

# TAKING RESPONSIBILITY

*Why the United States Must Lead the World  
in Reducing Global Warming Pollution*

NATIONAL ENVIRONMENTAL TRUST  
WASHINGTON, DC



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## EXECUTIVE SUMMARY

The 1992 United Nations Framework Convention on Climate Change, applying the principle of “common but differentiated responsibilities,” specified that developed nations should be obligated to make greenhouse gas (GHG) reductions before less-polluting developing nations. Fairness decreed that developed countries—responsible for the vast majority of historic emissions—should have the responsibility for developing the technological solutions needed to reduce them. Developing nations would thus have time to grow their economies, putting them in a better position to more quickly apply the technological solutions devised in the interim. This principle was upheld by the United States Senate, which ratified the 1992 UN Framework Convention on Climate Change (UNFCCC), and has been a cornerstone of subsequent international agreements on climate change.

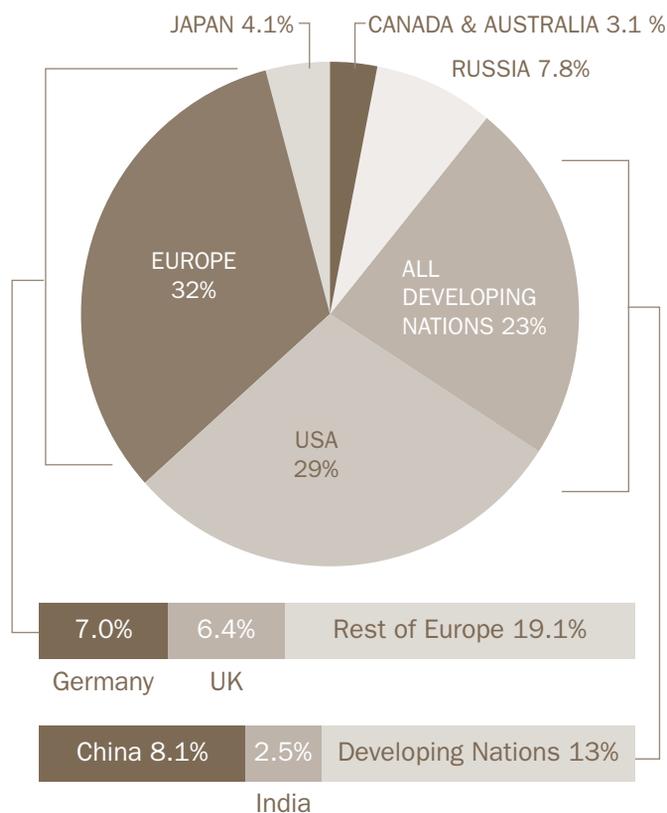
Unfortunately, some developed countries have begun arguing that “differentiated responsibilities” no longer apply due to the rapid emissions increases by developing countries. They contend that binding emissions reduction goals must be undertaken by developed and developing countries alike. This argument may jeopardize efforts to create a framework for a new international agreement to stabilize the climate after the Kyoto Protocol expires in 2012.

Greenhouse gases (GHG) emitted since the 1750s are already having demonstrably harmful effects on human welfare (figure 1). Because they are long-lived, the accumulated gases will continue to push global temperatures up, almost reaching the 2°C (3.6° F) threshold that many scientists consider the dividing line between severe and truly catastrophic climate change.

The welfare of hundreds of millions, and possibly billions of people hangs in the balance. By mid-century, more than a billion people will face food and water shortages, including 600 million in Africa alone.<sup>1</sup> Weather extremes, food and water scarcity, and climate-related public health threats are projected to displace between 150 million and 1 billion<sup>2</sup> people.

World leaders are beginning work on a new treaty for reducing greenhouse gases. This report aims to provide perspective on who bears first responsibility for reducing greenhouse gas emissions. It also examines commitments made by developed and developing nations, and individual U.S. states, to reduce emissions (figure 2).

**FIGURE 1.—PROPORTIONS OF CUMULATIVE GLOBAL GHG EMISSIONS**



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### RESPONSIBILITY FOR WARMING

Developed nations are responsible for the vast majority of fossil-fuel emissions that are now warming the Earth. Between 1750 and 2005, the United States, the nations of Europe and Russia, Japan, Canada, and Australia emitted 73.3% of all cumulative fossil-fuel emissions. Among these countries, the United States' share is the largest—27.8% of all gases from fossil fuels—over the period.<sup>3</sup> The U.S. influence is apparent even when emissions are counted at the state level (see Table 1— Greenhouse Gas Emissions of U.S. States Compared to Developed Countries).

In contrast, the historical emissions from developing nations since 1750 have been relatively small. China, the largest emitter of all developing nations, accounts for 7.8% of all gases released from fossil fuels. All developing nations combined account for approximately 23% of fossil-fuel emissions.<sup>4</sup>

### U.S. STATES EMISSIONS IN PERSPECTIVE

Many individual states release more GHG emissions than entire groups of developing countries. Forty-two U.S. states individually emit more carbon dioxide than 50 developing countries combined, and three states individually emit more CO<sub>2</sub> than 100 developing countries. Even Wyoming, with a population of only 510,000 people, emits more carbon dioxide than 69 developing countries having a combined population of more than 357 million.<sup>5</sup> Figure 10 shows emissions for the top 10 largest emitting U.S. states and compares them with comparable nations.

### EMISSIONS REDUCTIONS EFFORTS

#### AROUND THE WORLD

Many of the developed and developing nations that convened in Washington, D.C. in September 2007<sup>6</sup> to discuss emissions reductions goals have taken more concrete steps than the United States to reduce emissions, either by setting greenhouse gas reduction goals or by enacting policies that will directly reduce emissions (Figure 3). In contrast, the United States—

- Has no goal to reduce greenhouse gas emissions,
- Lacks a standard for electricity generation from renewable sources,
- Has adopted one the lowest vehicle fuel economy standards of any major nation, and
- Is only one of two industrialized, Annex I countries that have not ratified the Kyoto Protocol.<sup>7</sup>

#### MOVEMENT IN THE UNITED STATES:

##### A HOPEFUL SIGN FOR THE FUTURE

The Administration of President George W. Bush has resisted domestic efforts to address global warming through mandatory emissions reductions. Moreover, as the official representative in international affairs, the President has held back global efforts to lower emissions. A rising political tide, however, is gathering to overtop the President's opposition. Serious proposals to limit greenhouse gas emissions are gaining momentum in the U.S. Senate, and the Supreme Court has ruled that the Environmental Protection Agency must promulgate greenhouse gas regulations. Consistent with the opinion of a majority of Americans, more than half the nation's statehouses and Governor's mansions are seizing the initiative and passing policies that

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reduce emissions. Seventeen states—which account for 31% of U.S. emissions and 45% of the country’s population—currently have emissions reduction goals. Many more states have adopted policies to reduce emissions from autos or electric power. Corporate boardrooms are increasingly supportive of industry and national policies for a new direction on climate.

The prospects for U.S. enactment of an effective climate policy and international leadership are the strongest they have ever been. Regardless of the role that the Bush Administration plays in international negotiations, the United States is on track to finally fulfill its obligation to take responsibility for global warming. As resistance to mandatory emissions caps

gives way to domestic pressure, the United States will be able to assume revitalized leadership in crafting a new post-Kyoto global climate treaty.

More than anything else, a strong treaty will require breaking the logjam over who takes the lead in reducing emissions. As policies to reduce global warming pollution move forward, a key challenge will be to make sure that the targets and baselines proposed in domestic U.S. policies correspond to those proposed in international discussions. Another challenge will be to create an effective framework that defines, measures, and encourages developing countries to enact and expand on their own emissions reduction policies even before they are subject to the binding targets of future treaties.

**FIGURE 2.—COMPARISON OF STATE EMISSIONS  
TO THOSE OF DEVELOPING NATIONS**

U.S. States			Developing Nations		Developed Nations	
Top Ten U.S. States, Descending Order of Emissions	Population	Emissions (Million Metric Tons CO <sub>2</sub> )	Emits More Than This Many Developing Countries	Total Population	Emits More Pollution Than	Total Population
Texas	23,702,052	696.2	116	1,020,900,385	United Kingdom	60 million
California	37,329,035	395.37	106	784,806,752	Spain	45 million
Pennsylvania	12,439,246	290.27	101	749,128,536	Poland	38.1 million
Florida	18,361,189	260.03	98	714,222,702	Austria, Portugal, Switzerland, and Hungary combined	36.2 million
Ohio	11,494,336	254.64	98	714,222,702	The Netherlands	16 million
Illinois	12,897,374	229.38	96	704,725,179	Turkey	75 million
New York	19,363,947	227.62	95	691,614,434	Greece	32.4 million
Indiana	6,331,097	226.86	95	691,614,434	Czech Republic, Sweden, Slovenia, and Albania combined	24.2 million
Louisiana	4,526,963	200.38	93	633,689,347	Finland and Belgium combined	15.7 million
Michigan	10,215,775	181.98	91	597,655,764	Denmark, Ireland, New Zealand, and Croatia combined	18.2 million

*(See Table 1, page 70 for information on all 50 states)*

**FIGURE 3.—COMPARISON OF EFFORTS BY THE U.S.  
AND OTHER ANNEX I NATIONS TO REDUCE GHG EMISSIONS**

	Party to the Kyoto Protocol?	Mandatory greenhouse gas reduction target?	Intensity Goal	Auto fuel efficiency standards (in miles per gallon)	Renewable energy standard
<b>United States</b>	No	No	Yes: 18% reduction in emissions intensity between 2002 and 2012.	Yes: 27.5.3 mpg for cars 24(by 2011).	No
<b>Other Countries</b>	Australia is the only other industrialized, Annex 1 country that hasn't ratified the Kyoto Protocol.	Yes: European Union, United Kingdom*, Germany*, Canada, France, Russia, and Japan.	China: 40% by 2020, and 80% by 2050	Yes: European Union: 48.9 by 2012. Japan: 46.9 by 2015. China: 35.8 by 2009. Australia: 34.4 by 2010. Canada: 34.1 by 2010. South Korea: 30.6 by 2012.	Yes: Italy*, France*, EU-27, India, Germany*, United Kingdom*, China, Brazil.

*\* denotes nations with independent targets beyond or in addition to EU-related commitments.*

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## INTRODUCTION

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**D**uring the next few years, humankind's collective decisions will be decisive for the world's future. The Kyoto Protocol, which expires in 2012, must be replaced by a successor treaty with far more ambitious goals. But even as new scientific findings continually underscore the urgency of making rapid and significant emissions reductions, some developed nations are capitalizing on the sharp increase in emissions from developing nations to impede efforts to shape an aggressive, binding agreement in the limited time available.

