some variation between companies on how these matters are addressed in practice.

An OMS therefore provides the overall basis for how an upstream business manages compliance. Compliance management is then cascaded down to the regions and operating businesses at which level specific requirements may be identified. The OMS usually applies to every type of activity from construction through to closure and commissioning. A typical OMS also addresses a broad range of risks, including occupational health and safety, environmental, social, process safety, design integrity, quality and security. Compliance assurance monitoring is therefore generally aimed at the complete working of the OMS, including environmental and social risk/performance aspects. This is important, since for example a non-compliance with an environmental requirement may have its root cause elsewhere in the OMS and would therefore be discovered more readily than, say, an audit that purely focused on environmental performance parameters.

Within the context of an OMS, an Environmental Management System (EMS) (at operating business level for example) is designed to assist the company to identify, manage, monitor and control its environmental issues in a joined-up way. The EMS requires that the operating business considers all environmental issues relevant to its activities, such as air and water pollution, greenhouse gas emissions, and resource use and efficiency. An EMS is usually developed to be aligned with ISO 14001 or to achieve ISO 14001 accreditation. An EMS aligned with ISO 14001 also focuses strongly on the prominence of environmental management within an organization’s strategic planning processes, the input from leadership and a strong commitment to proactive initiatives aimed at continuous improvement in environmental performance.

Users of the standard have reported[[198]](#endnote-199) that ISO 14001 helps, among other matters, to:

* demonstrate compliance with current and future regulatory requirements;
* increase the involvement of leadership and the engagement of employees;
* improve company reputation; and
* gain the confidence of stakeholders (and regulators).

Not all companies decide to go for accredited certification of an EMS to ISO 14001. However, third-party certification, which involves an independent certification body auditing an organization’s EMS against the requirements of the standard, provides assurance to external parties, such as regulators and stakeholders, that the standard has been implemented properly, i.e., that the EMS is of international standard. Thereafter, independent verification audits to demonstrate that the standard of the EMS is being maintained provide ongoing assurance to external parties.

Some IOGCs proactively manage compliance through “compliance assurance programmes” or similar with specific teams and functions being allocated to compliance assurance and specific procedures developed. Operating businesses typically have their own regulatory compliance personnel, appropriately trained for their function, as well as traditional HSE teams, which may comprise several persons and contain technical specialists; for example, in the USA it is not uncommon for an air quality specialist to be a member of the team. The compliance personnel usually work closely with the HSE team.

Compliance assurance procedures may involve compliance requirements being identified, e.g., to meet local legislation, company standards, project construction consent or operating licence conditions. Subject-matter/technical experts then develop specific requirements for the operating businesses. Specific requirements may be set out in the form of “compliance actions” (or similar) and assigned to individuals or teams. Periodic reviews take place to ensure that compliance actions reflect new and emerging legislation or other changing requirements (such as changes to an operation). A review process may typically involve:

* periodic review for new or amended legislation or other changed circumstances;
* review by subject-matter experts;
* identification of any specific requirements relevant to an operating business (or region); and
* amendment of compliance actions and development of new ones.

In some systems compliance actions are entered onto an online software-based tracking system or register and their status is tracked from identification to closure. In some legislative regimes (e.g., UK and USA) the register can be linked directly to a regulator’s system to allow the company/operating business to track compliance progress down to individual compliance action level.

### Self-Monitoring

Self-monitoring is undertaken by operating businesses and by contractors. A separate category is where the company is in a non-operated joint venture (JV).

#### Operating Business

Self-monitoring is undertaken at the operating business level. The operating business EMS sets out a mandatory set of parameters to be monitored and reported. Self-monitoring is performed by the line with a degree of operating business HSE team support as required. Periodic management reviews may take place.

#### Contractor

In the first instance typical contracts include requirements on environmental performance and management. Self-monitoring (or verification) is done by the contractor but under company “oversight”. The self-monitoring undertaken by contractors is in the context of an EMS that is bridged or aligned with the company’s own system. Oversight by the company is aimed at gaining assurance that the contractor is properly meeting all its environmental requirements under its contract.

The extent of oversight may vary.

* Contractors of proven competence, good track records and management systems aligned with company’s own will largely self-monitor.
* Other contractors may be audited or inspected with varying intensity and frequency according to a risk-based approach.
* Sometimes contractors with a poor record or limited capacity have to be used, e.g., to incorporate required levels of local content in a particular country/location. Such contractors are strongly supervised.

#### Non-Operated JV

Where a company is not the operator, then typically it seeks to influence the non-operated JV in how risk is managed, including the EMS and compliance approaches adopted by the JV. Usually, less influence is required where the operator is another large IOGC and more influence for an operator that is short of capacity in environmental management. Non-operated joint ventures do their own monitoring and audits; however, a company may also do its own audits based on an assessment of the level of risk for each non-operated JV.

### Company Audits and Inspections

Typically, company audits and inspections take place at three levels.

* Operational business HSE personnel/teams conduct audits and inspections to a predetermined programme as a distinct activity from day-to-day self-monitoring. This type of audit is usually aimed at specific environmental performance topics and compliance actions that are required to be implemented by the particular operating business. Where an issue emerges the operating business HSE team can turn to the central business HSE team for advice on how to comply. SMEs may also become involved.
* The central business HSE team conducts its own audits at pre-determined intervals. Typically, these audits are aimed more at checking conformance with environmental performance standards and requirements that cut across the whole company regardless of location.
* A third level of audit may occur through inspections from a corporate HSE or company group audit team. To some extent these types of audit are close to being independent audits as they are separate from the operating business and the upstream business itself.

Capital projects going through the development stages tend to be handled differently. Usually there is a “phase gate” process that is audited at each phase gate milestone and reported to a review boards that decides whether to proceed and under what terms.

### Independent Verification

For those companies that are ISO 14001 accredited, independent verification of operating businesses is done through ISO 14001 verification audits which are conducted by an external independent party. It is also worth noting that many contractors (e.g., drilling contractors) are ISO 14001 accredited which provides another layer of independent verification. For those contractors that are not ISO 14001 accredited, bridging management systems are required to match those of the company. The external audit checks such bridging documents for conformance.

As noted above, certain types of internal audit, e.g., by group audit teams[[199]](#endnote-200) that are separate from the central business, can be regarded as at least semi-independent.

Some companies commission independent verification reviews of their overall systems that include visits to operating businesses.

There are other types of independent review. In Indonesia, for example, when BP began planning its liquefied natural gas plant in 2002, the company set up an independent panel to monitor its performance in various areas. The Tangguh Independent Advisory Panel there continues to review BP’s performance in areas such as human rights, security and governance.[[200]](#endnote-201)

Where companies have sought funding support from international financial institutions and lenders signed up to the “Equator Principles” independent verification will take place on behalf of the lender.[[201]](#endnote-202)

### Targeting/Prioritizing Strategies

Regulatory compliance is always a given priority. Aside from this, companies have developed standards over the years to at least in part address the risks associated with their operations so the process of checking compliance with their own standards is inherently rooted in a risk-based approach. The audit topics and the relative importance assigned to them then follow from this risk-based/regulatory compliance approach.

Operating businesses do a risk review of their own operations; for operating businesses the reviews are influenced by the “aspects and impacts register” (part of the EMS) and for projects in development by the EIA and EMMP. Generally, from such risk reviews priority can be given to what is monitored and audited, when and how often.

From the central business and/or corporate perspective priority such matters as frequency and intensity of audits and inspections is influenced by the nature of the project and its environmental, social and regulatory setting; higher-risk, larger, more complex operating businesses in sensitive settings receive greater attention in terms of depth and frequency of audit. Modifications may be made following the first and subsequent audits as risks become better understood.

## Compliance Enforcement

### Administrative Enforcement (Including Financial)

One company noted that serious infringements of HSE standards and requirements could ultimately lead to employment being terminated.

Performance against the terms of a contract is monitored by a “contract owner”. Administrative enforcement measures for contractors includes:

* withholding payments for serious HSE infractions;
* providing support to contractors to return to a compliant position for less serious infractions;
* contract termination; and
* placing badly performing contractors onto a “blacklist”.

### Criminal Enforcement

A fundamental requirement in all the IOGC activities is to always follow the law. If an internal audit, monitoring or inspection revealed a breach of local law, this would be reported to the appropriate regulator.

Prior to reporting or as part of the reporting process, a company may conduct its own investigation to understand the root cause of an incident, possibly leading to changes in practices, continuous improvement approaches, etc. Such an investigation allows the company to report to the regulator the measures it has taken to remedy the incident and how it intends to return to compliance.

### Other Sanctions

Other sanctions can include removal of contractors from approved suppliers lists, restrictions on services supplied and restrictions on geographies worked in. Some companies rank suppliers on their environmental performance and environmental management capacity, and being downgraded in ranking can affect the opportunities they can bid for and also the level of scrutiny they may be subject to, with scrutiny ranging from occasional audits through to day-to-day supervision.

## Reporting, Accountability and Transparency

IOGCs typically follow published guidelines for reporting their environmental performance in annual reports.

BP uses international reporting guidelines from Global Reporting Initiative (GRI) and IPIECA to report its environmental and social performance[[202]](#endnote-203) annually in its Sustainability Report. BP benchmarks its Sustainability Report[[203]](#endnote-204) against the Global Reporting Initiative (GRI) reporting guidelines.[[204]](#endnote-205) BP also indexes its Sustainability Report[[205]](#endnote-206) against the third edition of the IPIECA reporting guidance,[[206]](#endnote-207) which can be considered as a benchmark for the sector.

Shell reports on its sustainability performance in accordance with the Global Reporting Initiative Standards: Core option.[[207]](#endnote-208) Shell also follows global oil and gas industry standards and guidance for reporting environmental and social issues: e.g., IPIECA and the International Association of Oil & Gas Producers (IOGP).

Chevron also follows global oil and gas industry standards and guidance for reporting environmental and social issues as set out by IPIECA and the IOGP.

### Internal Reporting

Internal reporting and the functions involved in reviewing findings and acting on them are integral parts of all IOGC’s compliance monitoring processes as described in Section 8.4.

Internal reporting predominantly originates at the operating business level in terms of reporting up the line on matters related to environmental performance, internal audits, incidents (including near misses and potential non-compliances) and incident investigation.

Internal reporting is also used as a means of sharing experiences and lessons learned. For example, incident investigation and reporting typically involves:

* identifying, recording and reporting an incident;
* investigating by analysing root causes and trends;
* developing corrective actions; and
* sharing and adopting relevant lessons learned.

### External (Public) Reporting

BP provides externally available reports via the group website and also via some individual country websites. At a group level BP reports the targets it sets itself across various environmental and social performance indicators together with its group performance against these targets in both its annual Sustainability Report and in individual indicator reports. Other performance-related reporting material is available for some individual country websites.

Chevron reports annually on its global environmental and social performance in its Corporate Responsibility Report[[208]](#endnote-209) and website area (chevron.com/cr). The report is supplemented by specific environmental and social performance data[[209]](#endnote-210). In some instances, Chevron reports performance at a project-specific level, e.g., for the Tengizchevroil business in Kazakhstan.[[210]](#endnote-211) Overall Chevron reports on a variety of environmental and social performance issues, including climate change risk, and also provides various governance-related policy materials on its website.[[211]](#endnote-212)

Shell has publicly reported on an annual basis in its Sustainability Report on its progress in contributing to sustainable development for the past 22 years. All reports are available for download and are also available in local language versions.[[212]](#endnote-213)

### Scope and Transparency of Reporting

The majority of publicly available reporting by IOGCs is to do with group level performance against key environmental and social indicators and is done in accordance with the guidance and standards of reporting widely applied in the sector as noted above. However, there tends to be less reporting of individual operational performance. This is in part because in many places where they operate (e.g., UK, USA) IOGCs do so in a heavily regulated setting and data on their environmental performance will generally be available locally from regulatory sources and on the public record.

Generally, IOGCs only publish the results of self-monitoring and external audits at a facility/project level for a lender-funded project or if it was a host-country requirement.

#### BP

At a group level, BP reports the targets it sets itself across various environmental and social performance indicators that include:

* greenhouse gas emissions;[[213]](#endnote-214)
* freshwater withdrawal, consumption intensity (tons water/tons production);
* discharges to water (upstream, and refining and chemicals businesses), mass of produced water managed per unit mass of production, wastewater treatment measured as chemical oxygen demand;
* emissions to air of nitrogen oxides, sulphur oxides, non-methane hydrocarbons;
* environmental expenditure; and
* environmental and safety fines.

BP reports its group performance against these targets in its annual Sustainability Report.[[214]](#endnote-215)

There are exceptions to reporting being limited to overall group performance. For example, extensive reporting is provided on BP’s operations in Azerbaijan[[215]](#endnote-216) and for the Baku-Tbilisi-Ceyhan Pipeline Project. However, it should be noted that the extensive public reporting of the findings of monitoring, including independent audits and NGO reporting for these projects, was largely driven by the requirements of international lenders.

#### Chevron

The scope of Chevron’s global Corporate Responsibility Reporting covers the full range of environmental and social topics advocated by industry guidance.

The Corporate Responsibility Report highlights how Chevron goes about its environmental management practices, issues it is focusing on and its performance for a range of parameters that include:

* accidental releases;
* water use;
* wastewater discharges;
* greenhouse gas emissions;
* energy use and efficiency;
* emissions to air;
* solid wastes; and
* environmental fines and settlements.