Since the Rio Accords in 1992, the principle of common but differentiated responsibilities has governed the international community's approach to pacing developed and developing nations' commitments. The 1992 United Nations Framework Convention on Climate Change, which was ratified by the U.S. Senate, specified that developed nations—the source of the vast majority of greenhouse gas emissions—would be obligated to make reductions first (Figure 5). Developing nations could continue growing their economies for a time before meeting requirements to reduce their emissions, benefiting from technologies developed by more intensively industrialized nations. This principle was upheld in the 1995 Berlin Mandate and the 1997 Kyoto Protocol.

Some industrialized countries, however, appear to be rejecting this principle. The Bush Administration is suggesting that developed and developing nations make their commitments simultaneously, rather than sequentially. Prior to the G-8 Meeting in June 2007, National Security Advisor Stephen Hadley told reporters that reduction commitments ought to “reflect a broader community, particularly all the emitting countries and some of the key emit-

ting countries like India and China.” President Bush made the point even more plainly when he addressed delegations from developed and developing countries during the U.S.-sponsored Major Economies Meeting on Energy Security and Climate Change in September 2007: “Together, our nations will pave the way for a new international approach on greenhouse gas emissions. This new approach must involve all the world's largest producers of greenhouse gas emissions, including developed and developing nations.”<sup>9</sup>

Notwithstanding the fact that a few developing nations have become large contributors of GHG, anthropogenic greenhouse gases emitted in the last century by industrialized nations raised global average temperatures by about 0.75°C during that period.<sup>10</sup> According to the 2007 *Fourth Assessment Report* by the Intergovernmental Panel on Climate Change, this comparatively small amount of warming already “contributes to the global burden of disease and premature deaths”<sup>11</sup> through temperature and precipitation changes, sea-level rise, and the increasing frequency of extreme events.<sup>12</sup>

Even if no additional greenhouse gases were added to the Earth's atmosphere from this point forward, the persistent heat-trapping potential of emissions already present would increase global average temperatures by at least another 1.0°C during this century.<sup>13</sup> Thus, emissions already released are responsible for what will ultimately be nearly a 2°C increase in global temperatures—a level that verges on the “dangerous anthropogenic interference” that the signers of the Rio Treaty in 1992 were committed to prevent.

Absent sharp near-term emissions reductions, global temperatures are estimated to increase by about 4°C, with the potential to go as high as 7°C or higher.<sup>14</sup> This level of warming will have a devastating human impact. By mid-century, more than a billion

people will face water shortages and hunger, including 600 million in Africa alone.<sup>15</sup> Weather extremes, food and water scarcity, and climate-related dangerous public health conditions are projected to drive the displacement of between 150 million and 1 billion people as climate change unfolds.<sup>16</sup>

This report aims to provide perspective on the discussion of who bears responsibility for making greenhouse gas emissions reductions. It also examines the commitments made by developed and developing nations, as well as individual U.S. states.

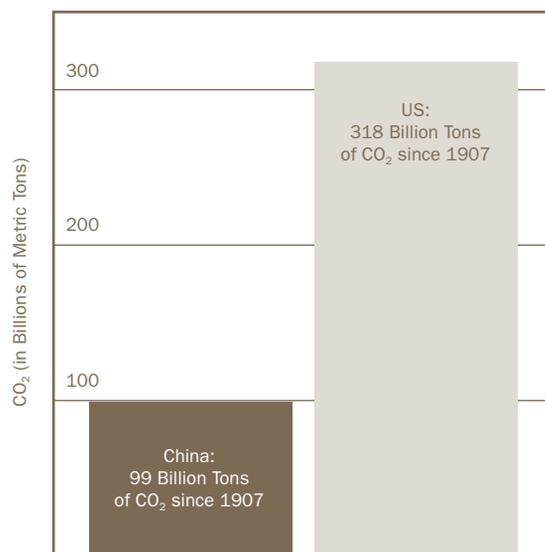
#### GLOBAL WARMING FASTER THAN EXPECTED

The consequences from emissions already released may be much more serious than projections currently show. Atmospheric carbon dioxide growth has increased 35% faster than expected since 2000, as ocean and land CO<sub>2</sub> sinks have slowed or stopped their absorption of greenhouse gases, allowing a greater proportion of emissions to remain in the atmosphere.<sup>17</sup> Physical and biological systems appear to be changing faster than expected as well. A sudden and steep increase in melting of Arctic sea ice in 2007 shrank the ice cover to record lows by September, exceeding previous rates of decline and prompting many experts to suggest that Arctic sea ice could be in an abrupt, irreversible decline.<sup>18</sup> Likewise, earlier projections of polar bear populations are proving overly optimistic. The U.S. Geological Survey reported in September 2007 that more than two-thirds of the world's polar bears could disappear by 2057, if Arctic sea-ice continues to melt at currently observed rates.<sup>19</sup>

Since 1907, the United States has emitted far more carbon dioxide than China has. Between 1899 and 2006, fossil-fuel consumption in the U.S. produced more than 318 billion tons of CO<sub>2</sub>, more than triple the nearly 99 billion tons produced by China over the same period.

While China is expected to surpass the U.S. in annual CO<sub>2</sub> emissions in the near future, it will be decades before its overall contribution to global warming equals that of the U.S. At current growth rates, China's total historic CO<sub>2</sub> emissions won't catch up to the U.S. until mid-2051.

**FIGURE 4.—HISTORIC CO<sub>2</sub> EMISSIONS OF U.S. AND CHINA**



**SOURCES:**

Pre-2005 emissions: Oak Ridge National Laboratory, [http://cdiac.esd.ornl.gov/trends/emis/em\\_cont.htm](http://cdiac.esd.ornl.gov/trends/emis/em_cont.htm). 2005-2006 data projected forward assuming a 1.1% CO<sub>2</sub> growth rate for the U.S. and a 3.4% growth rate for China. CO<sub>2</sub> growth rate from U.S. Energy Information Administration: [http://www.eia.doe.gov/oiaf/ieo/excel/ieorefstab\\_1.xls](http://www.eia.doe.gov/oiaf/ieo/excel/ieorefstab_1.xls).

**EMISSIONS FROM  
THE UNITED STATES AND CHINA:  
AN HISTORICAL PERSPECTIVE**

While greenhouse gas emissions in some developing countries are increasing at a rate greater than those of developed countries, developing countries have a long way to go to catch up with the amount of greenhouse gas emissions the U.S. has produced even over the past 100 years (Figure 4). Since carbon dioxide and other greenhouse gases remain in the atmosphere for decades, we are now seeing the effects of emissions from the first half of the 20<sup>th</sup> century. Although much attention is given to the rapid rise of China's annual greenhouse gas emissions—soon expected to exceed those of the U.S.<sup>21</sup>—its economic growth is very recent, and its per-capita emissions are just one-fifth of the U.S. (Figure 7 compares emissions intensity for the U.S. and China.)

During the 20<sup>th</sup> century, the United States emitted more than three times as much CO<sub>2</sub> as China—318 billion tons compared to 99 billion tons.<sup>22</sup> Even at current growth rates, it will take China until mid-century to equal historical emissions of the U.S.<sup>23</sup>

This is not to say that China should be exempt from emissions reductions in a future, binding international climate agreement. Given the country's projected emissions growth, it must be part of global efforts to ensure stabilization of the climate.

## **EMISSIONS FROM U.S. STATES COMPARED TO DEVELOPING COUNTRIES**

**M**any individual states release more GHG emissions than entire groups of developing countries. Forty-two U.S. states individually emit more carbon dioxide than 50 developing countries combined, and three states individually emit more CO<sub>2</sub> than 100 developing countries. Even Wyoming, with a population of only 510,002 people, emits more carbon dioxide than 69 developing countries having a combined population in excess of 357 million.<sup>20</sup> Figure 5 profiles the emissions characteristics of the 10 U.S. states responsible for the most CO<sub>2</sub>.

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## STATE AND REGIONAL U.S. ACTIONS TO REDUCE GREENHOUSE GAS EMISSIONS<sup>24</sup>

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In the absence of a federal program to limit or reduce U.S. GHG emissions, several states, individually and collectively, have taken action. Because many states emit CO<sub>2</sub> at levels equal to those of developed countries, their emissions reductions could be significant.

The state profiles in Table 1 provide a quick checklist of state efforts.<sup>25</sup> Twenty-five states—accounting for 41.5% of U.S. emissions and 55.5% of the country's population—currently are developing mandatory GHG emissions reduction goals. Clearly, actions by these states will have a large impact on total U.S. emissions. Twelve of them also have reduction goals for emissions by sector, focusing on electric utilities and/or other major industries. The profiles also list other state efforts:

*Climate Action Plans.*—A reduction goal with an action plan gives additional weight to the goal and indicates there is a specific strategy to meet it. Fourteen of the 25 states with reduction goals also have completed plans, and another five are in the process of developing plans.

*Renewable Energy Standards.*—Twenty-eight states have targets for renewable energy, either economy-wide or for particular sectors such as electricity generation. Two additional states have voluntary targets. The actual targets are not listed in the profiles because comparison among states is virtually impossible. For example, each state defines “renewable energy” differently; it may include hydropower or energy produced from municipal solid waste. (Figure 7 compares renewable energy targets for the U.S. and other major emitters of CO<sub>2</sub>.)

*Motor Vehicle Standards.*—California has led the way with legislation requiring a 30% reduction in GHG emissions from new passenger vehicles (cars and light trucks) by 2016, including an interim goal of a 23% reduction by 2012, beginning in 2009. Twelve other states have already adopted the California GHG standard for vehicles, and several other states are considering such a move. Combined, these states represent 39% of U.S. GHG emissions and 52% of the country's population. A decision by the U.S. Environmental Protection Agency on whether or not to let California and other states put these standards into effect has been pending since 2005.

*Energy Efficiency Resource Standards.*—These standards set mandatory energy-savings targets for utilities, which decide the most effective way to meet their targets. If a utility saves more than its target, it may sell credits to entities that fall short of their goal.

In addition to initiatives by individual states, many have joined regional efforts to curb greenhouse gas emissions.

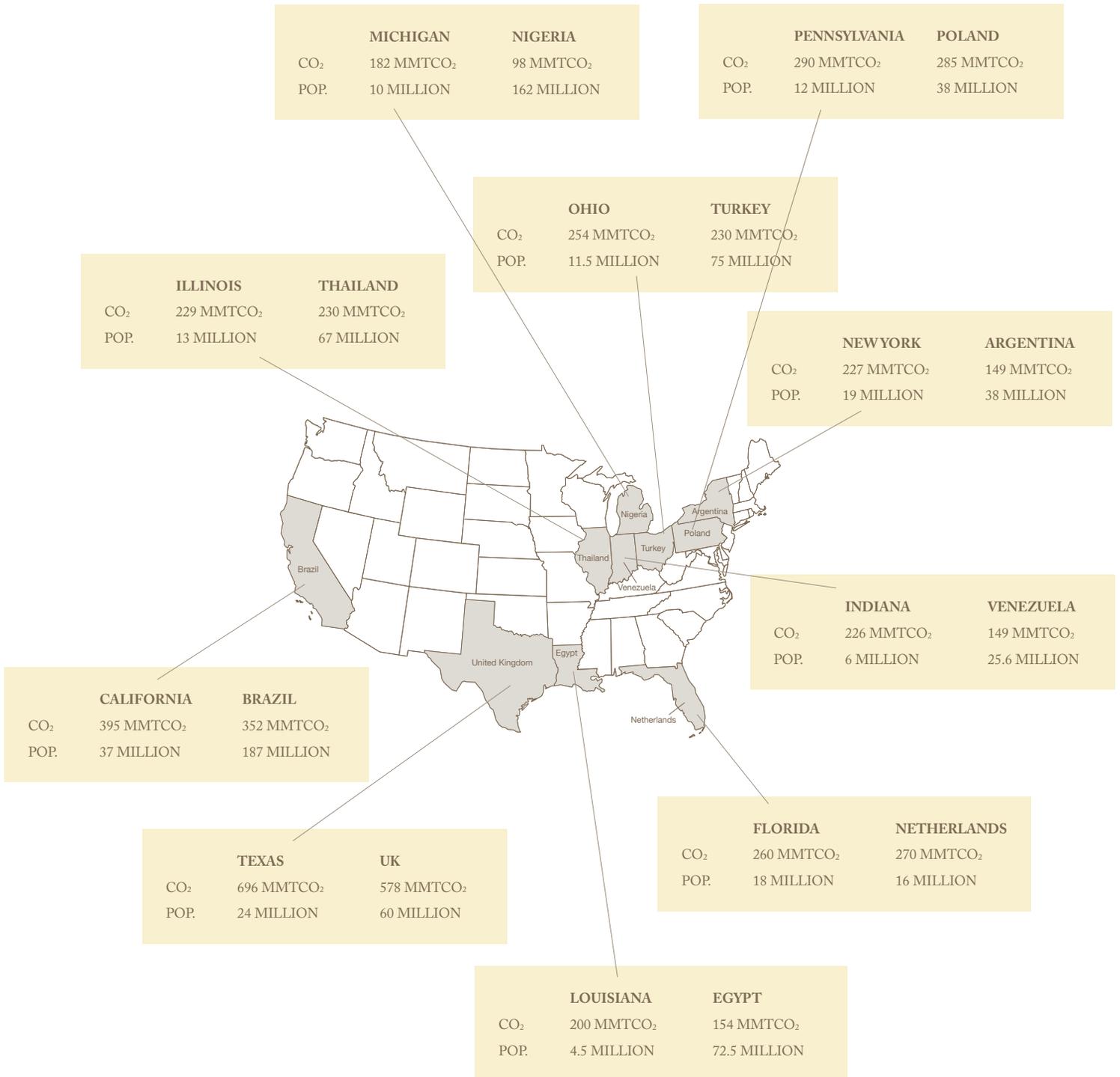
*Western Climate Change Initiative (WCI).*—Six states—Arizona, California, Oregon, Washington, New Mexico, and Utah—and the Canadian Provinces of British Columbia and Manitoba, set a regional goal of reducing emissions of the six major greenhouse gases 15% below 2005 levels by 2020. Montana has announced its intention to join the initiative.

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*Regional Greenhouse Gas Initiative (RGGI).*—Ten Northeast and Mid-Atlantic states have established a cap-and-trade program for power plants in Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, Vermont, Maryland, Massachusetts, and Rhode Island. The agreement requires participating states to cap carbon dioxide emissions from power plants beginning in 2009, hold those emissions stable through 2014, and from 2015 to 2019 reduce those emissions by 10%.

*Midwestern Regional Greenhouse Gas Reduction Accord (MRGGRA).*—Nine U.S. states—Wisconsin, Minnesota, Illinois, Indiana, Iowa, Michigan, Kansas, Ohio, and South Dakota—and the Canadian province of Manitoba recently signed an agreement which commits them to establishing greenhouse gas reduction targets and timeframes, developing a market-based and multi-sector cap-and-trade system, and creating complementary policies to achieve the goals. Targets consistent with the 60 to 80% reductions recommended by the Intergovernmental Panel on Climate Change will be established by the end of 2008. The governors have agreed to achieve full implementation of the accord within 30 months. Three states, Indiana, Ohio, and South Dakota, signed the agreement as “observers” and will decide later whether to participate fully in the cap-and-trade system.

**FIGURE 5.—COMPARISONS OF CO<sub>2</sub> EMISSIONS BY TOP 10 U.S. STATES TO COMPARABLE NATIONS**



**FIGURE 6.—EMISSIONS REDUCTIONS GOALS**

	U.S.	Canada	EU-27	UK	France	Italy	Germany	Russia	Japan
<b>Emissions Reduction Goal</b>	No goal	6% below 1990 levels by 2012	20% below 1990 levels by 2020	20% below 1990 levels by 2010	75% below 1990 levels by 2050	EU Goal	40% below 1990 levels by 2020	Stabilize at 1990 levels by 2012	6% below 1990 levels by 2012

**FIGURE 7.—EMISSIONS INTENSITY GOALS: U.S. VERSUS CHINA**

	U.S.	China
<b>Emissions Intensity Goal</b>	18% reduction in greenhouse gas intensity between 2002 and 2012	2010. <sup>27</sup> Draft goal (but not enacted): 40% by 2020, and 80% by 2050. <sup>28</sup>

**FIGURE 8.—FUEL EFFICIENCY STANDARDS FOR PASSENGER VEHICLES**

	Passenger vehicle fuel-efficiency (fleet averages) <sup>29</sup>
EU-27	48.9 mpg 2012*
France	48.9 mpg 2012*
Germany	48.9 mpg 2012*
Italy	48.9 mpg 2012*
United Kingdom	48.9 mpg 2012*
Japan	46.9 mpg by 2015
China	35.8 mpg by 2009
Australia	34.4 by 2010
Canada	34.1 mpg by 2010
South Korea	30.6 mpg by 2012
U.S.	26.3 mpg by 2011

\*Fuel efficiency goal for all EU countries.

**FIGURE 9.—RENEWABLE ENERGY TARGETS: U.S. VERSUS MAJOR EMITTING COUNTRIES**

	Renewable Energy Targets <sup>30</sup>
U.S.	None
EU-27	21% by 2020
United Kingdom	10% by 2010 & 20% by 2020
France	21% by 2010
Italy	25% by 2010
Germany	12.5% by 2010 & 20% by 2020
China	10% by 2010 & 16% by 2020 (primary energy goal)
Brazil	Additional 3,300 MW from wind, small hydro and bio-mass by 2016
India	15% by 2032
Australia	Add 9,500 MW/per year by 2010

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## RISING PRESSURE FOR ACTION IN THE U.S.

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The Constitution designates the President of the United States the nation's official international negotiator. The present Administration has used this power to hold back international efforts to address global warming—while working to oppose mandatory emissions reductions at home. A rising political tide, however, is now gathering to overtop the President's opposition to mandatory emissions reductions. The Legislative and Judicial branches of government are no longer equivocating on this nation's responsibility for global warming. Consistent with the opinion of a majority of Americans<sup>31</sup>, more than half the nation's statehouses and Governor's mansions are seizing the initiative and passing serious climate policies of their own. Boardrooms are increasingly supportive of corporate and national policies to turn a new direction on climate. The prospects for enactment of an effective climate policy in the United States are stronger than ever.

The political center of gravity in the United States Congress has shifted on global warming. A Senate subcommittee's passage of a proposal calling for 70% emissions reductions by 2050 is just one sign that debate is now focused on the mechanics of deep emissions reductions, rather than the merits of doing so.

The Judicial Branch, ruling on *Massachusetts vs. EPA*, in 2007, found that not only does the U.S. Environmental Protection Agency have the authority to regulate greenhouse gases, but it may not

sidestep its authority to do so unless it can prove global warming poses no threat to human health and welfare.

These shifts have taken place against a backdrop of changing opinions in the American body politic. A clear majority of the American public not only believes that human influence is the primary cause of global warming but also wants the federal government to take unilateral steps to address global climate change, regardless of actions by other nations.

A growing number of Fortune 500 companies are engaging in meaningful ways to limit global warming. The United States Climate Action Partnership, including 27 of the world's largest corporations with combined revenues of nearly \$2 trillion and market capitalization of more than \$2.2 trillion, supports mandatory greenhouse gas reductions. According to a statement by the group, "the climate change challenge will create more economic opportunities than risks for the U.S. economy."

More Wall Street firms are supporting policy interventions to create a carbon market. A recent Lehman Brothers report states, "The free market fails to limit climate-damaging emissions sufficiently, because polluters do not have to pay for the damage they cause. A basic role of policy in such cases is to 'internalize' such costs into emitters' cost structures—the 'polluter pays' principle." Major U.S. investors and banks like J.P. Morgan and Bank of

## LEADING THE WORLD BY LEADING AT HOME

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have issued climate change statements committing to support emissions reductions.

The measurable evolution of public and business support is clearly part of the reason that eight out of ten of the leading Republican and Democratic Presidential candidates back policies to cap carbon emissions.<sup>32</sup> This will send a welcome message to the rest of world that the U.S. is ready to move forward on global warming.

If the United States were to demonstrate to the world, particularly developing nations, that it is serious about embracing its obligations, it could play a meaningful leadership role in international negotiations. In particular, the U.S. could break the policy stalemate it helped create (see figure 6).

To demonstrate a genuine commitment to reduce global warming emissions commensurate with its responsibility, the United States must set an aggressive national cap on global warming emissions and institute complementary policies that improve fuel economy standards for cars and trucks, increase residential, commercial, and industrial energy efficiency, and firmly ground renewable energy in the U.S. electric generation mix.

In addition, the government should immediately invest in developing, testing, and deploying the next generation of emissions-reducing technologies, including methods for capturing and storing carbon dioxide from coal-fired power plants.

### **NATIONAL GLOBAL WARMING POLLUTION CAP**

According to the Intergovernmental Panel on Climate Change, global emissions must peak by 2015 and fall to 15% of 2000 levels by 2050 in order to limit the global temperature increase to about 2°C. Congress needs to put the country on a carbon reduction path that is consistent with this target and which assumes a rightful share of responsibility by the U.S.

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Recently, one of the climate bills proposed in the U.S. Congress took a first step toward becoming law when it was approved by a critical Senate subcommittee. The measure would reduce U.S. CO<sub>2</sub> emissions by about 20% by 2020 and about 60% by 2050. Although the bill makes an important start, deeper cuts are needed. In order to ensure the United States does its fair share relative to the rest of the global community, Congress should make certain that U.S. policies are compatible with the targets, timelines, and baselines that are the essential markers of international global warming agreements.