The report also provides links to supplementary annual reporting on the website where it is possible to drill down further into the performance data.[[216]](#endnote-217)

In terms of the E&S performance of individual projects or operating units the scope and transparency of reporting is largely driven by the requirements of the host country. A good example of this is for the Wheatstone project in Australia, which provides a large amount of accessible and detailed documentation on environmental and social aspects of the project, its management and compliance assessment reporting.[[217]](#endnote-218)

#### Shell

Shell reports at a global level on its environmental and social performance on an annual basis in its Sustainability Report.[[218]](#endnote-219) Reporting is against a wide range of environmental and social indicators and the reporting is supported by interactive charts and downloads.[[219]](#endnote-220)

Shell is committed to public reporting on its activities in areas of nature conservation value classified by the IUCN as Category I-IV protected areas.[[220]](#endnote-221)

Shell’s Sustainability Report is intended to provide an overview of its environmental and social performance for key stakeholders including local communities, NGOs, shareholders, investors, customers, partners, governments, employees, media, academics, contractors and suppliers. For investors Shell also reports on how it is managing environmental and social risks and opportunities in the company’s annual report. Shell also cooperates with the producers of key indices such as the Carbon Disclosure Project and other organizations that help investors understand the economic, environmental and social performance of companies.

The Sustainability Report focuses on the environmental and social issues of most concern to Shell’s key stakeholders, alongside a rigorous process that identifies the sustainability topics from various internal and external sources. The basis for topic selection is summarized below.

|  |  |
| --- | --- |
| Significance to stakeholders: | External Review Committee’s previous opinion letter  Civil society dialogues  Stakeholder relations review  Global media review  Investor feedback and indexes  Reader feedback and social media  Reputation tracker survey  Website visits |
| Significance in a sustainability context  Resulting topics are considered in their broader sustainability context based on: | World Energy Outlook  WBCSD Vision 2050 report  Shell business environment outlook  Sustainability reporting guidelines and standards  Intergovernmental Panel on Climate Change (Assessment Reports) |
| Significance to Shell strategy: | Financial risks  Reputation risks  Sustainability priorities |

#### Annual Report Verification

IOGCs tend to have their annual performance reports subjected to some form of external verification. As an example, the process adopted by Chevron is summarized below.

Chevron appoints independent parties such as Lloyd’s Register Quality Assurance (LRQA) to provide independent assurance on its processes used in the creation of the Corporate Responsibility Report. Independent assurance is based on a range of evidence-gathering activities such as:

* visiting corporate HQ to review data collection and checking processes;
* reviewing business units (e.g., Chevron Upstream and Gas) to assess their understanding and implementation of the HES reporting requirements;
* visiting a selection of actual operations to assess local understanding and implementation of the HES reporting requirements;
* interviewing key personnel to identify and gain an understanding of the reporting requirements including key persons responsible for drafting the Corporate Responsibility Report;
* reviewing Chevron’s documented reporting requirements to validate consistency of scope, definition and reporting requirements for each of the HES performance indicators;
* reviewing Chevron’s primary data collection tools to assess their use in the reporting processes; and
* evaluating consistency with the IPIECA and other oil and gas industry guidance on voluntary sustainability reporting.

Observations for the calendar year 2016[[221]](#endnote-222) noted the following.

* Processes were in place to ensure that personnel contributing to HES metrics understood corporate reporting procedures and requirements.
* Methods used for calculating each HES performance metric were clearly defined and communicated.
* Chevron’s reporting requirements for HES metrics were understood and carried out. Data collected at the site/local and business-unit levels were checked and aggregated into corporation-wide metrics.
* Responsibility for annually reviewing and updating reporting guidelines was clear, with improvement in methodology regularly undertaken.

BP provides an “Independent Assurance Statement” in its Sustainability Report for 2018 from an independent review by Deloitte LLP.

Shell does not subject its Sustainability Report 2018 as a whole to external assurance for the accuracy of the information provided. Instead the information is examined by a review panel of independent experts.

### Whistle-Blowing

BP has a “Code of Conduct” that makes clear that all its staff have a responsibility to speak up if they see something unsafe, unethical or potentially harmful.[[222]](#endnote-223) Various options are set out in a decision tree up to and including a confidential internal facility called “OpenTalk”. OpenTalk is a confidential way for BP staff to raise concerns. It is administered by an independent company, available at all times and able to accommodate calls in more than 75 languages. OpenTalk can be contacted anonymously from most locations, and any report a member of staff makes is kept confidential to the fullest practicable extent consistent with law and good business practices. Reports can also be made online.

Chevron operates an internal “hotline” that allows the confidential reporting (and thence follow-up action) by employees and contractors for a variety of issues including environmental and social performance.

Shell operates a Global Helpline that enables Shell employees and others to raise concerns or to seek advice on a matter related to compliance with the law and Shell’s business principles and Code of Conduct.[[223]](#endnote-224) The helpline allows employees and others to do this in full confidence and without fear of retaliation. The Global Helpline is for all Shell employees and contract staff, as well as for third parties with whom Shell has a business relationship (such as customers, suppliers, agents) if they observe wrongdoing by a Shell company or employee.

### Complaints Procedure

BP requires each of its operating sites and projects to have robust processes to receive, document and respond to complaints.[[224]](#endnote-225) In order for operating businesses sites and projects to have a systematic approach to identifying, acting on and responding to concerns raised by local communities, BP has guidance on community complaints mechanisms that are aligned with the UN Guiding Principles on Business and Human Rights criteria. All complaints are registered in a log, and employees and contractors who work directly with external stakeholders on managing community complaints are specifically trained.

As an example, at BP’s South Caucasus Pipeline Expansion project in Georgia and Azerbaijan, all complaints are logged within a seven-day period of receipt with an objective to investigate and provide a formal response within 30 days. An internal panel reviews the investigation outcomes and agrees on resolution of the grievance and any corrective measures, where necessary.

Chevron operates formal approaches for business units and operations to respond to local community concerns and complaints. The mechanism includes provisions for engagement and two-way dialogue. In 2016, Chevron introduced a Grievance Mechanism Guidance to encourage best practice in community feedback systems and to enable its operations units to identify and respond to community concerns (see also Section 8.3.2.3).

Shell implements mandatory “community feedback procedures” at major operations and projects. The purpose of the procedures is to receive, track and respond to questions and complaints from community members before they can escalate into a more serious issue.

## Effectiveness

IOGCs attempt to measure effectiveness looking at two issues.

* Is the compliance assurance process working properly?
* Is the desired level of environmental performance delivered (or improved upon)?

The review of both is an integral part of the OMS performance review process. Environmental performance metrics may differ from operation to operation.

### Internal Assessment

BP’s environmental compliance system is organized such that the process of proactively identifying compliance issues, setting compliance tasks, tracking tasks and documenting closure is systematic and continuous. The frequency may vary from region to region depending on the legal regime. The effectiveness of the process can be readily checked at any point in time.

Chevron internally assesses its environmental performance in as quantitative a way as possible. Chevron also places great emphasis on getting results the right way (e.g., achieving environmental targets at the expense of safety or vice versa would not be acceptable) and this is checked from the highest levels of the company. The internal OE Audit group measures the effectiveness of compliance and ensures that management systems are working and are effective.

Measurement of the effectiveness of compliance with environmental and social performance standards is through the auditing system tracking compliance. Shell does not just monitor the results but also checks how they are achieved. The CSR Committee reviews the inputs to the Annual Report and has oversight of performance.

### External/Independent Assessment

BP undertakes annual independent verification audits of the ISO 14001 management systems of its operating businesses to demonstrate that the process is working properly.

BP also verifies some of the environmental and safety performance data used in its annual Sustainability Report.[[225]](#endnote-226) Verification was undertaken by Deloitte and focused on safety performance indicators and greenhouse gas emissions indicators. Deloitte’s assurance procedures included the following.

* The documents relating to BP’s sustainability performance were reviewed, including safety and operational risk documentation, internal audit outputs, and board committee minutes, to understand the level of management awareness and oversight of sustainability performance.
* Staff responsible for managing data processes and data management systems at group level were interviewed.
* A sample of control documentation for non-financial management information was reviewed.
* Disaggregated data reported by a sample of operational businesses was reviewed to assess whether the data had been collected, consolidated and reported accurately.

The completeness of the data and whether it had been collected, consolidated and reported accurately at group level was tested.

Chevron commissions Lloyd’s Register Quality Assurance Inc. (LRQA) to review its OEMS against the requirements of ISO 14001 (as well as against the internationally recognized specification for Occupational Health and Safety Management Systems, OHSAS 18001). The objectives of the review are to confirm that the design of OEMS is aligned with ISO 14001, to confirm that OEMS was in place across Chevron and to assess the role of OEMS in driving continual improvement. The attestation statement for 2018 presented findings as a continuation of similar reviews undertaken by LRQA for Chevron since 2004.

LRQA’s assurance for the calendar year 2018[[226]](#endnote-227) was undertaken as a sampling exercise including the following activities:

* annual reviews with Operational Excellence (OE) leaders from Corporate to verify OEMS implementation status and review future plans;
* annual reviews with OE leaders from the businesses to review OE progress and metrics; and
* observation of Chevron’s corporate OE audits operating businesses units.

LRQA made the following conclusions based on its review for the calendar year 2018.

* The design of OEMS is aligned with the requirements of ISO 14001:2015 and goes beyond the respective scope of ISO 14001 by establishing additional expectations including the implementation of processes related to security, reliability and efficiency, legislative and regulatory advocacy, community and stakeholder engagement, and product stewardship.
* OEMS is in place throughout the Corporation.
* Implementation of the OEMS has coincided with continual improvement in Chevron’s reported environmental performance indicators.
* The management system process at all of the organizational levels of the company is a key driver of continual improvement. The process follows a risk-based approach and is most mature for those processes determined by Chevron to be of highest risk.

Shell works with environmental partners (e.g., IUCN). It also has formal processes for engaging with communities around its assets. These allow a degree of feedback on environmental and social performance outside of the context of internal monitoring, auditing and reporting.

As noted above, management systems are subject to external ISO 14001 review which provides an external perspective on how well the systems are working and if they are being properly applied.

# European Bank for Reconstruction and Development

## Overview

The European Bank for Reconstruction and Development (EBRD) was set up to facilitate the transition to market economies in countries, initially from central and eastern Europe to central Asia and, more recently, the southern and eastern Mediterranean (see Table 8).

**Table 8 EBRD’s Regional Presence and Country Offices**

|  |  |
| --- | --- |
| **Region** | **Offices** |
| Southeastern Europe | Albania, Bosnia and Herzegovina, Bulgaria, Cyprus, Greece, Kosovo, Montenegro, North Macedonia, Romania, Serbia |
| Central Europe and Baltic States | Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia |
| Eastern Europe and the Caucasus | Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine |
| Central Asia | Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, Turkmenistan, Uzbekistan |
| Southern and Eastern Mediterranean | Egypt, Jordan, Lebanon, Morocco, Tunisia, West Bank and Gaza |
| Other | Russia, Turkey |

Financial investments in projects is a core activity for EBRD. EBRD also provides business advisory services and promotes trade finance and loan syndications.

EBRD’s operations span a range of industries, from agribusiness to infrastructure to energy to transport. Through its Green Economy Transition approach EBRD is considered among world leaders in climate finance.

EBRD expresses itself as being committed to the highest standards of corporate governance, particularly in its activities as an investor and as a law reformer.

Other key aspects of EBRD’s activities include the following:

* assessing the environmental and social impacts of all the projects in which it invests, working with its clients to achieve good international standards;
* supporting countries’ moves towards low carbon economies;
* ensuring climate risk assessments and adaptation measures are addressed in its operations; and
* implementing robust safeguard policies, with particular emphasis on economic inclusion, gender equality and stakeholder engagement.

## The Institutional Framework

### Centralized Responsibilities

Throughout the EBRD, responsibilities and related controls appear to be clearly defined and transparency and accountability are expressed as being integral elements of the bank’s corporate governance framework. This framework is additionally supported by reporting procedures, with information tailored for and disseminated to each level of responsibility within the Bank to enable the system of checks and balances on its activities to function effectively.[[227]](#endnote-228)

Where the EBRD gets involved in the financing of development projects it has specific responsibilities to ensure that project proponents comply with the terms of the loan and with EBRD requirements in general (including its Performance Requirements). The EBRD is therefore involved in monitoring and inspecting projects, and generally enforces compliance with the conditions of a loan.

Regarding environmental and social performance of projects it lends to, the roles and responsibilities of the Bank’s departments and officers are set out in its *Procedures for Environmental and Social Appraisal and Monitoring of Investment Projects*. These two activities are described in more detail in Figures 5 and 6. Table 9 summarizes the roles and responsibilities and for monitoring the implementation of projects (there are similarly defined roles and responsibilities during the environmental and social appraisal of projects).