In addition to cap and trade, three complementary policies would make substantial progress toward steep emissions reductions.<sup>33</sup>

*Automobile Fuel Economy.*—Personal vehicles account for 20% of the nation's total carbon dioxide emissions.<sup>34</sup> The auto industry is currently capable of making cars more fuel efficient without compromising performance or safety.<sup>35</sup> Congress needs to enact stronger fuel economy standards. In July 2007, as part of its overall legislative package on energy, the U.S. Senate passed legislation to increase automobile fuel efficiency standards for the first time in over 20 years. If the standards become law, they will cut projected CO<sub>2</sub> pollution from vehicles by as much as 4.5 billion tons through 2030. (Figure 8 compares U.S. fuel economy standards with those of other developed countries.)

*Energy Efficiency.*—Comprehensive energy bills passed by both the Senate and the House include a number of important provisions on energy efficiency. With updated efficiency standards for residential and commercial equipment, like boilers, lighting, and basic weatherization, together with higher efficiency standards for new construction, these energy

efficiency provisions would reduce CO<sub>2</sub> emissions from electricity generation and natural gas use by 5.4–13.2 billion tons of CO<sub>2</sub> through 2030.

*Renewable Electricity Standard.*—The House of Representatives included a requirement that most power providers obtain 15% of their electricity from renewable energy sources. Modeling by the Energy Information Administration indicates that such a renewable energy standard would reduce CO<sub>2</sub> emissions by nearly 3 billion tons through 2030.

Figure 9 does not reflect the full extent to which nations have adopted renewable energy standards. All EU countries have individual renewable energy targets for electricity generation ranging from 3.6% to 78% that together should achieve the 21% EU target. Several countries also have targets for share of primary energy by 2010, including the Czech Republic (5–6%), France (7%), Germany (4%), Latvia (6%), Lithuania (12%), Poland (7.5%), and Spain (12.1%).

Some countries have policy targets tied to end-use energy (electricity and/or heat) from renewables. Examples are Australia (9,500 kWh/year by 2010), New Zealand (8,300 kWh/year by 2012), Norway (7,000 kWh/year by 2010), South Africa (10,000 kWh/year by 2013), and Switzerland (3,500 kWh by 2010).

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# A NOTE ABOUT THE DATA AND CHARTS IN THIS REPORT

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## GREENHOUSE GAS EMISSIONS DATA

National greenhouse gas emissions data through 2005 were obtained from the U.S. Energy Information Administration (EIA),<sup>36</sup> along with EIA data for the U.S. for 2005 and 2006. The 2006 emissions data for countries other than the U.S. were extrapolated using rates for annual increases in emissions projected by EIA for 2004–2030.<sup>37</sup>

State emissions data through 2004 were obtained from the U.S. Environmental Protection Agency’s inventory of state greenhouse gas emissions.<sup>38</sup> EIA publishes growth projections for individual U.S. regions. These data were used to scale the 2004 state data by assuming that the trend for an individual region applied to all the states in that region, with the additional constraint that the total for 2005 and 2006 had to equal the actual U.S. total as reported by EIA.<sup>39</sup>

Emissions data for the U.S. and other countries are calculated from the burning of fossil fuels and do not necessarily include greenhouse gases other than carbon dioxide. Emissions data are reported in million metric tons of carbon dioxide equivalent (MMTCE). Since different greenhouse gases do not contribute to global warming equally pound for pound, amounts of different gases cannot be added directly. Amounts of individual GHGs are weighted by their global warming potential and then added

together. International GHG emissions are typically reported in metric tons (1,000 kilograms, or approximately 2,203 pounds) rather than U.S. short tons (2,000 pounds).

## POPULATION DATA

Population data for the U.S. and other countries are for 2007 as reported in the World Gazetteer. Note that Hong Kong and Macao are listed as separate developing countries in this report, even though they became part of China in 1999. They are not included in China’s totals for emissions or population.

### TABLE 1 – GREENHOUSE GAS EMISSIONS OF U.S. STATES COMPARED TO DEVELOPED COUNTRIES

This table displays the summary data from individual state profiles listed alphabetically.

### TABLE 2 – GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

This table lists the world’s developing countries in order of GHG emissions (column 5) from least to most with a rank number. It also lists each country’s population (column 6). There are also columns showing cumulative GHG emissions (column 3) and cumulative population (column 4). For example, the cumulative GHG emissions listed for all countries up to and including Columbia (number 120 on the chart) are the sum of emissions from countries ranked 1 through 120.

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To compare GHG emissions from developing countries to a U.S. state, simply locate that state under “U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions” (column 8).

Because Table 1 and Table 2 are linked, it is possible from the individual state profiles to find the “number of developing countries with emissions less than” that state’s and go to that number in the ranking column (far left) of Table 2. For convenience, it is also possible to find the state name listed alphabetically in Table 1 and then take the “Number of Developing Countries with Summed GHG Emissions Less than or Equal to State” (column 5) back to Table 2. Follow the row to the first column to find the total number of developing countries with emissions adding up to that state’s GHG emissions, as well as the cumulative population. For example, Montana, with a population of 940,690 people, has emissions equal to the sum of the GHG emissions from the developing countries ranked 1 through 56 and having a cumulative population of 262,858,568.

## ENDNOTES

<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), Working Group II, *Fourth Assessment Report*, Chapters 3 and 9, <[www.ipcc-wg2.org](http://www.ipcc-wg2.org)>.

<sup>2</sup> Sir Nicholas Stern, *Stern Review on the Economics of Climate Change*, <[www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/stern\\_review\\_report.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm)> and Christian Aid, “Human Tide: The Real Migration Crisis,” May 2007, <[www.christianaid.org.uk/stoppoverty/climatechange/resources/human\\_tide.aspx](http://www.christianaid.org.uk/stoppoverty/climatechange/resources/human_tide.aspx)>.

<sup>3</sup> J. Hansen *et al.*, “Dangerous human-made interference with climate: a GISS modelE study,” *Atmospheric Chemistry and Physics*, May 7, 2007, pp. 2287–2312. Emissions from all countries total 96%; ship and airplane emissions are responsible for the remaining 4%.

<sup>4</sup> Hansen, *op. cit.*, pp. 2287–2312.

<sup>5</sup> Wyoming’s per capita emissions are 710 times greater than those of the 69 developing countries (128.04 MMTCO<sub>2</sub> per million people versus 0.18 MMTCO<sub>2</sub> per million).

<sup>6</sup> Invited nations included Annex I countries (UK, France, Germany, Italy, Japan, Canada, Russia, and Australia) and non-Annex I nations (South Korea, Mexico, China, India, Brazil, Indonesia, and South Africa).

<sup>7</sup> There are 42 industrialized nations in Annex I of the UN Framework Convention on Climate Change. Of this group, only the U.S. and Australia have refused to ratify the Kyoto Protocol.

<sup>8</sup> The U.S. target is an 18% intensity reduction by 2012, less aggressive and timed later than China’s target of 20% by 2010. Additionally, China has proposed (but not enacted) an 80% emissions intensity reduction by 2050. Unfortunately, none of these goals will reduce emissions, because emissions intensity goals measure how fast an economy generates pollution, not how much it creates.

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- <sup>9</sup> The White House, “President Bush Participates in Major Economies Meeting on Energy Security and Climate Change” address by President Bush before Major Economies Meeting on September 28, 2007, <[www.whitehouse.gov/news/releases/2007/09/20070928-2.html](http://www.whitehouse.gov/news/releases/2007/09/20070928-2.html)>. See also, U.S. Department of State, press briefing by National Security Advisor Steven Hadley, June 1, 2007, on the President’s trip to the G-8 Summit, <[www.whitehouse.gov/news/releases/2007/06/20070601-11.html](http://www.whitehouse.gov/news/releases/2007/06/20070601-11.html)>.
- <sup>10</sup> IPCC, Working Group I, “Summary for Policy Makers,” p. 5, <[http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1\\_Print\\_SPM.pdf](http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_SPM.pdf)>.
- <sup>11</sup> IPCC, Working Group II, Chapter 8, “Executive Summary,” p 3, <[www.ipcc-wg2.org/](http://www.ipcc-wg2.org/)>.
- <sup>12</sup> IPCC, Working Group II, “Summary for Policymakers,” <[www.ipcc-wg2.org/](http://www.ipcc-wg2.org/)>.
- <sup>13</sup> IPCC, Working Group I, “Summary for Policy Makers,” p. 12, <[http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1\\_Print\\_SPM.pdf](http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_SPM.pdf)>.
- <sup>14</sup> IPCC, Working Group I, “Summary for Policy Makers,” p. 13.
- <sup>15</sup> IPCC, Working Group II, *Fourth Assessment Report*, Chapters 3 and 9, <[www.ipcc-wg2.org/](http://www.ipcc-wg2.org/)>.
- <sup>16</sup> Stern, *op. cit.* and Christian Aid, *op. cit.*
- <sup>17</sup> J. Canadell *et al.*, “Contributions to accelerating atmospheric CO<sub>2</sub> growth from economic activity, carbon intensity, and efficiency of natural sinks,” *Proceedings of the National Academy of Sciences*, October 2007, <[www.pnas.org/cgi/reprint/0702737104v1](http://www.pnas.org/cgi/reprint/0702737104v1)>.
- <sup>18</sup> Richard A. Kerr, “Is Battered Arctic Sea Ice Down for the Count?,” *Science*, 318:5847 (October 2007), pp. 33–34, <[www.sciencemag.org/cgi/content/summary/318/5847/33a](http://www.sciencemag.org/cgi/content/summary/318/5847/33a)>.
- <sup>19</sup> U.S. Department of Interior, press release, “Future Retreat of Sea Ice Will Lower Polar Bear Population and Limit their Distribution,” *US Geological Survey*, September 7, 2007, <[www.usgs.gov/newsroom/article.asp?ID=1773](http://www.usgs.gov/newsroom/article.asp?ID=1773)>.
- <sup>20</sup> Wyoming’s per capita emissions are 710 times greater than those of the 69 developing countries (128.04 MMTCO<sub>2</sub> per million people versus 0.18 MMTCO<sub>2</sub> per million).
- <sup>21</sup> The International Energy Agency projects China will surpass the U.S. in CO<sub>2</sub> emissions in 2007. International Energy Agency, “Executive Summary,” *World Energy Outlook 2007*, p. 50, <[www.iea.org/w/bookshop/add.aspx?id=319](http://www.iea.org/w/bookshop/add.aspx?id=319)>.
- <sup>22</sup> Calculated using data through 2004 from G. Marland, T. A. Boden, and R. J. Andres, “Global, regional, and national CO<sub>2</sub> emissions,” in *Online Trends: Compendium of Data of Global Change*, Carbon Dioxide Information Analysis Center, Oak Ridge Natl. Lab., U.S. Dept. of Energy, Oak Ridge, Tenn., 2006, <[http://cdiac.esd.ornl.gov/trends/emis/em\\_cont.htm](http://cdiac.esd.ornl.gov/trends/emis/em_cont.htm)>. Data for 2005 and 2006 were calculated using emissions growth projections from the Energy Information Administration, <[www.eia.doe.gov/oiaf/ieo/excel/ieoreftab\\_1.xls](http://www.eia.doe.gov/oiaf/ieo/excel/ieoreftab_1.xls)>.

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- <sup>23</sup> Calculated based on emissions growth projections from the Energy Information Administration, *op. cit.* It should be noted that about 23% of China's 2004 carbon emissions were the result of net exports to industrialized nations. See "Who Owns China's Carbon Emissions?" Tyndall Centre for Climate Change Research, Tyndall Briefing Note No. 23, October 2007.
- <sup>24</sup> Information for this section was largely drawn from the following sources (unless otherwise noted): Pew Center on Global Climate Change, "What's Being Done...In the States," <[www.pewclimate.org/what\\_s\\_being\\_done/in\\_the\\_states/](http://www.pewclimate.org/what_s_being_done/in_the_states/)>; The Center for Climate Strategies, "What's Happening: U.S. Climate Policy Action," <[www.climatestrategies.us/](http://www.climatestrategies.us/)>; and the Clean Cars Campaign, <[www.cleancarscampaign.org/](http://www.cleancarscampaign.org/)>.
- <sup>25</sup> These profiles are intended to be a quick snapshot and do not necessarily describe the full range of emissions-reducing activities pursued by each state.
- <sup>26</sup> Great Plains Institute, Powering the Plains Website, "II. Policy Development," <[www.gpisd.net/resource.html?Id=61#reg](http://www.gpisd.net/resource.html?Id=61#reg)>.
- <sup>27</sup> Statement by H.E. Mr. Yang Jiechi, Minister of Foreign Affairs of the People's Republic of China, "Thematic Plenary on Adaptation of the United Nations High Level Event on Climate Change," New York, September 24, 2007, <[www.china-un.org/eng/zt/yang\\_ga62/t366299.htm](http://www.china-un.org/eng/zt/yang_ga62/t366299.htm)>.
- <sup>28</sup> Goal published in China's draft "First National Climate Change Assessment." See Timothy Herzog, "China's Carbon Intensity Target," World Resources Institute, April 27, 2007, <[www.wri.org/climate/topic\\_content.cfm?cid=4234](http://www.wri.org/climate/topic_content.cfm?cid=4234)>.
- <sup>29</sup> All fuel economy figures taken from International Council on Clean Transportation (ICCT), *Passenger Vehicle Greenhouse Gas and Fuel Economy Standards: A Global Update*, July 2007, <[www.theicct.org/documents/ICCT\\_GlobalStandards\\_20071.pdf](http://www.theicct.org/documents/ICCT_GlobalStandards_20071.pdf)>. The underlying data were provided through personal communication, October 23, 2007.
- <sup>30</sup> Eric Martinot *et al.*, "Renewable Energy Futures: Targets, Scenarios, and Pathways," *Annual Review of Environment and Resources*, in press, April 2007, <[www.martinot.info/Martinot\\_et\\_al\\_AR32\\_prepub.pdf](http://www.martinot.info/Martinot_et_al_AR32_prepub.pdf)>.
- <sup>31</sup> CNN, "Poll shows Americans getting more concerned about global warming," October 20, 2007, <<http://edition.cnn.com/2007/US/10/20/warming.poll/>>.
- <sup>32</sup> Candidates considered "leading" based on CNN polling results obtained November 2, 2007, from <[www.cnn.com/ELECTION/2008/](http://www.cnn.com/ELECTION/2008/)>. Position on global warming obtained from League of Conservation Voters 'Heat Is On' Website, November 2, 2007, <[www.heatison.org/content/blank/candidate\\_chart](http://www.heatison.org/content/blank/candidate_chart)>.
- <sup>33</sup> CAFE savings based on Union of Concerned Scientists (UCS) estimates through 2030. Energy efficiency savings based on American Council for an Energy Efficient Economy (ACEEE) estimates through 2030. Renewable Energy Standard (RES) savings based on Energy Information Administration (EIA) modeling of Sen. Jeff Bingaman's 15% RES, assumed to continue at 2030 levels through 2050. RES estimates assume that the measure passed by the House of Representatives, calling for 4% energy efficiency substitution, will achieve similar CO<sub>2</sub> reductions.

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<sup>34</sup> U.S. EPA, “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2005,” 2007, p. ES-8.

<sup>35</sup> The National Academy of Sciences reported that “Cost efficient fuel economy increases of 12 to 27 percent for cars and 25 to 42 percent for light trucks were estimated to be possible without any loss of performance characteristics... [or] degradation of safety.” National Research Council, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, 2002, p. 76, <[www.nationalacademies.org/onpinews/newsitem.aspx?RecordID=10172](http://www.nationalacademies.org/onpinews/newsitem.aspx?RecordID=10172)>.

<sup>36</sup> <http://www.eia.doe.gov/pub/international/iealf/table1co2.xls>.

<sup>37</sup> Energy Information Administration (EIA), International Energy Outlook, 2007, <[www.eia.doe.gov/oiaf/ieo/excel/ieoreftab\\_10.xls](http://www.eia.doe.gov/oiaf/ieo/excel/ieoreftab_10.xls)>.

<sup>38</sup> EPA, “CO<sub>2</sub> Emissions from Fossil Fuel Combustion (Million Metric Tons CO<sub>2</sub>),” <[www.epa.gov/climatechange/emissions/downloads/CO2FFC\\_2004.pdf](http://www.epa.gov/climatechange/emissions/downloads/CO2FFC_2004.pdf)>.

<sup>39</sup> EIA, “U.S. Carbon Dioxide Emissions from Energy Sources, 2006 Flash Estimate,” <[www.eia.doe.gov/oiaf/1605/flash/flash.html](http://www.eia.doe.gov/oiaf/1605/flash/flash.html)>.

<sup>40</sup> Equation published by the Carbon Dioxide Information Analysis Center of the Oak Ridge National Laboratory, <<http://cdiac.ornl.gov/pns/convert.html>>.

FIGURE 10.—WORLD MAP COMPARING EMISSIONS OF CO<sub>2</sub> FROM THE U.S. WITH DEVELOPED AND DEVELOPING COUNTRIES



U.S.  
CO<sub>2</sub> EMISSIONS (2006) PER  
MILLION PEOPLE—  
19.46 MMTCO<sub>2</sub>

POPULATION—302 MILLION



148 DEVELOPING COUNTRIES  
CUMULATIVE CO<sub>2</sub> EMISSIONS  
(2006) PER MILLION  
PEOPLE—  
1.92 MMTCO<sub>2</sub>

CUMULATIVE POPULATION—  
3,835 MILLION



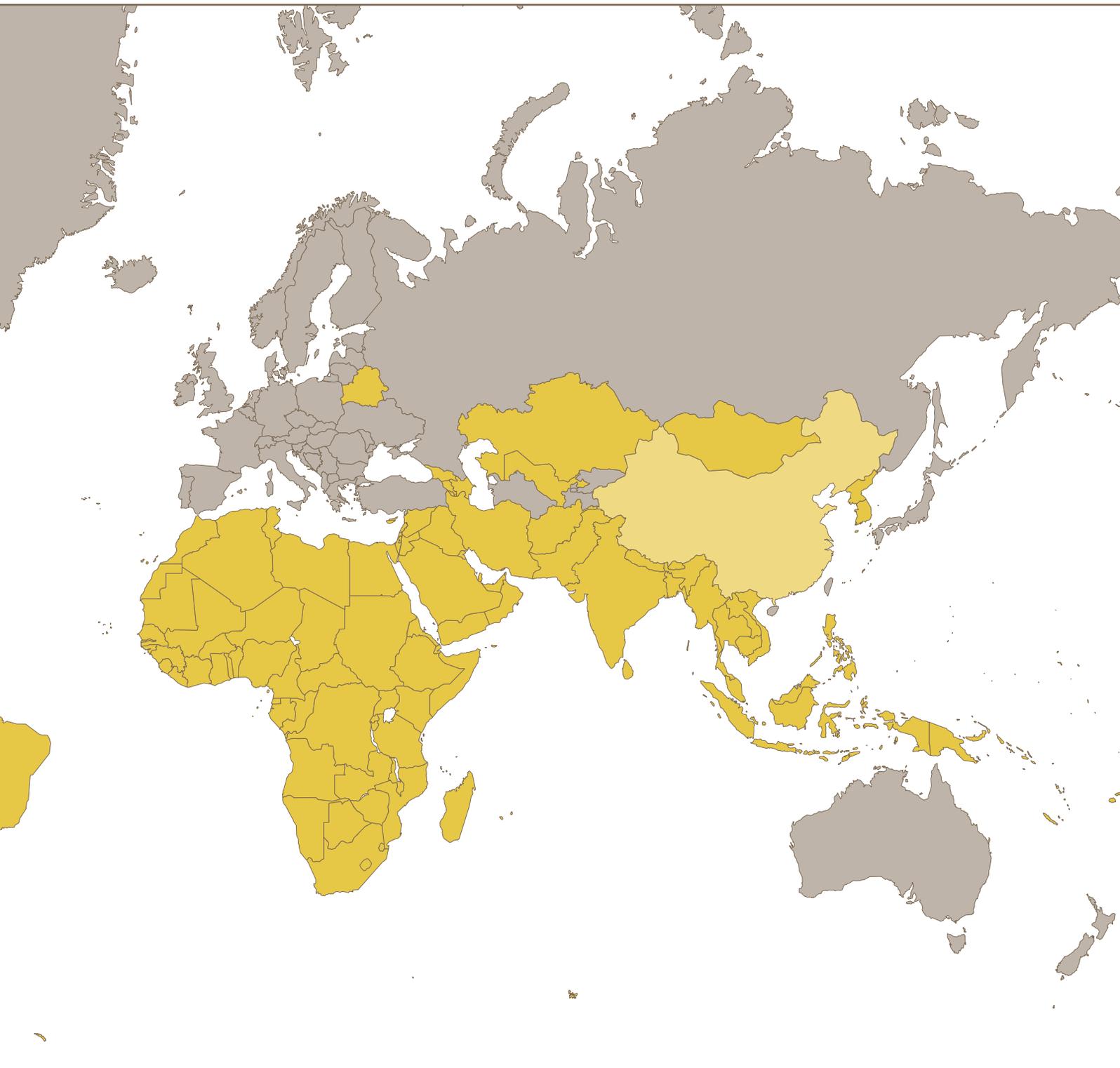
CHINA  
CO<sub>2</sub> EMISSIONS (2006) PER  
MILLION PEOPLE—  
3.80 MMTCO<sub>2</sub>