**Table 9 Key EBRD Roles and Responsibilities during Environmental and Social Monitoring of Project Implementation**

| **Entity** | **Summary of Roles and Responsibilities** |
| --- | --- |
| Client | * comply with the agreed environmental and social provisions included in the financing agreements to the satisfaction of EBRD; * monitor the project’s performance against these requirements; * provide periodic environmental and social reports to EBRD together with other information such as prompt reporting of material incidents or accidents as required; * facilitate monitoring visits or audits by the Environment and Sustainability Department (ESD) and/or independent consultants. |
| Operation Team (and Operations Leader) | * monitor the project’s performance against EBRD’s policy and legal requirements; * maintain contact with the client and monitor compliance with all covenants (with the assistance of Operation Administration Department and with the ESD in respect of compliance with environmental and social covenants). |
| Environment and Sustainability Department (ESD) | * reviews the periodic environmental and social monitoring reports provided by the client, including updates on the implementation of the ESAP; * makes field visits as required to ensure project conformity with agreed environmental and social requirements; * participates in the compliance monitoring process regarding environmental and social covenants by advising OLs and OAD on any environmental and social issues that may arise, and by signing off on the client’s compliance with the environmental and social requirements; * documents, records and stores adequate environmental and social appraisal information; * approves waivers requested on covenants, which either have explicit environmental and social implications or may have such implications as a result of the proposed changes. |
| Operation Administration Department | * tracks and monitors the specific covenants for a project; * forwards environmental and social reports or information relating to environmental and social covenants to the ESD for review; * obtains ESD sign-off on the compliance of the project and the client with environmental and social provisions as evidence that the client has met the relevant environmental and social requirements; * maintains compliance records; * where a waiver, consent or amendment concerning environmental and social matters is required, produces the internal waiver, consent or amendment and, if necessary, circulates it for approval by other departments, including the ESD; * consults ESD when processing waivers, consents or amendments which either have explicit environmental and social implications or may have such implications as a result of the proposed changes. |
| Operations Committee | * Material changes to any project as well as any significant adverse material environmental and/or social incidents, or significant non-compliances must be brought to the attention of the Operations Committee. |
| Board of Directors | * Material changes which could affect the achievement of the environmental and/or social objectives of the project may also need to be reported to the Board of Directors or be subject to Board approval. |

### Strategic Planning

The EBRD has a clear strategy on addressing the environmental and social aspects of its work, especially the projects it invests in. This strategy is set out in the Bank’s Environmental and Social Policy, which is one of its three good governance policies and a key document in guiding the EBRD’s commitment to promoting “environmentally sound and sustainable development” across the full range of its activities. The policy sets out the ways in which the bank implements these commitments in practice.

The policy is periodically reviewed and most recently it (together with the Performance Requirements discussed further below) was reviewed over an 18-month period involving internal and external consultation, leading up to a 45-day public consultation period on the draft Policy and consultation events in eight countries. The outcome of this process is a new policy which will become effective in 2020.

The EBRD develops strategies for each country it is operating in. The strategies look ahead over the next four years and are regularly refreshed with public consultation input and approved by the Board. The strategies consider the bank’s current portfolio, trends in the various sectors relevant to the country, the general investment environment and the likely impacts of the bank’s future investment activities, among various other matters.

The EBRD develops strategies for the coming years (e.g., 2019 to 2023) for the various sectors it invests in (energy, transport, mining, etc.) that set out trends in the sector, the Bank’s areas of focus, lessons learned from previous years and how it will measure its performance.[[228]](#endnote-229) The strategies are periodically refreshed, their development involves public consultation and they are approved by the Board.

### Funding

The EBRD is owned by 71 shareholders: 69 countries and two international organizations. When each country or organization becomes a shareholder, it makes a contribution to an overall capital base. That capital base (augmented by other commitments and contributions) allows the EBRD to raise funds which ultimately form the investment in projects.[[229]](#endnote-230)

EBRD’s environmental and social safeguarding activities specifically related to a project are generally funded at least in part by the borrowing party/project proponent.

### Staff Resources and Training

The EBRD has a team of staff dedicated to compliance assurance and related activities (advice, guidance, review of documents, etc.) regarding conformance with the Bank’s performance requirements. This team is regularly augmented by the appointment (paid for by the project proponent) of external environmental and social consultants as “lender’s adviser”. The project proponent itself will also appoint consultants to undertake Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plan (ESMP) and related services, further adding to the resources involved in compliance assurance for the Bank’s projects.

In addition to its own staff resources and external consultants the Bank also has an Environmental and Social Advisory Council (ESAC).[[230]](#endnote-231) The ESAC is an independent body of environmental and social specialists that advises the Bank on important environmental and social issues including policy, international standards, technical development, emerging trends and future opportunities.

The ESAC members are drawn from a wide range of interests including the private sector, academia and non-governmental organizations. They are also drawn from a wide range of countries to reflect the Bank’s geographic spread of interests. They are appointed for three-year periods and are selected based on professional expertise and their potential to contribute to the development of EBRD’s environmental and social policies and programmes. ESAC members and EBRD staff maintain regular contacts between twice-yearly formal meetings.

The EBRD recruits staff to work in its London headquarters and resident offices spread across the countries where the Bank invests. Recruitment tends to be from nationals of one its shareholders or countries where it works. One benefit of this is that its employees come from a diverse range of cultural backgrounds and speak a number of languages.

EBRD operates an International Professionals Programme (IPP). IPP involves recruitment of individuals on a two-year programme offering experience in one of the Bank’s resident country offices and in a variety of teams at its Headquarters in London.

For example, the IPP is an intensive two-year programme that prepares individuals for a potential career at the EBRD. The programme is designed to both invest in an individual’s existing talents and involve them in the Bank’s projects. The programme also involves starting and finishing in the London headquarters, rotating through three placements, including one that provides the opportunity to work with and learn from other cultures in one of the Bank’s 36 countries of operations. Throughout the programme a recruit works to an individual training plan under the guidance of a line manager and mentor.

### Ring-Fencing of Different Functions

The roles and responsibilities set out in Table 9 show the clear distinctions in roles between the Environment and Sustainability Department (ESD) and other Bank departments and also how they interact. Of note are the checks and balances involved in the process of including project-specific requirements on environmental and social performance. For example, the Office of General Counsel lawyer and the Operations Leader must ensure that the environmental and social provisions included in the financing agreements have been reviewed and agreed by the ESD prior to completion of negotiations and signing. This separation of functions continues during project implementation where the ESD continues to have a review and ultimate sign-off role in processing waivers, consents or amendments to the original agreement that could have environmental or social implications (see Table 9).

Further separation and independence are provided by the Project Complaints Mechanism discussed below.

## Compliance Promotion

### General Considerations

Projects financed by EBRD are required to be designed, constructed and operated in compliance with good international practices relating to sustainable development. To help its clients achieve good practice in their projects, EBRD has defined 10 performance requirements covering key areas of environmental and social performance. Generally, these requirements are made binding through addressing those that are relevant to a project in the ESIA and ESMP, and then carried forward into the terms of the agreement. The performance requirements are periodically reviewed and have been updated this year along with the Bank’s Environmental and Social Policy, ready for implementation in 2020. The performance requirements are aimed at providing a solid base from which clients can improve the sustainability of their projects.

The EBRD Performance Requirements comprise:

* PR 1: Assessment and Management of Environmental and Social Impacts and Issues;
* PR 2: Labour and Working Conditions;
* PR 3: Resource Efficiency and Pollution Prevention and Control;
* PR 4: Health and Safety;
* PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement;
* PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
* PR 7: Indigenous Peoples;
* PR 8: Cultural Heritage;
* PR 9: Financial Intermediaries; and
* PR 10: Information Disclosure and Stakeholder Engagement.

Each performance requirement sets out its objectives, the scope of its applicability and the requirements themselves.

Projects that comprise new build facilities or business start-ups must be designed to meet the performance requirements from the outset. Existing facilities that are not able to meet the requirements at the time of EBRD Board approval of finance are required to adopt and implement a suitable Environmental and Social Action Plan (ESAP) that is approved by EBRD.

EBRD has a strong focus on environmental and social compliance promotion, the majority of which is aimed at helping clients to develop and deliver their projects in accordance with the performance requirements. As noted above, the EBRD performance requirements are considered an integral part of the ESIA process and the measures for the project to address them (e.g., via mitigation and monitoring measures) are set out in an ESMP/ESAP. The ESIA process is normally also a host-country requirement, and compliance with host-country laws and regulations is a key requirement of the bank. The resultant ESIA report and ESMP/ESAP normally reflects both the bank’s performance requirements and specific, relevant host-country laws, standards, etc., whichever are the most stringent.

### Publications

#### Raising Awareness

In its Environmental and Social Policy (2014)[[231]](#endnote-232) the Bank sets out how the Bank addresses the environmental and social impacts of its projects in terms of the following:

* defining the respective roles and responsibilities of prospective clients as well as the Bank’s in designing, implementing and operating projects according to Policy and the associated Performance Requirements;
* setting a strategic goal to promote projects with high environmental and social benefits; and
* mainstreaming environmental and social sustainability considerations into all its activities.

The Environmental and Social Policy also introduces the EBRD Performance Requirements (PRs),[[232]](#endnote-233) which set out in more detail what clients are required to do in terms of meeting the PRs and generally address the environmental and social aspects of obtaining funding for a project.

As noted in Section 9.3.1 the policy and performance requirements are periodically reviewed and have recently been updated ready for implementation in 2020. The policy and PRs that will apply from 2020 until the next review can be viewed here: <https://www.ebrd.com/news/publications/policies/environmental-and-social-policy-esp.html>.

#### Providing Knowledge

EBRD does not have a separate approach to providing knowledge or directing people to an evidence base so this topic can be assumed to be partially covered under guidance in general.

#### Setting Guidance

In order to guide its clients in the implementation of the performance requirements, EBRD has a wide range of online resources available. These include guidance documents and good practice notes, compliance documents and e-manuals. The majority of these are linked to specific performance requirements.[[233]](#endnote-234) The performance requirements are mandatory; the guidance is focused on helping borrowers meet the requirements.

Taking PR 6 (*Biodiversity Conservation and Sustainable Management of Living Natural Resources*) as an example it is supported by *Guidance Note: EBRD Performance Requirement 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources*. The Guidance Note in turn provides a large number of links to international good practice in biodiversity assessment and management.

#### Communicating Best Practice

As noted above, EBRD guidance, especially that aimed at facilitating delivery of its PRs, sets out good practice. Good practice is set out both in terms of PR topics as well as for specific sectors, e.g., *Environmental and social good practice note—Small hydropower projects*.

Good practice is also communicated via seminars and webinars (see Section 9.3.3.1 below).

#### Topicality and Relevance

The Environmental and Social Policy and the PRs are periodically reviewed and updated. The most recent versions were introduced in 2014. Review commenced on these 18 months ago leading to revisions and updates to them which will come into force in 2020. The review process is an open one that includes public consultation.

#### Appropriate to Audience

Guidance is aimed at environmental managers, practitioners, clients, host country regulators and the public. Local language documents are also available.

### Other Media

#### Web-Based Materials

All EBRD documents that promote compliance are readily accessible via its website for use by loan recipients and others.

In addition, EBRD periodically advertises and hosts Webinars[[234]](#endnote-235) but these are generally created for other financial institutions, for example:

* Environmental and Social Policy Development—Best Practice for Financial Institutions;
* Environmental and Social Management Systems—Best Practice for Financial Institutions;
* Environmental and Social Policy Development—Best Practice for Private Equity; and
* Environmental and Social Management Systems Development for Private Equity.

#### Interactive Web-Based Materials

The EBRD invites civil society organizations (CSOs) and members of the public to present their views on its work via the Consultation Hub (<https://www.ebrd-consultations.com>). The Hub provides a platform for the Bank’s stakeholders to comment on such matters as developing environmental and social policy and country and sectoral strategies.

All comments received during public consultation periods are reviewed by the Bank’s management and are used to advise the Board. The feedback obtained through consultation is taken into account in decisions on policies and strategies, together with comments from shareholder governments, clients and other interested parties.

Project Summary Documents (PSDs) are accessible via the Hub and available for comment for all projects directly financed by the EBRD. For category A projects, Environmental and Social Impact Assessments (ESIAs) are released for public consultation for 60 days for private sector and 120 days for public sector projects.

Online interactive training programmes are also available, such as *Online E&S Risk Management Learning Programme for Financial Intermediaries.*[[235]](#endnote-236) This course explains how EBRD’s E&S Risk Management Procedures can help Financial Intermediaries involved in the EBRD project funding to manage the risks that rise from E&S issues in their activities.

#### Seminars and Training

As well as internal training, EBRD also conducts training for external parties in the countries/locations hosting its operations.

One example is the *EBRD Capacity Building Workshop on Environmental, Health and Safety and Social Policies.*[[236]](#endnote-237) These workshops:

* covered EBRD’s environmental and social policies, procedures and due diligence requirements, including project monitoring;
* explained the international banking and investment processes, clarifying the differences in the environmental and social requirements related to different investment types;
* described the legal mechanisms and covenants through which the EBRD agrees with clients to ensure actions are included to manage risk and drive compliance with policies;
* addressed some industry sector-specific environmental and social issues typically faced by clients;
* covered the environment and social consulting skills and the contracting requirements of the Bank.

The workshops are organized and facilitated by external consultants, and participants include senior international environmental, social, and health and safety experts as well as senior EBRD specialists presenting and discussing case studies. They are held in relevant host countries; for example, in 2015 workshops were held in Bosnia and Herzegovina, Albania, FYR of Macedonia, Croatia, Serbia, Turkey, Ukraine and Mongolia.

Participation at the workshops is typically targeted at project managers, owners and managers in host country consulting companies, together with technical specialists.

### Incentivization

#### Financial

The ESD provides key input to the specification of appropriate environmental and social covenants to be included in the financing agreements that reflect the environmental and social due diligence (ESDD) and ESIA outcomes. These may include specific covenants, such as requirements that must be met prior to effectiveness or disbursement of funds. Environmental and social compliance are therefore directly linked to financial incentives. One high-profile example was the EBRD delaying approval of a loan to the Sakhalin-2 Phase II Project due to environmental concerns.[[237]](#endnote-238)

#### Approved Suppliers

EBRD does not maintain a formal list of approved suppliers of ESIA and related services but does occasionally make recommendations of a shortlist for loan applicants to consider. Typically, the shortlist would be of organizations that the bank knows has delivered suitable services for that sector in that country on recent occasions.

#### Awards

In recognition of the profile and importance of sustainability in the bank’s activities and in the countries in which it funds projects, EBRD holds annual Sustainability Awards to celebrate the achievements of its clients in the areas of environmental and social responsibility.[[238]](#endnote-239)

Each year gold, silver and bronze awards are presented in each of four categories:

* Sustainable Energy;
* Climate Resilience;
* Environmental and Social Best Practice; and
* Environmental and Social Innovation.