POPULATION—1,325 MILLION



DEVELOPED COUNTRIES





STATE PROFILE:  
ALABAMA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	14
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	144.97
STATE POPULATION	4,558,509
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	86
COMBINED POPULATION OF DEVELOPING COUNTRIES	544,300,487
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.26
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	31.80
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	122.31
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
ALASKA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	38
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	46.35
STATE POPULATION	673,681
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	61
COMBINED POPULATION OF DEVELOPING COUNTRIES	291,431,692
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.15
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	68.80
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	458.67
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
ARIZONA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	23
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	98.83
STATE POPULATION	6,180,525
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	77
COMBINED POPULATION OF DEVELOPING COUNTRIES	421,188,595
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.23
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	15.99
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	69.52
STATEWIDE GHG REDUCTION TARGETS	2000 LEVELS BY 2020, 50% BELOW 2000 LEVELS BY 2040
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	PENDING
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	WCI

# STATE PROFILE: ARKANSAS



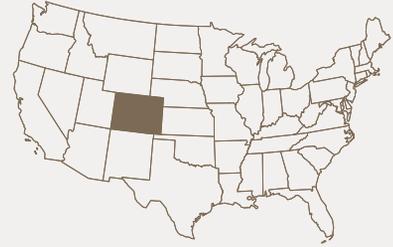
RANK AMONG U.S. STATES FOR GHG EMISSIONS	34
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	64.17
STATE POPULATION	2,788,856
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	68
COMBINED POPULATION OF DEVELOPING COUNTRIES	331,229,087
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.19
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	23.01
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	121.11
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
CALIFORNIA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	2
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	395.37
STATE POPULATION	37,329,035
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	106
COMBINED POPULATION OF DEVELOPING COUNTRIES	784,806,752
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.49
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	10.59
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	21.61
STATEWIDE GHG REDUCTION TARGETS	2000 LEVELS BY 2010, 1990 LEVELS BY 2020, 80% BELOW 1990 BY 2050
SECTOR GHG REDUCTION TARGETS	YES
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	WCI

STATE PROFILE:  
**COLORADO**



RANK AMONG U.S. STATES FOR GHG EMISSIONS	24
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	94.53
STATE POPULATION	4,839,694
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	76
COMBINED POPULATION OF DEVELOPING COUNTRIES	419,896,286
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.22
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	19.53
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	88.77
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
CONNECTICUT



RANK AMONG U.S. STATES FOR GHG EMISSIONS	40
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	43.03
STATE POPULATION	3,568,112
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	60
COMBINED POPULATION OF DEVELOPING COUNTRIES	283,716,926
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.15
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	12.06
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	80.40
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
DELAWARE



RANK AMONG U.S. STATES FOR GHG EMISSIONS	46
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	17.19
STATE POPULATION	860,154
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	44
COMBINED POPULATION OF DEVELOPING COUNTRIES	138,179,700
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.12
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	19.98
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	166.50
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	VOLUNTARY
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

# STATE PROFILE: DISTRICT OF COLUMBIA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	51
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	4.07
STATE POPULATION	544,345
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	26
COMBINED POPULATION OF DEVELOPING COUNTRIES	28,552,525
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.14
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	7.48
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	53.43
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
FLORIDA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	4
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	260.03
STATE POPULATION	18,361,189
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	98
COMBINED POPULATION OF DEVELOPING COUNTRIES	714,222,702
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.35
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	14.16
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	40.46
STATEWIDE GHG REDUCTION TARGETS	2000 LEVELS BY 2017, 1990 LEVELS BY 2025
SECTOR GHG REDUCTION TARGETS	YES
REDUCTION GOAL FOR MOTOR VEHICLES	PENDING
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
**GEORGIA**



RANK AMONG U.S. STATES FOR GHG EMISSIONS	II
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	176.52
STATE POPULATION	9,303,383
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	90
COMBINED POPULATION OF DEVELOPING COUNTRIES	595,054,123
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.28
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	18.97
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	67.75
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	UNDER CONSIDERATION
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
HAWAII



RANK AMONG U.S. STATES FOR GHG EMISSIONS	44
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	22.37
STATE POPULATION	1,311,465
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	48
COMBINED POPULATION OF DEVELOPING COUNTRIES	156,832,848
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.14
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	17.06
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	121.86
STATEWIDE GHG REDUCTION TARGETS	1990 LEVELS BY 2020
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	NO

STATE PROFILE:  
IDAHO



RANK AMONG U.S. STATES FOR GHG EMISSIONS	47
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	15.99
STATE POPULATION	1,466,722
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	43
COMBINED POPULATION OF DEVELOPING COUNTRIES	138,109,378
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.11
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	10.90
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	99.09
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

# STATE PROFILE: ILLINOIS



RANK AMONG U.S. STATES FOR GHG EMISSIONS	6
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	229.38
STATE POPULATION	12,897,374
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	96
COMBINED POPULATION OF DEVELOPING COUNTRIES	704,725,179
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.32
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	17.79
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	55.59
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	UNDER CONSIDERATION
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
INDIANA



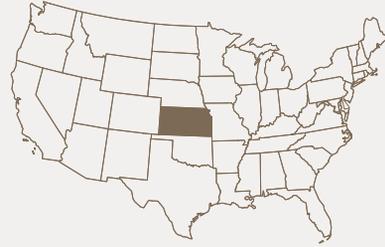
RANK AMONG U.S. STATES FOR GHG EMISSIONS	8
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	226.86
STATE POPULATION	6,331,097
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	95
COMBINED POPULATION OF DEVELOPING COUNTRIES	691,614,434
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.31
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	35.83
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	115.58
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA (OBSERVER)

STATE PROFILE:  
IOWA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	28
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	81.11
STATE POPULATION	2,961,494
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	73
COMBINED POPULATION OF DEVELOPING COUNTRIES	404,601,609
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.20
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	27.39
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	136.95
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
KANSAS



RANK AMONG U.S. STATES FOR GHG EMISSIONS	30
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	77.61
STATE POPULATION	2,758,285
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	72
COMBINED POPULATION OF DEVELOPING COUNTRIES	402,708,083
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.19
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	28.14
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	148.11
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
KENTUCKY



RANK AMONG U.S. STATES FOR GHG EMISSIONS	12
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	154.85
STATE POPULATION	4,208,244
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	87
COMBINED POPULATION OF DEVELOPING COUNTRIES	548,804,500
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.27
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	36.80
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	136.30
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
LOUISIANA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	9
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	200.38
STATE POPULATION	4,526,963
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	93
COMBINED POPULATION OF DEVELOPING COUNTRIES	633,689,347
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.31
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	44.26
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	142.77
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
MAINE



RANK AMONG U.S. STATES FOR GHG EMISSIONS	43
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	22.52
STATE POPULATION	1,342,524
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	48
COMBINED POPULATION OF DEVELOPING COUNTRIES	156,832,848
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.14
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	16.77
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	119.79
STATEWIDE GHG REDUCTION TARGETS	1990 LEVELS BY 2010, 10% BELOW 1990 LEVELS BY 2020, AND 75-80% BELOW 2003 IN THE LONG-TERM
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
**MARYLAND**



RANK AMONG U.S. STATES FOR GHG EMISSIONS	27
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	82.53
STATE POPULATION	5,749,540
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	73
COMBINED POPULATION OF DEVELOPING COUNTRIES	404,601,609
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.20
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	14.35
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	71.75
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

## STATE PROFILE: MASSACHUSETTS



RANK AMONG U.S. STATES FOR GHG EMISSIONS	29
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	80.42
STATE POPULATION	6,495,752
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	73
COMBINED POPULATION OF DEVELOPING COUNTRIES	404,601,609
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.20
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	12.38
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	61.90
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
MICHIGAN



RANK AMONG U.S. STATES FOR GHG EMISSIONS	10
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	181.98
STATE POPULATION	10,215,775
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	91
COMBINED POPULATION OF DEVELOPING COUNTRIES	597,655,764
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.30
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	17.81
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	59.37
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
MINNESOTA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	21
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	101.11
STATE POPULATION	5,225,320
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	78
COMBINED POPULATION OF DEVELOPING COUNTRIES	421,523,737
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	19.35
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	80.63
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
MISSISSIPPI



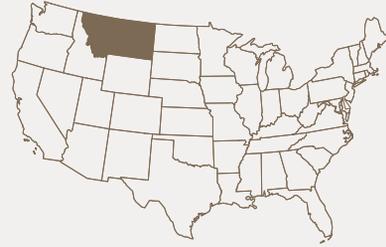
RANK AMONG U.S. STATES FOR GHG EMISSIONS	31
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	67.51
STATE POPULATION	2,920,925
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	69
COMBINED POPULATION OF DEVELOPING COUNTRIES	357,103,606
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.18
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	23.11
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	128.39
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
MISSOURI



RANK AMONG U.S. STATES FOR GHG EMISSIONS	15
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	139.82
STATE POPULATION	5,829,136
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	85
COMBINED POPULATION OF DEVELOPING COUNTRIES	537,472,991
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.26
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	23.99
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	92.27
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
MONTANA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	42
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	36.07
STATE POPULATION	940,690
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	56
COMBINED POPULATION OF DEVELOPING COUNTRIES	261,868,568
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.13
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	38.34
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	294.92
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH WCI REGIONAL INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	PENDING

STATE PROFILE:  
NEBRASKA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	39
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	43.33
STATE POPULATION	1,772,974
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	60
COMBINED POPULATION OF DEVELOPING COUNTRIES	283,716,926
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.15
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	24.44
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	162.93
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
NEVADA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	36
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	48.64
STATE POPULATION	2,582,604
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	62
COMBINED POPULATION OF DEVELOPING COUNTRIES	296,959,024
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.16
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	18.83
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	117.69
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	NO

STATE PROFILE:  
NEW HAMPSHIRE



RANK AMONG U.S. STATES FOR GHG EMISSIONS	45
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	21.10
STATE POPULATION	1,347,146
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	47
COMBINED POPULATION OF DEVELOPING COUNTRIES	144,514,635
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.14
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	15.66
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	111.86
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	YES
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
NEW JERSEY



RANK AMONG U.S. STATES FOR GHG EMISSIONS	16
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	136.68
STATE POPULATION	8,874,740
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	84
COMBINED POPULATION OF DEVELOPING COUNTRIES	534,201,220
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	15.40
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	64.17
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH RGGI INITIATIVE
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
NEW MEXICO