Nominations are assessed by an independent panel against criteria that include the following.

* Standards and best practice: Has the client implemented higher standards, introduced best practice, or gone beyond the Bank’s Performance Requirements to deliver energy savings or similar?
* Innovation: Has the client introduced new or unique practices, products or services with significant E&S benefits within the sector/region/country?
* Demonstration effect: Has the client introduced technologies, practices or management techniques with significant demonstration effect and with the potential for replication?
* Capacity building: Has the client made changes or improvements to the management culture or working practices which promote better understanding and management of key environmental and social issues?

## Compliance Monitoring

### Introduction

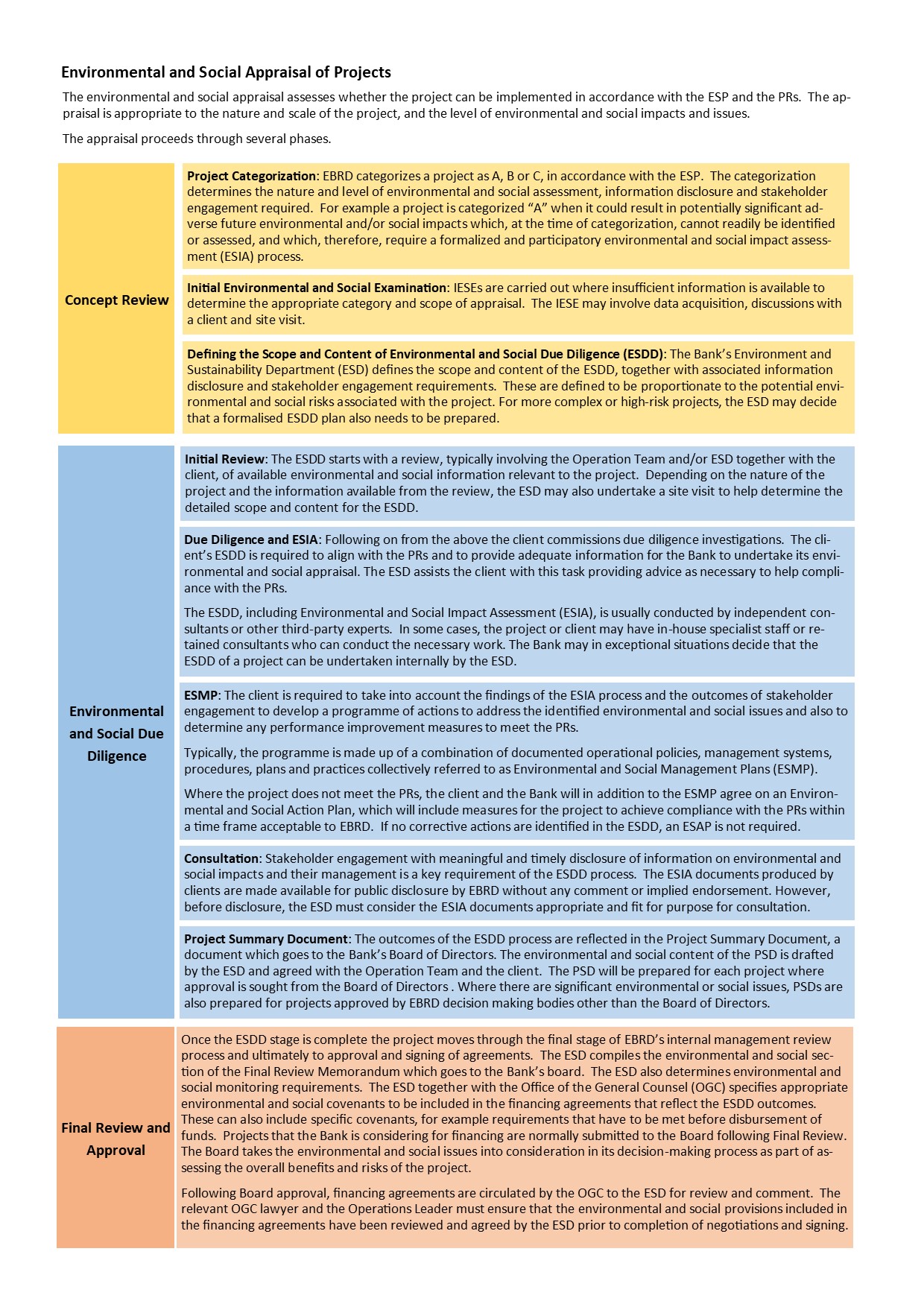
EBRD has clearly established procedures for monitoring the environmental and social performance of projects that it directly finances or finances via intermediaries: Procedures for Environmental and Social Appraisal and Monitoring of Investment Projects (2015) (the “Procedures”). These Procedures set out EBRD’s process for the environmental and social appraisal and monitoring of projects and also how this process is integrated into the overall EBRD project cycle and decision-making process. The Procedures also describe the respective roles and responsibilities of EBRD’s clients. The Procedures are applied in conjunction with the ESP and the PRs, together with relevant guidelines and tools developed by EBRD.

Leaving aside where financial intermediaries are involved, there are effectively two main and linked stages of compliance assurance:

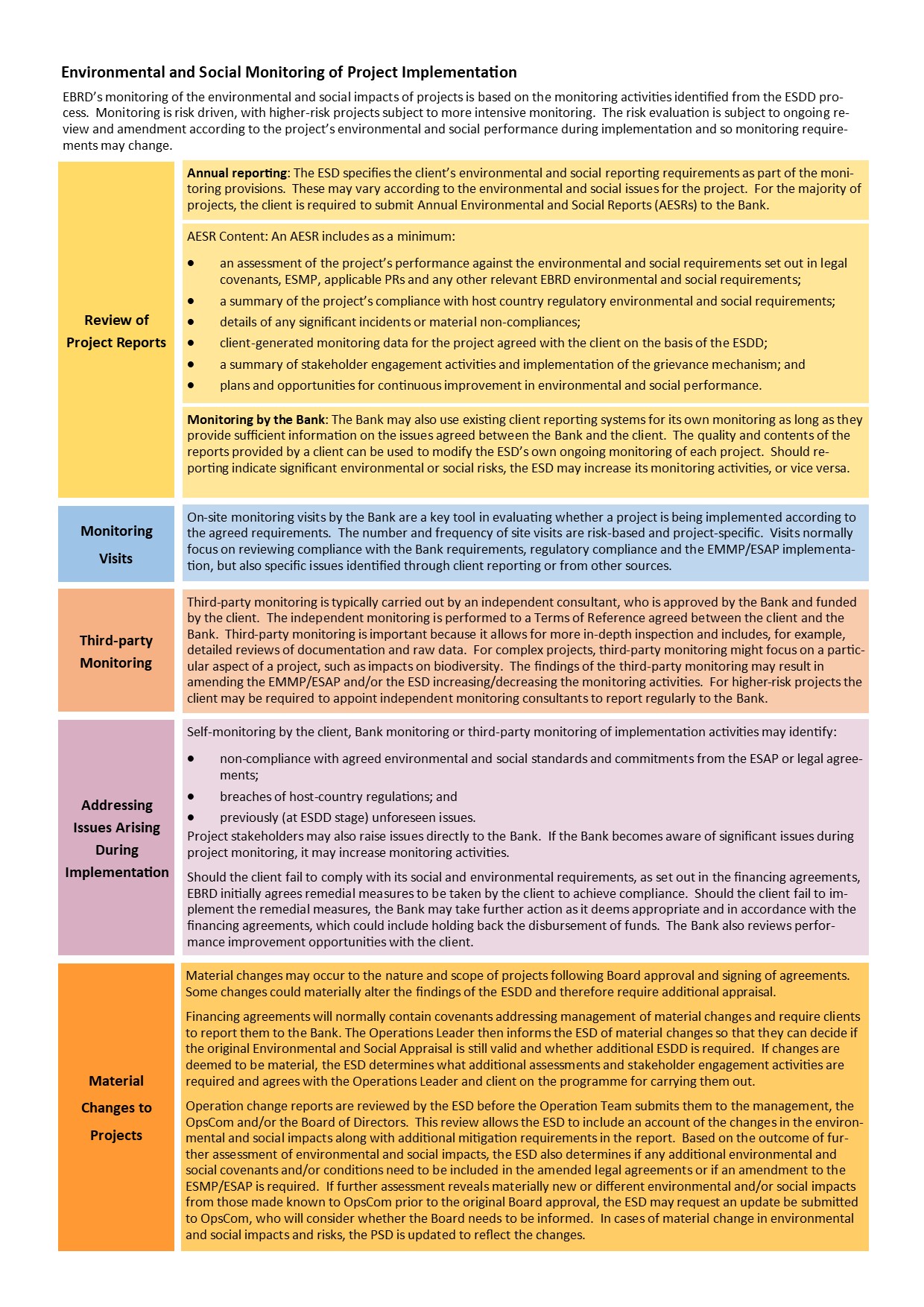
* environmental and social appraisal of projects; and
* environmental and social monitoring of project implementation.

The above two processes are summarized in Figures 5 and 6. It should be noted that these figures are representations of the two processes and are by no means comprehensive. For example, there are specific aspects of the environmental and social appraisal of projects that relate to the Bank’s financial intermediaries which for the sake of brevity are omitted.

**Figure 5 EBRD’s Environmental and Social Appraisal of Projects**



**Figure 6 EBRD’s Environmental and Social Monitoring of Project Implementation**



### Self-Monitoring

Self-monitoring by clients plays a role in compliance monitoring. However, as shown in Figure 6 it is part of a suite of monitoring approaches and rarely if ever the sole approach. In addition, self-monitoring has to be conducted strictly in accordance with an agreed ESMP/ESAP as set out in the financing agreement.

### Bank Audits and Inspections

Throughout the Environmental and Social Appraisal process the Bank’s ESD is closely involved such that the ESMP/ESAP and associated monitoring requirements are closely aligned with the environmental and social risks raised by the project. Thereafter through the implementation phase the ESD is closely involved in the review of monitoring reports and also makes on-site monitoring visits to help evaluate whether a project is being implemented according to the agreed requirements. The number and frequency of site visits are risk-based and project-specific.

### Independent Verification

As shown in Figure 6, third-party (i.e., independent) monitoring may be carried out by an independent consultant, who is approved by the Bank and funded by the client. Although there are no formal criteria to trigger this, generally, the higher the potential risks of a project the more likely it is that third-party monitoring will be required and the more extensive the terms of reference for that monitoring. Third-party monitoring typically involves more in-depth inspection and includes, for example, detailed reviews of documentation and raw data. For complex projects, third-party monitoring may focus on one key aspect of a project, such as biodiversity.

It is also worth noting the role of the public and the Project Complaints Mechanism which together effectively provide another tier of third-party monitoring.

### Targeting/Prioritizing Strategies

The Bank’s compliance monitoring process is the result of a structured approach aimed at focusing most effort on the areas of highest potential risk for a specific project.

The focus of monitoring in terms of priorities is progressive through the “environmental and social appraisal” and “monitoring of implementation” processes. The initial categorization of a project indicates certain priorities and further review defines the scope and content of the ESDD, including the ESIA. Priority risks identified in the ESDD and their associated management and monitoring requirements are then captured in the ESMP/ESAP and addressed by monitoring during project implementation. The process does not end at this stage and priorities are continuously reviewed and reassessed if required such that monitoring effort and frequency can be modified in either direction.

## Compliance Enforcement

### Administrative Enforcement (Including Financial)

Enforcement measures tend to be progressive as set out below.

As noted in Figure 6, monitoring activities may identify non-compliance with agreed environmental and social standards and commitments from the ESMP/ESAP or legal agreements. Where issues are identified they should be promptly followed up and addressed. In the event the Bank becomes aware of significant issues during its own monitoring, it may then increase its monitoring activities.

Should the client fail to comply with its social and environmental commitments, as set out in the financing agreements, EBRD agrees on remedial measures to be taken by the client to achieve compliance. If the client fails to comply with these agreed measures, the Bank may then take further action and/or exercise such remedies contained in the financing agreements that are deemed appropriate. Appropriate environmental and social covenants that reflect the ESDD outcomes are included in the financing agreements, and may include specific covenants, such as requirements that must be met prior to disbursement of funds. The Office of General Counsel lawyer assigned to the project and the operations team leader are required to ensure that the environmental and social provisions set out in the financing agreements have been approved by the Environment and Sustainability Department prior to completion of negotiations and signing.[[239]](#endnote-240) Administrative enforcement could therefore ultimately include withholding of funds until compliance with environmental and social provisions was achieved or a clear programme to compliance was set out and agreed.

### Criminal Enforcement

Criminal enforcement is not directly relevant for the EBRD where environmental performance compliance is concerned. In the event of breach of local laws EBRD would defer to a national government where the project takes place. It is normal for an ESMP/ESAP to contain mechanisms for breaches of environmental laws to be reported to the appropriate authorities. It is also worth noting that most host countries have their own inspection and enforcement processes running alongside those of EBRD.

### Other Sanctions

EBRD does have other sanctions (see, e.g., <https://www.ebrd.com/ineligible-entities.html>) but these tend to relate to legal and financial issues.

## Reporting, Accountability and Transparency

### Internal Reporting

The outcome of compliance assurance activities is reported within the bank as part of an overall process of ensuring that borrowers are meeting the terms of their loan agreements.

### External (Public) Reporting

The Bank publishes an annual Sustainability Report[[240]](#endnote-241) which is discussed further below.