RANK AMONG U.S. STATES FOR GHG EMISSIONS	35
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	59.94
STATE POPULATION	1,949,272
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	67
COMBINED POPULATION OF DEVELOPING COUNTRIES	329,145,682
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.18
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	30.75
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	170.83
STATEWIDE GHG REDUCTION TARGETS	2000 LEVELS BY 2012, 10% BELOW 2000 BY 2020, 75% BELOW 2000 BY 2050
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	WCI

STATE PROFILE:  
NEW YORK



RANK AMONG U.S. STATES FOR GHG EMISSIONS	7
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	227.62
STATE POPULATION	19,363,947
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	95
COMBINED POPULATION OF DEVELOPING COUNTRIES	691,614,434
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.31
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	11.75
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	37.90
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH RGGI INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
NORTH CAROLINA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	13
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	152.33
STATE POPULATION	8,838,795
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	87
COMBINED POPULATION OF DEVELOPING COUNTRIES	548,804,500
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.27
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	17.23
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	63.81
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	NO

STATE PROFILE:  
NORTH DAKOTA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	37
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	47.00
STATE POPULATION	624,700
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	62
COMBINED POPULATION OF DEVELOPING COUNTRIES	296,959,024
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.16
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	75.24
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	470.25
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
OHIO



RANK AMONG U.S. STATES FOR GHG EMISSIONS	5
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	254.64
STATE POPULATION	11,494,336
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	98
COMBINED POPULATION OF DEVELOPING COUNTRIES	714,222,702
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.35
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	22.15
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	63.29
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA (OBSERVER)

STATE PROFILE:  
OKLAHOMA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	22
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	100.09
STATE POPULATION	3,580,846
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	78
COMBINED POPULATION OF DEVELOPING COUNTRIES	421,523,737
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	27.95
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	116.46
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
OREGON



RANK AMONG U.S. STATES FOR GHG EMISSIONS	41
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	42.67
STATE POPULATION	3,731,367
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	60
COMBINED POPULATION OF DEVELOPING COUNTRIES	283,716,926
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.15
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	11.44
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	76.27
STATEWIDE GHG REDUCTION TARGETS	STABILIZE BY 2010, 10% BELOW 1990 BY 2020, 75% BELOW 1990 BY 2050
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	WCI

STATE PROFILE:  
PENNSYLVANIA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	3
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	290.27
STATE POPULATION	12,439,246
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	101
COMBINED POPULATION OF DEVELOPING COUNTRIES	749,128,536
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.39
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	23.34
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	59.85
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	RGGI (OBSERVER)

# STATE PROFILE: RHODE ISLAND



RANK AMONG U.S. STATES FOR GHG EMISSIONS	49
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	10.58
STATE POPULATION	1,104,999
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	37
COMBINED POPULATION OF DEVELOPING COUNTRIES	116,478,003
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.09
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	9.57
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	106.33
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	COMPLETED
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	RGGI

STATE PROFILE:  
SOUTH CAROLINA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	25
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	89.84
STATE POPULATION	4,313,497
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	75
COMBINED POPULATION OF DEVELOPING COUNTRIES	411,467,280
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.21
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	20.83
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	99.19
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

## STATE PROFILE: SOUTH DAKOTA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	48
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	13.85
STATE POPULATION	775,185
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	41
COMBINED POPULATION OF DEVELOPING COUNTRIES	132,682,824
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.10
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	17.87
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	178.70
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA (OBSERVER)

STATE PROFILE:  
**TENNESSEE**



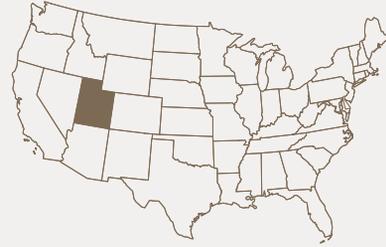
RANK AMONG U.S. STATES FOR GHG EMISSIONS	17
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	129.38
STATE POPULATION	6,029,843
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	83
COMBINED POPULATION OF DEVELOPING COUNTRIES	514,031,868
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	21.46
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	89.42
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
TEXAS



RANK AMONG U.S. STATES FOR GHG EMISSIONS	I
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	696.20
STATE POPULATION	23,702,052
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	116
COMBINED POPULATION OF DEVELOPING COUNTRIES	1,020,900,385
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.67
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	29.37
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	43.84
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	NO

STATE PROFILE:  
UTAH



RANK AMONG U.S. STATES FOR GHG EMISSIONS	32
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	66.17
STATE POPULATION	2,507,767
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	69
COMBINED POPULATION OF DEVELOPING COUNTRIES	357,103,606
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.18
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	26.39
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	146.61
STATEWIDE GHG REDUCTION TARGETS	PENDING BY JUNE 2008
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	UNDER CONSIDERATION
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	WCI

STATE PROFILE:  
VERMONT



RANK AMONG U.S. STATES FOR GHG EMISSIONS	50
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	6.77
STATE POPULATION	629,898
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	32
COMBINED POPULATION OF DEVELOPING COUNTRIES	41,558,609
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.16
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	10.75
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	67.19
STATEWIDE GHG REDUCTION TARGETS	GHG TARGETS ADOPTED UNDER THE NEW ENGLAND GOVERNORS' CLIMATE CHANGE ACTION PLAN, BUT THE AGREEMENT IS NON-BINDING.
SECTOR GHG REDUCTION TARGETS	PENDING
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	RGGI

## STATE PROFILE: VIRGINIA



RANK AMONG U.S. STATES FOR GHG EMISSIONS	18
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	129.22
STATE POPULATION	7,769,233
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	83
COMBINED POPULATION OF DEVELOPING COUNTRIES	514,031,868
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	16.83
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	70.13
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	NO

# STATE PROFILE: WASHINGTON



RANK AMONG U.S. STATES FOR GHG EMISSIONS	26
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	85.23
STATE POPULATION	6,423,470
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	74
COMBINED POPULATION OF DEVELOPING COUNTRIES	405,721,670
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.20
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	13.27
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	66.35
STATEWIDE GHG REDUCTION TARGETS	1990 LEVELS BY 2020, 25% BELOW 1990 BY 2035, 50% BELOW 1990 BY 2050
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	YES
CLIMATE ACTION PLAN	IN PROGRESS
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	YES
REGIONAL INITIATIVES	WCI

STATE PROFILE:  
WEST VIRGINIA



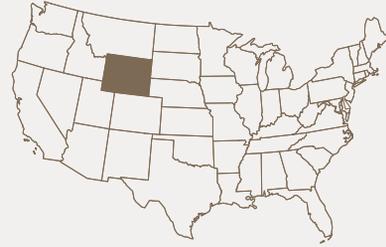
RANK AMONG U.S. STATES FOR GHG EMISSIONS	19
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	113.79
STATE POPULATION	1,816,832
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	81
COMBINED POPULATION OF DEVELOPING COUNTRIES	512,166,689
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.22
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	62.63
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	284.68
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO

STATE PROFILE:  
WISCONSIN



RANK AMONG U.S. STATES FOR GHG EMISSIONS	20
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	104.06
STATE POPULATION	5,596,141
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	78
COMBINED POPULATION OF DEVELOPING COUNTRIES	421,523,737
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.24
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	18.59
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	77.46
STATEWIDE GHG REDUCTION TARGETS	PENDING; CONSISTENT WITH MRGGRA INITIATIVES
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	YES
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	MRGGRA

STATE PROFILE:  
WYOMING



RANK AMONG U.S. STATES FOR GHG EMISSIONS	33
2006 GHG EMISSIONS (IN MMTCO <sub>2</sub> )	65.30
STATE POPULATION	510,002
NO. DEVELOPING COUNTRIES WITH SUMMED GHG EMISSIONS LESS THAN OR EQUAL TO STATE	69
COMBINED POPULATION OF DEVELOPING COUNTRIES	357,103,606
CUMULATIVE DEVELOPING COUNTRY EMISSIONS PER MILLION PEOPLE (IN MMTCO <sub>2</sub> )	0.18
GHG EMISSIONS PER MILLION PEOPLE OF STATE (IN MMTCO <sub>2</sub> )	128.04
RATIO OF PER CAPITA EMISSIONS STATE/DEV. COUNTRY	711.33
STATEWIDE GHG REDUCTION TARGETS	NO
SECTOR GHG REDUCTION TARGETS	NO
REDUCTION GOAL FOR MOTOR VEHICLES	NO
CLIMATE ACTION PLAN	NO
RENEWABLE ENERGY STANDARD	NO
ENERGY EFFICIENCY RESOURCE STANDARD	NO
REGIONAL INITIATIVES	NO



TABLE I

## GREENHOUSE GAS EMISSIONS OF U.S. STATES COMPARED TO DEVELOPING COUNTRIES

Rank in U.S. for 2006 GHG Emissions	State	State 2006 GHG Emissions (MMTCO <sub>2</sub> )	State Population	Number of Developing Countries with Summed GHG Emissions Less Than or Equal to State	Combined Population of Developing Countries	Cumulative Developing Country Emissions per Million People	GHG Emissions per Million People of State	Ratio of Per Capita Emissions State/Dev. Country
14	Alabama	144.97	4,558,509	86	544,300,487	0.26	31.80	122.31
38	Alaska	46.35	673,681	61	291,431,692	0.15	68.80	458.67
23	Arizona	98.83	6,180,525	77	421,188,595	0.23	15.99	69.52
34	Arkansas	64.17	2,788,856	68	331,229,087	0.19	23.01	121.11
2	California	395.37	37,329,035	106	784,806,752	0.49	10.59	21.61
24	Colorado	94.53	4,839,694	76	419,896,286	0.22	19.53	88.77
40	Connecticut	43.03	3,568,112	60	283,716,926	0.15	12.06	80.40
46	Delaware	17.19	860,154	44	138,179,700	0.12	19.98	166.50
51	District of Columbia	4.07	544,345	26	28,552,525	0.14	7.48	53.43
4	Florida	260.03	18,361,189	98	714,222,702	0.35	14.16	40.46
11	Georgia	176.52	9,303,383	90	595,054,123	0.28	18.97	67.75
44	Hawaii	22.37	1,311,465	48	156,832,848	0.14	17.06	121.86
47	Idaho	15.99	1,466,722	43	138,109,378	0.11	10.90	99.09
6	Illinois	229.38	12,897,374	96	704,725,179	0.32	17.79	55.59
8	Indiana	226.86	6,331,097	95	691,614,434	0.31	35.83	115.58
28	Iowa	81.11	2,961,494	73	404,601,609	0.20	27.39	136.95
30	Kansas	77.61	2,758,285	72	402,708,083	0.19	28.14	148.11
12	Kentucky	154.85	4,208,244	87	548,804,500	0.27	36.80	136.30