The Bank also has other reporting, disclosure and feedback mechanisms in place for its sustainability work associated with the following:

* ESIA listings to allow public feedback during the project ESDD phase;[[241]](#endnote-242)
* Project complaint mechanism (see Section 9.2.5.2);
* Environmental and social advisory council (see Section 9.2.4);
* Greenhouse gas assessments;[[242]](#endnote-243)
* Project ESIA and related documents (usually via a country link);[[243]](#endnote-244) and
* Project summary documents.[[244]](#endnote-245)

### Scope and Transparency of Reporting

The Bank provides quantitative and qualitative information on the impacts and outcomes of its activities in its annual Sustainability Report. This is aimed at communicating the environmental and sustainability benefits of its work to shareholders, donors, civil society and investors.

The Sustainability Report is prepared using the framework of the Global Reporting Initiative (GRI) G3 Indicator protocols and the GRI Financial Sector Supplement.

EBRD as an organization also measures and manages its own carbon footprint in the same way that requires of the projects it invests in.

The EBRD has a robust monitoring, reporting and verification (MRV) system, which is in line with internationally established practice. The system’s guidelines define the characteristics of green projects and project components and they determine the data required for monitoring.

The Bank also encourages proactive public involvement in the development of its strategies, for example country and sector strategies.[[245]](#endnote-246)

All ESIA-related documentation for projects that the EBRD is funding or that have applied for funding is available on the bank website.[[246]](#endnote-247) Some projects funded by the bank report compliance issues from monitoring and audits of the implementation phase, including details of non-compliance, details of remedial action, etc., on their websites.

### Whistle-Blowing

The EBRD requires that for projects it funds the client will provide an effective grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns.[[247]](#endnote-248)

Based on this review, the bank itself does not appear to have a whistle-blowing policy.

### Complaints Procedure

The Bank operates a Project Complaints Mechanism (PCM),[[248]](#endnote-249) which is governed by a set of rules on how a complaint may be filed and how it will be processed, together with other requirements such as timelines. PCM has two functions:

* a “Compliance Review” function which seeks to assess whether a Bank-approved project complies with relevant environmental and social requirements among other policies and the project-specific provisions of the Public Information Policy; and
* a “Problem-solving Initiative” aimed at restoring dialogue between the parties involved, which might include such actions as independent fact-finding, mediation, investigation and reporting.

Complaints may originate from parties in areas affected by Bank-funded projects, including those with economic, social and cultural interests.

Administration of the PCM is independent from the EBRD’s banking operations and the ESD. It is administered by a dedicated Officer drawn from the EBRD’s Office of the Chief Compliance Officer (OCCO). In addition, a roster of independent experts may assist the PCM Officer. When a complaint is received, the PCM Officer appoints an independent expert from the current roster. Working with the expert, the PCM Officer assesses the eligibility of the complaint and decides whether or not to proceed through the compliance review and/or problem-solving stages.

The PCM Officer is also responsible for the overall, day-to-day administration of the PCM including:

* maintaining the PCM website;
* registering and preparing administrative procedures and guidelines;
* receiving and registering complaints; and
* maintaining a documentary record in respect of each registered complaint.

The PCM Officer also produces annual reports covering PCM activities in the respective year and conducts outreach events so that civil society is aware of the existence and function of the PCM.

## Effectiveness

### Internal Assessment

The EBRD annual sustainability report looks at how effective the bank has been in selected activities, especially around greener technology and energy transition[[249]](#endnote-250) where trends and impacts are seen to be positive. However, there does not appear to be any published assessment of the bank’s environmental compliance assurance activities.

### External/Independent Assessment

Various organizations examine the performance of international finance institutions including EBRD. Bankwatch, for example, is critical of its activities. Much of the criticism is associated with specific projects rather than any systemic failings or faults in its performance requirements or its environmental compliance assurance processes. However, EBRD’s overall approach is questioned in the context of the difficult environmental and social issues being faced in many of the countries it invests in and the quality (and quantity) of the projects it supports.

**Endnotes**

1. Republic of South Africa Department of Environment Affairs, “Department of Environment, Forestry and Fisheries,” accessed June 23, 2020, https://www.environment.gov.za/aboutus/ministry. [↑](#endnote-ref-2)
2. Republic of South Africa Department of Environment Affairs, “Environmental Management Inspectorate,” accessed March 31, 2020, https://www.environment.gov.za/projectsprogrammes/emi. [↑](#endnote-ref-3)
3. Republic of South Africa Department of Environment Affairs, “Strategic Plan and Annual Performance Plan” (2018), https://www.environment.gov.za/sites/default/files/strategic\_plans/EnvironmentalAffairs\_StrategicPlan2019-2024-AND-App2019-2020.pdf. [↑](#endnote-ref-4)
4. Although the NECES is referenced in various locations and documents, a stand-alone document was not found during this case study review. [↑](#endnote-ref-5)
5. Republic of South Africa Department of Environment Affairs, “Strategy and Framework Documents,” accessed Aug. 28, 2020, https://www.environment.gov.za/documents/strategicdocuments. [↑](#endnote-ref-6)
6. Republic of South Africa Department of Environment Affairs, “National Waste Management Strategy” (2011), https://www.environment.gov.za/sites/default/files/docs/nationalwaste\_management\_strategy.pdf. [↑](#endnote-ref-7)
7. Western Cape Government, Department of Environmental Affairs and Developmental Planning, “Annual Report 2017/18” (2018), https://www.westerncape.gov.za/eadp/files/atoms/files/Annual%20Report%202017-18.pdf. [↑](#endnote-ref-8)
8. Republic of South Africa Department of Environment Affairs, “National Environmental Compliance and Enforcement Report 2017-18” (2018), https://www.environment.gov.za/sites/default/files/reports/necereport2017-18.pdf. [↑](#endnote-ref-9)
9. Republic of South Africa Department of Environment Affairs, “Environmental Management Inspectorate Basic Training,” accessed June 23, 2020, https://www.environment.gov.za/projectsprogrammes/emi/basictraining. [↑](#endnote-ref-10)
10. Republic of South Africa Department of Environment Affairs, “Publications,” accessed Aug. 28, 2020, https://www.environment.gov.za/media/publications. [↑](#endnote-ref-11)
11. Republic of South Africa Department of Environment Affairs, “Gazetted Notices,” accessed Aug. 28, 2020, https://www.environment.gov.za/legislation/gazetted\_notices. [↑](#endnote-ref-12)
12. Republic of South Africa Department of Environment Affairs, “Evidence and Policy in South Africa’s Department of Environmental Affairs” (2016), https://www.environment.gov.za/sites/default/files/reports/report\_evidenceandpolicy\_environmentalaffars\_southafrica.pdf. [↑](#endnote-ref-13)
13. Republic of South Africa Department of Environment Affairs, “Environment Sector Research, Development and Evidence Framework” (2012), https://www.environment.gov.za/sites/default/files/docs/environmental\_research\_framework.pdf. [↑](#endnote-ref-14)
14. Republic of South Africa Department of Environment Affairs, “Research Documents,” accessed Sept. 3, 2020, https://www.environment.gov.za/documents/research. [↑](#endnote-ref-15)
15. Republic of South Africa Department of Environment Affairs, “Integrated Environmental Management Information Series,” accessed June 23, 2020, https://www.environment.gov.za/documents/strategies/integrated\_environmentalmanagement\_eim. [↑](#endnote-ref-16)
16. Republic of South Africa Department of Environment Affairs, “Guidelines and Policies,” accessed Sept. 3, 2020, https://www.environment.gov.za/legislation/guidelines. [↑](#endnote-ref-17)
17. Republic of South Africa Department of Environment Affairs, “Guidelines on the Administration of Incidents” (2019), https://www.environment.gov.za/sites/default/files/legislations/guidelines\_administrationofincidents.pdf. [↑](#endnote-ref-18)
18. Ibid. [↑](#endnote-ref-19)
19. Republic of South Africa Department of Environment Affairs, “People and Parks: Best Practices,” accessed June 23, 2020, https://www.environment.gov.za/projectsprogrammes/peopleparks/bestpractices. [↑](#endnote-ref-20)
20. Republic of South Africa Department of Environment Affairs, “National Waste Management Summit,” accessed June 23, 2020, https://www.environment.gov.za/event/deptactivity/wastemanagementsummit. [↑](#endnote-ref-21)
21. Republic of South Africa Department of Environment Affairs, “Department of Environmental Affairs Hosts Interpol Meeting on Waste and Pollution,” news release, May 21, 2018, https://www.environment.gov.za/mediarelease/deahostsinterpolmeetingonwasteandpollution. [↑](#endnote-ref-22)
22. Republic of South Africa Department of Environment Affairs, “Environmental Geographic Information Systems,” accessed June 23, 2020, https://www.environment.gov.za/mapsgraphics. [↑](#endnote-ref-23)
23. Republic of South Africa Department of Environment Affairs, “Welcome to Environmental GIS,” accessed June 23, 2020, https://egis.environment.gov.za/. [↑](#endnote-ref-24)
24. Republic of South Africa Department of Environment Affairs, “Protected Areas Register,” accessed Sept. 3, 2020, https://portal.environment.gov.za/portal/apps/webappviewer/index.html?id=54487a82babf4a7e9ab3a42aacabdf84. [↑](#endnote-ref-25)
25. Republic of South Africa Department of Environment Affairs, National Web-Based Environmental Screening Tool, accessed March 24, 2020, https://screening.environment.gov.za/screeningtool/index.html#/pages/welcome. [↑](#endnote-ref-26)
26. Republic of South Africa Department of Environment Affairs, “7th Environmental Compliance & Enforcement Lekgotla 2017,” accessed Sept. 3, 2020, https://www.environment.gov.za/events/department\_activities/7thenvironmentalcomplianceenforcementlekgotla2017. [↑](#endnote-ref-27)
27. Republic of South Africa Department of Environment Affairs, “Deputy Minister Thomson Announces the Winners of the Greenest Municipality Competition in Tzaneen,” news release, Jan. 28, 2015, https://www.environment.gov.za/mediarelease/thomson\_gmcawards2015. [↑](#endnote-ref-28)
28. Republic of South Africa Department of Environment Affairs, “Transmission Verification Report” (2012), http://www.eskom.co.za/OurCompany/SustainableDevelopment/EnvironmentalImpactAssessments/1403/Documents/3603850.pdf. [↑](#endnote-ref-29)
29. Centre for Environmental Rights, “Enforcing the Law: The Challenges Undermining Environmental Compliance Monitoring and Enforcement in South Africa,” accessed Sept. 3, 2020, https://fulldisclosure.cer.org.za/2015/enforcing-the-law. [↑](#endnote-ref-30)
30. Republic of South Africa Department of Environment Affairs, “Green Scorpions Embark on National Sand Mining Blitz,” news release, Aug. 19, 2014, https://www.environment.gov.za/mediarelease/greenscorpions\_nationalsandminingblitz. [↑](#endnote-ref-31)
31. Republic of South Africa Department of Environment Affairs, “Annual Report 2017/18” (2018), https://www.environment.gov.za/sites/default/files/reports/environmental\_affairs\_annualreport2017\_18.pdf. [↑](#endnote-ref-32)
32. Republic of South Africa Department of Environment Affairs, “Strategic Plan (2019/20-2023/24) and Annual Performance Plan 2019/20” (2018), https://www.environment.gov.za/sites/default/files/strategic\_plans/EnvironmentalAffairs\_StrategicPlan2019-2024-AND-App2019-2020.pdf. [↑](#endnote-ref-33)
33. Republic of South Africa Department of Environment Affairs, “National Environmental Compliance and Enforcement Report 2017-18.” [↑](#endnote-ref-34)
34. Republic of South Africa Department of Environment Affairs, “Reports,” accessed Sept. 3, 2020, https://www.environment.gov.za/otherdocuments/reports. [↑](#endnote-ref-35)
35. Republic of South Africa Department of Environment Affairs, “National Environmental Crimes and Incidents Hotline,” accessed Sept. 3, 2020, https://www.environment.gov.za/projectsprogrammes/emi/environmental\_crimeshotline. [↑](#endnote-ref-36)
36. Western Cape Government, Department of Environmental Affairs and Developmental Planning, “Report Environmental Crimes,” accessed Sept. 3, 2020, https://www.westerncape.gov.za/eadp/report-environmental-crimes. [↑](#endnote-ref-37)
37. Republic of South Africa Department of Environment Affairs, “Services to the General Public,” accessed Sept. 3, 2020, https://www.environment.gov.za/services/public. [↑](#endnote-ref-38)
38. Republic of South Africa Department of Environment Affairs, “Invitation to Bid” (2019), https://www.environment.gov.za/appointment\_service\_provider\_undertake\_independent\_review\_and\_assessment\_work\_done\_environmental\_management\_inspectorate\_emi\_respect\_implementing\_national\_environmental\_compliance\_and\_enforcement\_strategy\_2014\_and\_develop\_new\_multi\_term\_strategy\_inform. [↑](#endnote-ref-39)
39. Centre for Environmental Rights, “Full Disclosure: The Truth About Corporate Environmental Compliance in South Africa,” accessed Sept. 3, 2020, https://cer.org.za/. [↑](#endnote-ref-40)
40. Centre for Environmental Rights, “Enforcing the Law.” [↑](#endnote-ref-41)
41. Hong Kong Special Administrative Region Environmental Protection Department, “Home,” accessed April 7, 2020, https://www.epd.gov.hk/epd/english/top.html. [↑](#endnote-ref-42)
42. Hong Kong Special Administrative Region Environmental Protection Department, “Organisation Chart,” accessed March 28, 2020, https://www.epd.gov.hk/epd/english/about\_epd/organ\_chart/organ\_chart.html. [↑](#endnote-ref-43)
43. Hong Kong Special Administrative Region Environmental Protection Department, “Controlling Officer’s Report” (2018), https://www.budget.gov.hk/2018/eng/pdf/head044.pdf. [↑](#endnote-ref-44)
44. Ibid. [↑](#endnote-ref-45)
45. Hong Kong Special Administrative Region Environmental Protection Department, “Career With EPD,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/business\_job/job\_opp/career\_epd.html#epo. [↑](#endnote-ref-46)
46. Hong Kong Special Administrative Region Environmental Protection Department, “Compliance Assistance Centre,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/cac/index.html. [↑](#endnote-ref-47)
47. Hong Kong Special Administrative Region Environmental Protection Department, “About Us,” accessed March 29, 2020, https://www.epd.gov.hk/epd/english/cac/aboutus/aboutus.html. [↑](#endnote-ref-48)
48. Hong Kong Special Administrative Region Government, “Environmental Compliance,” accessed Sept. 3, 2020, https://www.gov.hk/en/residents/environment/compliance/index.htm. [↑](#endnote-ref-49)
49. Hong Kong Special Administrative Region Environmental Protection Department, “Reference Materials,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/greenconstruction/ref\_mat/ref\_mat.html. [↑](#endnote-ref-50)
50. Hong Kong Special Administrative Region Environmental Protection Department, “Home”; Hong Kong Special Administrative Region Environmental Protection Department, “About Us.” [↑](#endnote-ref-51)
51. Hong Kong Special Administrative Region Environmental Protection Department, “Corporate Environmental Management,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/cac/com\_guilde/com\_guilde\_cor.html. [↑](#endnote-ref-52)
52. Hong Kong Special Administrative Region Environmental Protection Department, “List of Guidance Notes on Best Practicable Means for Specified Processes,” accessed March 29, 2020, https://www.epd.gov.hk/epd/english/environmentinhk/air/guide\_ref/guide\_best\_pract.html. [↑](#endnote-ref-53)
53. Hong Kong Special Administrative Region Environmental Protection Department, “General Requirements of Continuous Emission Monitoring System” (Air Policy Group, 2009), https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/air/guide\_ref/files/cem\_requirements\_for\_sp.pdf. [↑](#endnote-ref-54)
54. Hong Kong Special Administrative Region Environmental Protection Department, “Home.” [↑](#endnote-ref-55)
55. Hong Kong Special Administrative Region Environmental Protection Department, “EA & Planning,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/environmentinhk/eia\_planning/eia\_maincontent.html. [↑](#endnote-ref-56)
56. Hong Kong Special Administrative Region Environmental Protection Department, “Access to Information,” accessed Oct. 14, 2020, https://www.epd.gov.hk/epd/english/access\_info/access\_info.html. [↑](#endnote-ref-57)
57. Hong Kong Special Administrative Region Environmental Protection Department, “Mobile Apps,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/mobile-apps.html. [↑](#endnote-ref-58)
58. Hong Kong Special Administrative Region, “Environmental Exhibition and Resource Centres,” accessed Sept. 3, 2020, https://www.gov.hk/en/residents/environment/public/activities/envcentres.htm. [↑](#endnote-ref-59)
59. Hong Kong Special Administrative Region Environmental Protection Department, “Programmes & Events: Archives,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/cac/pro\_events/pro\_events\_ecpp\_archives.html. [↑](#endnote-ref-60)
60. Hong Kong Special Administrative Region Environmental Protection Department, “Useful Links,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/cac/use\_links/use\_links.html. [↑](#endnote-ref-61)
61. Hong Kong Special Administrative Region Environmental Protection Department, “Construction Phase Environmental Monitoring and Audit Manual,” n.d., https://www.epd.gov.hk/eia/hb/materials/images/4Construction.pdf. [↑](#endnote-ref-62)
62. Environmental Resources Management, “Hong Kong Offshore LNG Terminal” (2018), https://www.epd.gov.hk/eia/register/report/eiareport/eia\_2562018/HTML/PDF/0359722\_HKOLNG%20EIA\_EMA%20Manual\_Rev%203.pdf. [↑](#endnote-ref-63)
63. Hong Kong Environmental Protection Department, “Environmental Monitoring and Audit Reports” (2019), https://www.epd.gov.hk/eia/register/english/permit/vep5052016/documents/emar201905/html/emar201905.htm. [↑](#endnote-ref-64)
64. Hong Kong Special Administrative Region Environmental Protection Department, “Environmental Audit,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/how\_help/tools\_ea/tools\_ea.html. [↑](#endnote-ref-65)
65. Hong Kong Special Administrative Region Environmental Protection Department, “Environmental Management System,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/how\_help/tools\_ems/iso14001.html. [↑](#endnote-ref-66)
66. Hong Kong Special Administrative Region Environmental Protection Department, “Enforcement Principles,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/laws\_regulations/enforcement/e\_chapter2.html. [↑](#endnote-ref-67)
67. Ibid. [↑](#endnote-ref-68)
68. Hong Kong Special Administrative Region Environmental Protection Department, The Statement of Prosecution Policy for the Environmental Protection Department (2003), https://www.epd.gov.hk/epd/english/news\_events/current\_issue/current\_policy.html. [↑](#endnote-ref-69)
69. Hong Kong Special Administrative Region Environmental Protection Department, “Environment Hong Kong” (2018), https://www.epd.gov.hk/epd/misc/ehk18/en/pdf1.html. [↑](#endnote-ref-70)
70. Hong Kong Special Administrative Region Environmental Protection Department, “Project Profiles and Environmental Impact Assessment Reports Exhibited for Public Comment,” accessed Sept. 3, 2020, https://www.gov.hk/en/residents/environment/eap/eiareports.htm. [↑](#endnote-ref-71)
71. Hong Kong Special Administrative Region Environmental Protection Department, “Guangdong-Hong Kong-Macao Pearl River Delta Regional Air Quality Monitoring Network Results for 2018,” news release, June 27, 2019, https://www.info.gov.hk/gia/general/201906/27/P2019062700369.htm. [↑](#endnote-ref-72)
72. Hong Kong Special Administrative Region Environmental Protection Department, “To Report Pollution,” accessed Sept. 3, 2020, https://www.epd.gov.hk/epd/english/how\_help/report\_pollution/reportpollution.html. [↑](#endnote-ref-73)
73. Environmental Protection Authority Act 2011, Section 12 (2011), http://extwprlegs1.fao.org/docs/pdf/nze108498.pdf. [↑](#endnote-ref-74)
74. New Zealand Environmental Protection Authority, “Who Does What in the EEZ,” accessed Oct. 14, 2020, https://epa.govt.nz/industry-areas/eez-marine-activities/roles-and-responsibilities/who-does-what-and-when/. [↑](#endnote-ref-75)
75. New Zealand Environmental Protection Authority, “Statement of Intent 2019-2023” (2019), https://epa.govt.nz/assets/RecordsAPI/e98e137ccc/EPA-Statement-of-Intent-2019-to-2023.pdf. [↑](#endnote-ref-76)
76. Government Regulatory Practice Initiative, “2020 Conference: Elevenses With G-REG,” accessed Oct. 14, 2020, https://g-reg.govt.nz. [↑](#endnote-ref-77)
77. The Skills Organisation, “Regulatory Compliance Initiative (G-REG),” accessed Oct. 14, 2020, https://skills.org.nz/careers-and-courses/government/regulatory-compliance-initiative/. [↑](#endnote-ref-78)
78. New Zealand Environmental Protection Authority, “EPA Sets Out Its Ambitions for Environmental Leadership,” news release, June 27, 2019, https://epa.govt.nz/news-and-alerts/latest-news/epa-sets-out-its-ambitions-for-environmental-leadership/. [↑](#endnote-ref-79)
79. New Zealand Environmental Protection Authority, “Alerts,” accessed Oct. 14, 2020, https://epa.govt.nz/news-and-alerts/alerts/. [↑](#endnote-ref-80)
80. Stats NZ, “Environmental Indicators: Marine,” accessed Oct. 14, 2020, http://archive.stats.govt.nz/browse\_for\_stats/environment/environmental-reporting-series/environmental-indicators/Home/Marine.aspx. [↑](#endnote-ref-81)
81. New Zealand Environmental Protection Authority, “Seismic Survey Guidance 2016” (2016), https://epa.govt.nz/assets/Uploads/Documents/Marine-Activities-EEZ/Guidance/aeb6ee8a54/Seismic-survey-guidance-2016.pdf. [↑](#endnote-ref-82)
82. New Zealand Environmental Protection Authority, “Quick Tips to Help You Comply With the Seismic Surveying Code of Conduct” (2014), https://epa.govt.nz/assets/Uploads/Documents/Marine-Activities-EEZ/Guidance/1a7087381d/tips-comply-Seismic-Surveying-COC.pdf. [↑](#endnote-ref-83)
83. New Zealand Environmental Protection Authority, “Decision-Making Criteria for EEZ Marine Consent Applications” (2018), https://epa.govt.nz/assets/Uploads/Documents/Marine-Activities-EEZ/Guidance/d6dfe287fe/EEZ-Information-sheet-decision-making-criteria-V1.1.pdf. [↑](#endnote-ref-84)
84. New Zealand Environmental Protection Authority, “Painting Your Boat,” accessed Oct. 14, 2020, https://epa.govt.nz/everyday-environment/painting-your-boat/. [↑](#endnote-ref-85)
85. New Zealand Environmental Protection Authority, “EEZ Compliance Monitoring Policy” (2017), https://epa.govt.nz/assets/Uploads/Documents/Marine-Activities-EEZ/Policies/08ffe3ef38/EEZ-Compliance-Monitoring-Policy.pdf. [↑](#endnote-ref-86)
86. New Zealand Environmental Protection Authority, “Transparency Statement,” accessed Oct. 14, 2020, https://www.epa.govt.nz/resources-and-publications/transparency-statement/. [↑](#endnote-ref-87)
87. New Zealand Environmental Protection Authority, “Out at Sea With the EPA,” accessed Oct. 14, 2020, https://www.epa.govt.nz/news-and-alerts/newsletters/out-at-sea-with-the-epa. [↑](#endnote-ref-88)
88. New Zealand Environmental Protection Authority, “Compliance Monitoring,” accessed April 7, 2020, https://www.epa.govt.nz/industry-areas/eez-marine-activities/about-the-exclusive-economic-zone-and-continental-shelf/compliance-monitoring/. [↑](#endnote-ref-89)
89. New Zealand Environmental Protection Authority Prosecution Policy (2014), https://www.epa.govt.nz/assets/Uploads/Documents/EPA-Publications/EPA-Prosecution-Policy.pdf. [↑](#endnote-ref-90)
90. New Zealand Environmental Protection Authority, “EPA Weekly Update—Hon. Eugenie Sage, Associate Minister for the Environment,” Dec. 19, 2018, https://www.epa.govt.nz/assets/RecordsAPI/9a98e2c0d2/EPA\_Weekly\_Update\_to\_Minister\_17\_December-2018.pdf. [↑](#endnote-ref-91)
91. New Zealand Environmental Protection Authority, “EEZ Applications,” accessed April 7, 2020, https://epa.govt.nz/database-search/eez-applications. [↑](#endnote-ref-92)
92. New Zealand Environmental Protection Authority, “Monitoring and Reporting,” accessed Oct. 14, 2020, https://epa.govt.nz/resources-and-publications/monitoring-and-reporting?start=0. [↑](#endnote-ref-93)
93. New Zealand Environmental Protection Authority, “Methyl Bromide Annual Reports” (2008-19), https://epa.govt.nz/resources-and-publications/methyl-bromide-annual-reports/. [↑](#endnote-ref-94)
94. New Zealand Environmental Protection Authority, “EEZ Applications.” [↑](#endnote-ref-95)
95. New Zealand Environmental Protection Authority, “Chatham Rock Phosphate MCA 2014,” accessed Oct. 14, 2020, https://epa.govt.nz/database-search/eez-applications/view/EEZ000006. [↑](#endnote-ref-96)
96. New Zealand Environmental Protection Authority, “Reports and Advice,” accessed Oct. 14, 2020, https://epa.govt.nz/public-consultations/in-progress/omv-gsb-limited/reports-and-advice/. [↑](#endnote-ref-97)
97. New Zealand Environmental Protection Authority, “Statement of Performance Expectations 2018/19” (2018), https://epa.govt.nz/assets/RecordsAPI/806997e3b2/EPA-Statement-of-Performance-Expectations-2018-19.pdf. [↑](#endnote-ref-98)
98. New Zealand Environmental Protection Authority, “Statement of Performance Expectations 2017/18” (2017), https://epa.govt.nz/assets/RecordsAPI/985eebca19/EPA-Statement-of-Performance-Expectations-2017-18.pdf. [↑](#endnote-ref-99)
99. New Zealand Environmental Protection Authority, “Statement of Performance Expectations 2018/19.” [↑](#endnote-ref-100)
100. United Kingdom, Marine Management Organisation, “East Marine Plans Implementation and Monitoring Plan Published,” news release, June 27, 2014, https://www.gov.uk/government/news/east-marine-plans-implementation-and-monitoring-plan-published. [↑](#endnote-ref-101)
101. United Kingdom, Marine Management Organisation, Department of Environment, Food and Rural Affairs, “Marine License Post Consent Administrations and Monitoring Changes,” news release, Sept. 18, 2014, https://www.gov.uk/government/news/new-charges-for-marine-licence-administration-and-monitoring. [↑](#endnote-ref-102)
102. Centre for Environment Fisheries and Aquaculture Science, “Cefas: A World Leader in Marine Science and Technology,” accessed Oct. 14, 2020, https://www.cefas.co.uk/. [↑](#endnote-ref-103)
103. United Kingdom, Marine and Coastal Access Act 2009, Section 2 (2009), https://www.legislation.gov.uk/ukpga/2009/23/section/2. [↑](#endnote-ref-104)
104. United Kingdom, “Marine Licenses,” accessed Oct. 14, 2020, https://www.gov.uk/topic/planning-development/marine-licences. [↑](#endnote-ref-105)
105. United Kingdom, Marine Management Organisation, “Evidence Projects Register,” accessed Oct. 14, 2020, https://www.gov.uk/government/publications/evidence-and-the-marine-management-organisation-mmo/evidence-projects-register. [↑](#endnote-ref-106)
106. United Kingdom, Marine Management Organisation, “Marine Management Organisation Master Data Register,” accessed Oct. 14, 2020, https://www.gov.uk/government/publications/master-data-register. [↑](#endnote-ref-107)
107. United Kingdom, Marine Management Organisation (MMO), “Guidance and Regulation,” accessed Oct. 14, 2020, https://www.gov.uk/search/guidance-and-regulation?organisations%5B%5D=marine-management-organisation&parent=marine-management-organisation. [↑](#endnote-ref-108)
108. United Kingdom, Marine Management Organisation, “Marine Licensing: Impact Assessments,” accessed Oct. 14, 2020, https://www.gov.uk/guidance/marine-licensing-impact-assessments. [↑](#endnote-ref-109)
109. United Kingdom, “Water Framework Directive Assessment: Estuarine and Coastal Waters,” accessed Oct. 14, 2020, https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters. [↑](#endnote-ref-110)
110. United Kingdom, Marine Management Organisation, “Overview of the Derogation Provisions Under the Habitats Regulations,” n.d., https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/799598/MMO\_HRA\_Derogations\_Overview.pdf. [↑](#endnote-ref-111)
111. United Kingdom, Marine Management Organisation, “Marine Licensing: Physical and Chemical Determinands for Sediment Sampling,” accessed Oct. 14, 2020, https://www.gov.uk/government/publications/marine-licensing-physical-and-chemical-determinands-for-sediment-sampling. [↑](#endnote-ref-112)
112. British Marine Aggregate Producers Association, “Welcome to BMAPA,” accessed Oct. 14, 2020, https://www.bmapa.org/. [↑](#endnote-ref-113)
113. Joint Nature Conservation Committee, “JNCC,” accessed Oct. 14, 2020, https://jncc.gov.uk/. [↑](#endnote-ref-114)
114. United Kingdom, Centre for Environment, Fisheries and Aquaculture Science, “Latest From the Centre for Environment, Fisheries and Aquaculture Science,” accessed Oct. 14, 2020, https://www.gov.uk/government/organisations/centre-for-environment-fisheries-and-aquaculture-science. [↑](#endnote-ref-115)
115. Fishing Liaison With Offshore Wind and Wet Renewables Group (FLOWW), “Best Practice Guidance for Offshore Renewables Development: Recommendations for Fisheries Liaison” (2014), https://www.sff.co.uk/wp-content/uploads/2016/01/FLOWW-Best-Practice-Guidance-for-Offshore-Renewables-Developments-Jan-2014.pdf. [↑](#endnote-ref-116)
116. United Kingdom, Marine Management Organisation, “Scientific Framework Agreement 2012-2016, Technical Advice and Research,” accessed Oct. 14, 2020, https://www.gov.uk/government/publications/scientific-framework-agreement-2012-2016/technical-advice-and-research. [↑](#endnote-ref-117)
117. United Kingdom, “Marine Management Organisation,” accessed Oct. 14, 2020, https://www.gov.uk/government/organisations/marine-management-organisation. [↑](#endnote-ref-118)
118. United Kingdom, MMO, Guidance and Regulation. [↑](#endnote-ref-119)
119. United Kingdom, Marine Management Organisation, “Marine Information System,” accessed Oct. 14, 2020, http://mis.marinemanagement.org.uk/. [↑](#endnote-ref-120)
120. United Kingdom, “Marine Planning Evidence Base,” accessed Nov. 9, 2020, https://explore-marine-plans.marineservices.org.uk/. [↑](#endnote-ref-121)
121. United Kingdom, Marine Management Organisation, “Compliance and Enforcement Strategy” (2020), https://www.gov.uk/government/publications/compliance-and-enforcement-strategy/compliance-and-enforcement-strategy. [↑](#endnote-ref-122)
122. Ibid. [↑](#endnote-ref-123)
123. Marine and Coastal Access Act 2009, http://www.legislation.gov.uk/ukpga/2009/23/notes/division/2. [↑](#endnote-ref-124)
124. United Kingdom, MMO, “Compliance and Enforcement Strategy.” [↑](#endnote-ref-125)
125. United Kingdom, Marine Management Organisation, “Annual Report and Accounts, 1 April 2018 to 31 March 2019” (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/819727/CCS001\_CCS0319930646-001\_MMO\_Annual\_Report\_and\_Accounts\_Web\_Accessible.pdf. [↑](#endnote-ref-126)
126. United Kingdom, “Check the Public Register of Marine Licence Applications and Decisions,” accessed Nov. 19, 2020, https://www.gov.uk/check-marine-licence-register. [↑](#endnote-ref-127)
127. United Kingdom, Marine Management Organisation, “Transparency and Freedom of Information Releases,” accessed Oct. 14, 2020, https://www.gov.uk/search/transparency-and-freedom-of-information-releases?organisations%5B%5D=marine-management-organisation. [↑](#endnote-ref-128)
128. United Kingdom, Marine Management Organisation, “Marine Protected Areas: Strategic Management Table,” accessed Oct. 14, 2020, https://www.gov.uk/government/publications/marine-protected-areas-strategic-management-table. [↑](#endnote-ref-129)
129. United Kingdom, MMO, “Check the Public Register of Marine Licence Applications and Decisions.” [↑](#endnote-ref-130)
130. United Kingdom, Marine Management Organisation, “Complaints Procedure,” accessed Oct. 14, 2020, https://www.gov.uk/government/organisations/marine-management-organisation/about/complaints-procedure. [↑](#endnote-ref-131)
131. Marine Management Organisation, “Annual Report and Accounts, 1 April 2018 to 31 March 2019.” [↑](#endnote-ref-132)
132. United Kingdom, Department for Environment, Food and Rural Affairs, “East Inshore and East Offshore Marine Plans, Executive Summary” (2014), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/312493/east-plan-executivesummary.pdf. [↑](#endnote-ref-133)
133. United Kingdom, Department for Environment, Food and Rural Affairs, “Triennial Review of the Marine Management Organisation” (2014), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/411064/mmo-triennial-review.pdf. [↑](#endnote-ref-134)
134. Parties to the Nauru Agreement, “PNA Moves Forward With the Strategic Plan, Budgets,” news release, Dec. 11, 2018, https://pnatuna.com/content/pna-moves-forward-strategic-plan-budgets. [↑](#endnote-ref-135)
135. Marshall Islands Marine Resources Authority, “Observer Program,” accessed March 31, 2020, http://www.rmimimra.com/. [↑](#endnote-ref-136)
136. Parties to the Nauru Agreement, “Palau Arrangement for the Management of the Western Pacific Tuna Fishery: Management Scheme (Longline Vessel Day Scheme)” (2016), http://www.pnatuna.com/sites/default/files/LL\_VDS%20Txt\_Amended\_Oct2016\_2.pdf. [↑](#endnote-ref-137)
137. Parties to the Nauru Agreement, “Palau Arrangement for the Management of the Western Pacific Fishery as Amended: Management Scheme (Purse Seine Vessel Day Scheme)” (2016), http://www.pnatuna.com/sites/default/files/PS\_VDS%20Txt\_Amended\_Oct2016\_1.pdf. [↑](#endnote-ref-138)
138. Marine Stewardship Council, “Seafood for Future Generations: The MSC Annual Report 2017-18” (2018), https://www.msc.org/docs/default-source/default-document-library/about-the-msc/msc-annual-report-2017-2018.pdf?sfvrsn=b0c19c3\_4. [↑](#endnote-ref-139)
139. Rio Tinto, “2018 Annual Report” (2018), https://www.sec.gov/Archives/edgar/data/863064/000119312519062147/d616204dex152.htm#ex15\_2\_tx616204\_27. [↑](#endnote-ref-140)
140. International Council on Mining and Metals, “Mining Principles, Performance Expectations” (2020), https://www.icmm.com/website/publications/pdfs/commitments/181126\_performance-expectations.pdf. [↑](#endnote-ref-141)
141. International Council on Mining and Metals, “ICMM Guidance,” accessed Oct. 14, 2020, https://guidance.miningwithprinciples.com/. [↑](#endnote-ref-142)
142. Cross Sector Biodiversity Initiative, “Who We Are,” accessed Oct. 14, 2020, http://www.csbi.org.uk/. [↑](#endnote-ref-143)
143. Rio Tinto, “Our Approach to Climate Change 2018” (2018), https://d3em83qrfmyuai.cloudfront.net/wp-content/uploads/2020/05/RT\_Our\_approach\_to\_climate\_change\_2018-min.pdf. [↑](#endnote-ref-144)
144. Rio Tinto, “Tailings,” accessed Oct. 14, 2020, https://www.riotinto.com/en/sustainability/environment/tailings. [↑](#endnote-ref-145)
145. Ibid. [↑](#endnote-ref-146)
146. Rio Tinto, “Standard: Rio Tinto Management System” (2014). [↑](#endnote-ref-147)
147. Rio Tinto, “The Way We Work” (2017), http://www.riotinto.com/aboutus/the-way-we-work-23105.aspx. [↑](#endnote-ref-148)
148. Ibid. [↑](#endnote-ref-149)
149. Rio Tinto, “Biodiversity,” accessed Oct. 14, 2020, https://www.riotinto.com/en/sustainability/environment/biodiversity. [↑](#endnote-ref-150)
150. Rio Tinto, “Our Commitment,” accessed Oct. 14, 2020, http://www.riotinto.com/ourcommitment/publications-policies-10273.aspx. [↑](#endnote-ref-151)
151. Rio Tinto, “Biodiversity.” [↑](#endnote-ref-152)
152. Rio Tinto, “Water,” accessed Oct. 14, 2020, https://www.riotinto.com/sustainability/environment/water. [↑](#endnote-ref-153)
153. Rio Tinto, “Air,” accessed Oct. 14, 2020, https://www.riotinto.com/sustainability/environment/air. [↑](#endnote-ref-154)
154. Rio Tinto, “Our Commitment.” [↑](#endnote-ref-155)
155. Rio Tinto, “Rio Tinto Online Training Portal,” accessed Oct. 14, 2020, http://portal-db.live/ca/rio-tinto-online-training-portal. [↑](#endnote-ref-156)
156. Rio Tinto, “Supplier Code of Conduct” (2016), http://www.riotinto.com/documents/Rio\_Tinto\_Supplier\_Code\_of\_Conduct\_EN.pdf. [↑](#endnote-ref-157)
157. Rio Tinto, “Standard: Rio Tinto Management System.” [↑](#endnote-ref-158)
158. Not publicly available. [↑](#endnote-ref-159)
159. Not publicly available. [↑](#endnote-ref-160)
160. Rio Tinto, “Annual Report” (2019), https://www.riotinto.com/en/invest/reports/annual-report. [↑](#endnote-ref-161)
161. Rio Tinto, “Our Approach to Climate Change 2018.” [↑](#endnote-ref-162)
162. Rio Tinto, “ICMM Sustainable Development Framework: Rio Tinto Mapping Against Commitments,” accessed Oct. 14, 2020. [↑](#endnote-ref-163)
163. Global Reporting Initiative, “GRI Standards,” accessed March 31, 2020, https://www.globalreporting.org/standards. [↑](#endnote-ref-164)
164. International Council on Mining and Metals, “Annual Reports,” accessed Nov. 9, 2020, http://www.icmm.com/en-gb/about-us/annual-reviews. [↑](#endnote-ref-165)
165. Rio Tinto, “Annual Report.” [↑](#endnote-ref-166)
166. Rio Tinto, “Tailings.” [↑](#endnote-ref-167)
167. Task Force on Climate-Related Financial Disclosures, “About the Task Force,” accessed Oct. 14, 2020, https://www.fsb-tcfd.org/about/#. [↑](#endnote-ref-168)
168. Rio Tinto, “Talk to Peggy,” accessed Oct. 14, 2020, https://app.convercent.com/en-us/LandingPage/60732c5c-fb3c-e811-80e2-000d3ab6ebad. [↑](#endnote-ref-169)
169. Rio Tinto, “Complaint and Dispute Resolution Policy.” [↑](#endnote-ref-170)
170. BP, “Code of Conduct: Our Code, Our Responsibility,” https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/who-we-are/our-values-and-code-of-conduct/bp-code-of-conduct-english.pdf. [↑](#endnote-ref-171)
171. Chevron Corp., “The Chevron Way,” accessed Oct. 14, 2020, https://www.chevron.com/about/the-chevron-way. [↑](#endnote-ref-172)
172. Shell, “Shell Code of Conduct,” accessed Oct. 14, 2020, https://coc.shell.com/en\_gb/code-of-conduct.html. [↑](#endnote-ref-173)
173. BP, “BP Operating Management System” (2019). [↑](#endnote-ref-174)
174. Chevron Corp., “Operational Excellence Mangement System,” accessed Oct. 14, 2020, https://www.chevron.com/about/operational-excellence/oems. [↑](#endnote-ref-175)
175. Shell, “Commitments, Policies and Standards,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/our-approach/commitments-policies-and-standards.html. [↑](#endnote-ref-176)
176. This term will be used to represent an operational facility or asset as well as an IOGC presence in one country. [↑](#endnote-ref-177)
177. Chevron Corp., “Public Policy Committee Charter” (2019), https://www.chevron.com/-/media/chevron/investors/documents/publicpolicycommitteecharter.pdf. [↑](#endnote-ref-178)
178. Shell, “Sustainability Governance,” accessed Oct. 14, 2020, https://reports.shell.com/sustainability-report/2018/introduction/our-approach-to-sustainability/sustainability-governance.html. [↑](#endnote-ref-179)
179. The Chevron OEMS includes details on the leadership team roles and individual roles the execution of the OEMS. [↑](#endnote-ref-180)
180. Shell, “Sky Scenario,” accessed Oct. 14, 2020, https://www.shell.com/energy-and-innovation/the-energy-future/scenarios/shell-scenario-sky.html. [↑](#endnote-ref-181)
181. Trans Adriatic Pipeline, “Environmental and Socal Compliance Assurance Plan” https://www.tap-ag.com/assets/07.reference\_documents/english/Project%20Finance%20Disclosure/Environmental%20and%20Social%20Compliance%20Assuarance%20Plan.pdf. [↑](#endnote-ref-182)
182. Shell, “Commitments, Policies and Standards.” [↑](#endnote-ref-183)
183. Chevron Corp., “Operational Excellence: Managing Safeguards to Protect People and the Environment” (2018), https://www.chevron.com/-/media/shared-media/documents/OE-workforce-overview.pdf. [↑](#endnote-ref-184)
184. Chevron Corp., “Grievance Management Guidance” (2018), https://www.chevron.com/-/media/chevron/sustainability/documents/summary-grievance-mechanism-guidance-aug-2018.pdf. [↑](#endnote-ref-185)
185. International Association of Oil and Gas Producers, “Environment,” accessed Oct. 14, 2020, https://www.iogp.org/bookstore/product-category/environment/. [↑](#endnote-ref-186)
186. BP, “Case Studies,” accessed Oct. 14, 2020, https://www.bp.com/en/global/corporate/investors/results-and-reporting/annual-report/case-studies.html. [↑](#endnote-ref-187)
187. Shell, “Biodiversity in Action,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/environment/biodiversity/biodiversity-in-action.html. [↑](#endnote-ref-188)
188. Chevron Corp., “Environmental Protection,” accessed Oct. 14, 2020, https://www.chevron.com/stories/environmental-protection. [↑](#endnote-ref-189)
189. Chevron Corp., “Barrow Island Quarantine: Beyond Best Practice” (2015), https://www.chevron.com/-/media/shared-media/documents/BarrowIslandQuarantineCaseStudy.pdf. [↑](#endnote-ref-190)
190. Shell, “Environmental and Social Partners,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/our-approach/environmental-and-community-partners.html#iframe=L3dlYmFwcHMvRWFydGh3YXRjaC92Ml8wLw. [↑](#endnote-ref-191)
191. IPIECA-IOGP Biodiversity and Ecosystem Services Working Group, Marine Geospatial Bibliography, 2017, http://mgb.ipieca.org/projects/ipieca\_mgb. [↑](#endnote-ref-192)
192. Shell, “Shell in the Community,” accessed Oct. 14, 2020, https://www.shell.us/sustainability/shell-in-the-community.html. [↑](#endnote-ref-193)
193. Shell, “Environmental and Social Partners.” [↑](#endnote-ref-194)
194. IPIECA, “Water Risk Assessment Tools E-Learning Course Launch,” news release, April 11, 2016, http://www.ipieca.org/news/water-risk-assessment-tools-e-learning-course-launch/. [↑](#endnote-ref-195)
195. W. Heidug and C. Ward, senior research fellow and research fellow, King Abdullah Petroleum Studies and Research Centre (presentation, webinar: Delivering Low-GHG Intensity Crude Oil With CCS, IPIECA, July 8, 2019), http://www.ipieca.org/events/webinar-delivering-low-ghg-intensity-crude-oil-with-ccs/. [↑](#endnote-ref-196)
196. BP, “Code of Conduct.” [↑](#endnote-ref-197)
197. International Association of Oil and Gas Producers, “Book Store,” accessed Oct. 14, 2020, https://www.iogp.org/bookstore/search/. [↑](#endnote-ref-198)
198. International Organization for Standardization, “ISO 14001, Key Benefits” (2015), https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/iso\_14001\_-\_key\_benefits.pdf. [↑](#endnote-ref-199)
199. Made up of professional auditors calling upon technical HSE expertise as required. [↑](#endnote-ref-200)
200. BP Indonesia, “Reports,” accessed April 7, 2020, https://www.bp.com/en\_id/indonesia/home/news/reports.html. [↑](#endnote-ref-201)
201. See also European Bank for Reconstruction and Development case study. [↑](#endnote-ref-202)
202. BP, “Reporting Standards,” accessed Oct. 14, 2020, https://www.bp.com/en/global/corporate/sustainability/our-sustainability-frame/reporting-standards.html. [↑](#endnote-ref-203)
203. BP, “GRI Reporting Table, BP Sustainability Report” (2018), https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/sustainability/tables/bp-gri-reporting-2018.pdf. [↑](#endnote-ref-204)
204. Global Reporting Initiative, “Welcome to GRI,” accessed Oct. 14, 2020, https://www.globalreporting.org/Pages/default.aspx. [↑](#endnote-ref-205)
205. BP, “BP Sustainability Report 2018” (2018), https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/sustainability/group-reports/bp-sustainability-report-2018.pdf. [↑](#endnote-ref-206)
206. BP, “IPIECA Reporting Table, BP Sustainability Report” (2018), https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/sustainability/tables/bp-ipieca-guidance-2018.pdf. [↑](#endnote-ref-207)
207. Shell, “Reporting Standards and Guidelines,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/sustainability-reporting-and-performance-data/how-we-report/reporting-standards-and-guidelines.html. [↑](#endnote-ref-208)
208. Chevron Corp., “2018 Corporate Responsibility Report Highlights” (2018), https://www.chevron.com/-/media/shared-media/documents/2018-corporate-responsibility-report.pdf. [↑](#endnote-ref-209)
209. Chevron Corp., “2018 Performance Data” (2018), https://www.chevron.com/-/media/shared-media/documents/2018-corporate-responsibility-performance-data.pdf. [↑](#endnote-ref-210)
210. TCO, “TCO Corporate Social Responsibility Report 2017” (2017), http://www.tengizchevroil.com/latest/2017CSR. [↑](#endnote-ref-211)
211. Chevron Corp., “Environment,” accessed Oct. 14, 2020, https://www.chevron.com/corporate-responsibility/environment. [↑](#endnote-ref-212)
212. Shell, “Previous Reports and Translations,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/sustainability-reporting-and-performance-data/sustainability-reports/previous.html. [↑](#endnote-ref-213)
213. BP, “Reducing Emissions in Our Operations,” accessed Oct. 14, 2020, https://www.bp.com/en/global/corporate/sustainability/climate-change/reducing-emissions-in-our-operations.html. [↑](#endnote-ref-214)
214. BP, “BP Sustainability Report 2019” (2019). [↑](#endnote-ref-215)
215. BP, “BP in Azerbaijan,” accessed Oct. 14, 2020, https://www.bp.com/en\_az/caspian/sustainability/ASRC.html. [↑](#endnote-ref-216)
216. Chevron Corp., “Environment.” [↑](#endnote-ref-217)
217. Chevron in Australia, “Environmental Approvals,” accessed Oct. 14, 2020, https://australia.chevron.com/our-businesses/wheatstone-project/environmental-approvals. [↑](#endnote-ref-218)
218. Shell, “Sustainability Report 2018” (2018), https://reports.shell.com/sustainability-report/2018/. [↑](#endnote-ref-219)
219. Shell, “Sustainability Report 2018, Chart Generator,” accessed Oct. 14, 2020, https://reports.shell.com/sustainability-report/2018/servicepages/keyfigurescomparison.html#/datasheet\_shell\_sr\_env/line/0,1/0,1,2,3,4,5,6,7,8,9/periods/0. [↑](#endnote-ref-220)
220. Shell, “Environmentally Sensitive Areas,” accessed Oct. 14, 2020, https://www.shell.com/sustainability/environment/biodiversity/environmentally-sensitive-areas.html. [↑](#endnote-ref-221)
221. Lloyd’s Register Quality Assurance Inc., “Assurance Statement” (2019), https://www.chevron.com/-/media/shared-media/documents/chevron-attestation.pdf. [↑](#endnote-ref-222)
222. BP, “Code of Conduct.” [↑](#endnote-ref-223)
223. Shell, “Shell Global Helpline,” accessed Oct. 14, 2020, https://www.shell.com/about-us/our-values/shell-global-helpline.html. [↑](#endnote-ref-224)
224. BP, “Community Engagement,” accessed Oct. 14, 2020, https://www.bp.com/en/global/corporate/sustainability/value-to-society/community-engagement.html. [↑](#endnote-ref-225)
225. BP, “Sustainability,” accessed Oct. 14, 2020, https://www.bp.com/en/global/corporate/sustainability.html. [↑](#endnote-ref-226)
226. Lloyd’s Register Quality Assurance Inc., “Assurance Statement.” [↑](#endnote-ref-227)
227. European Bank for Reconstruction and Development, “Corporate Governance,” accessed Oct. 14, 2020, https://www.ebrd.com/corporate-governance.html. [↑](#endnote-ref-228)
228. European Bank for Reconstruction and Development, “EBRD Strategies and Policies,” accessed March 28, 2020, https://www.ebrd.com/what-we-do/strategies-and-policies.html. [↑](#endnote-ref-229)
229. European Bank for Reconstruction and Development, “How the EBRD Is Funded,” accessed Oct. 14, 2020, https://www.ebrd.com/who-we-are/how-ebrd-is-funded.html. [↑](#endnote-ref-230)
230. European Bank for Reconstruction and Development, “Environmental and Social Advisory Council,” accessed Oct. 14, 2020, https://www.ebrd.com/cs/Satellite?c=Content&cid=1395271626222&pagename=EBRD%2FContent%2FHublet. [↑](#endnote-ref-231)
231. European Bank for Reconstruction and Development, “Performance Requirements and Guidance,” accessed Oct. 14, 2020, https://www.ebrd.com/who-we-are/our-values/environmental-and-social-policy/performance-requirements.html. [↑](#endnote-ref-232)
232. Ibid. [↑](#endnote-ref-233)
233. European Bank for Reconstruction and Development, “How to Implement Our Performance Requirements,” accessed Oct. 14, 2020, https://www.ebrd.com/who-we-are/our-values/environmental-and-social-policy/implementation.html. [↑](#endnote-ref-234)
234. European Bank for Reconstruction and Development, “Performance Requirements and Guidance.” [↑](#endnote-ref-235)
235. European Bank for Reconstruction and Development, “EBRD Environmental and Social Risk Management Manual,” accessed Oct. 14, 2020, https://www.ebrd.com/who-we-are/our-values/environmental-emanual-education.html. [↑](#endnote-ref-236)
236. MFC, “Social Performance, Environmental and H&S Workshops,” accessed Oct. 14, 2020, https://consultmfc.com/ebrd-workshops/. [↑](#endnote-ref-237)
237. MosNews, “EBRD Delays Loan to Sakhalin-2 Oil Project Due to Environmental Concerns,” FoE Japan, June 21, 2005, http://www.foejapan.org/en/aid/jbic02/sakhalin/050621.html. [↑](#endnote-ref-238)
238. European Bank for Reconstruction and Development, “Sustainability Awards,” accessed Oct. 14, 2020, https://www.ebrd.com/cs/Satellite?c=Content&cid=1395273657278&pagename=EBRD%2FContent%2FHublet. [↑](#endnote-ref-239)
239. European Bank for Reconstruction and Development, “EBRD Strategies and Policies.” [↑](#endnote-ref-240)
240. European Bank for Reconstruction and Development, “Sustainability Reporting,” accessed Oct. 14, 2020, https://www.ebrd.com/sustainability-reporting.html. [↑](#endnote-ref-241)
241. European Bank for Reconstruction and Development, “Environmental and Social Impact Assessments,” accessed April 7, 2020, https://www.ebrd.com/esia.html. [↑](#endnote-ref-242)
242. European Bank for Reconstruction and Development, “Search Results for ‘Greenhouse Gas’,” accessed Oct. 14, 2020, https://www.ebrd.com/Search.html?srch-term-user=greenhouse+gas&srch-term=greenhouse%2520gas&srch-pg=srch&srch-type=all&pg=1&sort=relevant. [↑](#endnote-ref-243)
243. European Bank for Reconstruction and Development, “Azerbaijan: Southern Gas Corridor,” accessed Oct. 14, 2020, https://www.ebrd.com/work-with-us/projects/esia/azerbaijan-southern-gas-corridor.html. [↑](#endnote-ref-244)
244. European Bank for Reconstruction and Development, “Project Summary Documents,” accessed Oct. 14, 2020, https://www.ebrd.com/work-with-us/project-finance/project-summary-documents.html. [↑](#endnote-ref-245)
245. European Bank for Reconstruction and Development, “Have Your Say on the EBRD’s Work,” accessed Oct. 14, 2020, https://www.ebrd.com/strategies-and-policies/have-your-say.html. [↑](#endnote-ref-246)
246. European Bank for Reconstruction and Development, “Environmental and Social Impact Assessments.” [↑](#endnote-ref-247)
247. European Bank for Reconstruction and Development, “Principles of Employee Grievance Mechanisms for FIs (Under 2014 ESP),” accessed Oct. 14, 2020, www.ebrd.com/documents/environment/env-emanual-employee-grievance.pdf?blobnocache=true. [↑](#endnote-ref-248)
248. European Bank for Reconstruction and Development, “Project Complaint Mechanism,” accessed March 31, 2020, https://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/about.html. [↑](#endnote-ref-249)
249. European Bank for Reconstruction and Development, “EBRD Sustainability Report 2017” (2017), http://2017.sr-ebrd.com/impact/. [↑](#endnote-ref-250)