Climate Action Plan	Statewide GHG Reduction Targets	Sector** GHG Reduction Targets	Reduction Goal for Motor Vehicles	Renewable Energy Standard***	Energy Efficiency Resource Standard****	Regional Initiatives
						No
						No
Completed	2000 levels by 2020, 50% below 2000 levels by 2040		Pending	Yes		WCI
In Progress						No
Completed	2000 levels by 20120, 1990 levels by 2020, 80% below 1990 by 2050	Yes	Yes	Yes		WCI
Completed				Yes		No
Completed	GHG targets adopted but the agreement is non-binding	Pending	Yes	Yes	Yes	RGGI
	GHG targets adopted but the agreement is non-binding	Pending		Voluntary		RGGI
				Yes		No
In Progress	2000 levels by 2017, 1990 levels by 20205	Yes	Pending			No
						No
Completed	1990 levels by 2020			Yes	Yes	No
						No
In Progress	1990 levels by 2020, 10% below 1990 by 2050		Under Consideration	Yes	Yes	MRGGRA
	No					MRGGRA (Observer)
	Pending			Yes		MRGGRA
	No					MRGGRA
						No

TABLE I

## GREENHOUSE GAS EMISSIONS OF U.S. STATES COMPARED TO DEVELOPING COUNTRIES

Rank in U.S. for 2006 GHG Emissions	State	State 2006 GHG Emissions (MMTCO <sub>2</sub> )	State Population	Number of Developing Countries with Summed GHG Emissions Less Than or Equal to State	Combined Population of Developing Countries	Cumulative Developing Country Emissions per Million People	GHG Emissions per Million People of State	Ratio of Per Capita Emissions State/Dev. Country
9	Louisiana	200.38	4,526,963	93	633,689,347	0.31	44.26	142.77
43	Maine	22.52	1,342,524	48	156,832,848	0.14	16.77	119.79
27	Maryland	82.53	5,749,540	73	404,601,609	0.20	14.35	71.75
29	Massachusetts	80.42	6,495,752	73	404,601,609	0.20	12.38	61.90
10	Michigan	181.98	10,215,775	91	597,655,764	0.30	17.81	59.37
21	Minnesota	101.11	5,225,320	78	421,523,737	0.24	19.35	80.63
31	Mississippi	67.51	2,920,925	69	357,103,606	0.18	23.11	128.39
15	Missouri	139.82	5,829,136	85	537,472,991	0.26	23.99	92.27
42	Montana	36.07	940,690	56	261,868,568	0.13	38.34	294.92
39	Nebraska	43.33	1,772,974	60	283,716,926	0.15	24.44	162.93
36	Nevada	48.64	2,582,604	62	296,959,024	0.16	18.83	117.69
45	New Hampshire	21.10	1,347,146	47	144,514,635	0.14	15.66	111.86
16	New Jersey	136.68	8,874,740	84	534,201,220	0.24	15.40	64.17
35	New Mexico	59.94	1,949,272	67	329,145,682	0.18	30.75	170.83

Climate Action Plan	Statewide GHG Reduction Targets	Sector** GHG Reduction Targets	Reduction Goal for Motor Vehicles	Renewable Energy Standard***	Energy Efficiency Resource Standard****	Regional Initiatives
						No
Completed	1990 levels by 2010, 10% below 1990 by 2020, 75-80% below 2003 long-term	Pending	Yes	Yes		RGGI
In Progress	No	Pending	Yes	Yes		RGGI
Completed	GHG targets adopted, but the agreement is non-binding	Pending	Yes	Yes		RGGI
						MRGGRA
In Progress	15% below 2005 levels by 2015, 30% below 2005 by 2025, 80% below 2005 by 2050			Yes	Yes	MRGGRA
						No
				Yes		No
Completed	Pending			Voluntary		WCI
						No
				Yes	Yes	No
In Progress	GHG targets adopted, but the agreement is non-binding	Yes		Yes		RGGI
Completed	1990 levels by 2020, 80% below 2006 by 2050		Yes	Yes	Yes	RGGI
Completed	2000 levels by 2012, 10% below 2000 by 2020, 75% below 2000 by 2050		Pending	Yes		WCI

TABLE I

## GREENHOUSE GAS EMISSIONS OF U.S. STATES COMPARED TO DEVELOPING COUNTRIES

Rank in U.S. for 2006 GHG Emissions	State	State 2006 GHG Emissions (MMTCO <sub>2</sub> )	State Population	Number of Developing Countries with Summed GHG Emissions Less Than or Equal to State	Combined Population of Developing Countries	Cumulative Developing Country Emissions per Million People	GHG Emissions per Million People of State	Ratio of Per Capita Emissions State/Dev. Country
7	New York	227.62	19,363,947	95	691,614,434	0.31	11.75	37.90
13	North Carolina	152.33	8,838,795	87	548,804,500	0.27	17.23	63.81
37	North Dakota	47.00	624,700	62	296,959,024	0.16	75.24	470.25
5	Ohio	254.64	11,494,336	98	714,222,702	0.35	22.15	63.29
22	Oklahoma	100.09	3,580,846	78	421,523,737	0.24	27.95	116.46
41	Oregon	42.67	3,731,367	60	283,716,926	0.15	11.44	76.27
3	Pennsylvania	290.27	12,439,246	101	749,128,536	0.39	23.34	59.85
49	Rhode Island	10.58	1,104,999	37	116,478,003	0.09	9.57	106.33
25	South Carolina	89.84	4,313,497	75	411,467,280	0.21	20.83	99.19
48	South Dakota	13.85	775,185	41	132,682,824	0.10	17.87	178.70
17	Tennessee	129.38	6,029,843	83	514,031,868	0.24	21.46	89.42
1	Texas	696.20	23,702,052	116	1,020,900,385	0.67	29.37	43.84
32	Utah	66.17	2,507,767	69	357,103,606	0.18	26.39	146.61
50	Vermont	6.77	629,898	32	41,558,609	0.16	10.75	67.19
18	Virginia	129.22	7,769,233	83	514,031,868	0.24	16.83	70.13
26	Washington	85.23	6,423,470	74	405,721,670	0.20	13.27	66.35

Climate Action Plan	Statewide GHG Reduction Targets	Sector** GHG Reduction Targets	Reduction Goal for Motor Vehicles	Renewable Energy Standard***	Energy Efficiency Resource Standard****	Regional Initiatives
Completed	5% below 1990 levels by 2010, 10% below 1990 by 2020	Pending	Yes	Yes	Yes	RGGI
Completed				Yes	Yes	No
						No
						MRGGRA (Observer)
						No
Completed	Stabilize by 2010, 10% below 1990 by 2020, 75% below 1990 by 2050		Yes	Yes		WCI
			Yes	Yes	Yes	RGGI (Observer)
Completed	GHG targets adopted, but the agreement is non-binding		Yes	Yes		RGGI
In Progress						No
						MRGGRA (Observer)
						No
				Yes	Yes	No
In Progress	Pending (2008)					WCI
In Progress	GHG targets adopted, but the agreement is non-binding	Pending	Yes	Yes	Yes	RGGI
				Yes	Yes	No
In Progress	1990 levels by 2020, 25% below 1990 by 2035, 50% below 1990 by 2050		Yes	Yes	Yes	WCI

**TABLE I**

**GREENHOUSE GAS EMISSIONS OF U.S. STATES COMPARED TO DEVELOPING COUNTRIES**

Rank in U.S. for 2006 GHG Emissions	State	State 2006 GHG Emissions (MMTCO <sub>2</sub> )	State Population	Number of Developing Countries with Summed GHG Emissions Less Than or Equal to State	Combined Population of Developing Countries	Cumulative Developing Country Emissions per Million People	GHG Emissions per Million People of State	Ratio of Per Capita Emissions State/Dev. Country
19	West Virginia	113.79	1,816,832	81	512,166,689	0.22	62.63	284.68
20	Wisconsin	104.06	5,596,141	78	421,523,737	0.24	18.59	77.46
33	Wyoming	65.30	510,002	69	357,103,606	0.18	128.04	711.33

\* The EPA must rule to allow the adoption of the California standard before states can implement it. “Yes” designation means the state has formally authorized implementation of the standard once EPA rules; “Pending” means the state has announced it will adopt the standard and is working on regulations to do so; “Under Consideration” means that state officials are considering whether to adopt the standard.

\*\* Electric utility sector in all cases except California, which set goals for major industries.

\*\*\* Details about these policies are not provided here because they vary significantly by start dates, target dates and definitions of applicable technologies, making them difficult to meaningfully compare.

Climate Action Plan	Statewide GHG Reduction Targets	Sector** GHG Reduction Targets	Reduction Goal for Motor Vehicles	Renewable Energy Standard***	Energy Efficiency Resource Standard****	Regional Initiatives
						No
				Yes		MRGGRA
						No

TABLE 2

GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
1	Niue	0.003	1,722	0.00	1,722
2	Turks and Caicos Islands	0.01	34,851	0.01	36,573
3	Saint Helena	0.01	4,662	0.02	41,235
4	Kiribati	0.03	93,565	0.06	134,800
5	Guinea	0.04	8,171,096	0.10	8,305,896
6	Montserrat	0.06	4,796	0.16	8,310,692
7	Cook Islands	0.06	18,723	0.22	8,329,415
8	Saint Pierre and Miquelon	0.08	7,446	0.30	8,336,861
9	Vanuatu	0.09	222,606	0.40	8,559,467
10	Sao Tome and Principe	0.10	173,942	0.50	8,733,409
11	Comoros	0.12	681,800	0.62	9,415,209
12	Dominica	0.13	71,388	0.74	9,486,597
13	Saint Kitts and Nevis	0.13	39,382	0.87	9,525,979
14	Tonga	0.14	104,057	1.01	9,630,036
15	Cape Verde	0.16	494,034	1.16	10,124,070
16	Samoa	0.16	184,633	1.32	10,308,703
17	Nauru	0.18	11,424	1.50	10,320,127
18	Saint Vincent/Grenadines	0.20	125,882	1.70	10,446,009
19	Solomon Islands	0.20	492,170	1.90	10,938,179
20	Chad	0.22	8,915,381	2.12	19,853,560
21	Lesotho	0.22	2,513,076	2.34	22,366,636
22	Grenada	0.25	101,008	2.59	22,467,644
23	Western Sahara	0.29	456,348	2.88	22,923,992
24	Gambia, The	0.30	1,508,727	3.19	24,432,719
25	Bhutan	0.33	812,184	3.51	25,244,903
26	Central African Republic	0.37	3,307,622	3.88	28,552,525

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
1.83				
0.37				
0.58				
0.41				
0.01				
0.02				
0.03				
0.04				
0.05				
0.06				
0.07				
0.08				
0.09				
0.10				
0.11				
0.13				
0.15				
0.16				
0.17				
0.11				
0.10				
0.12				
0.13				
0.13				
0.14				
0.14	District of Columbia	4.07	544,345	7.48

TABLE 2

GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
27	Cayman Islands	0.39	50,348	4.27	28,602,873
28	Guinea-Bissau	0.40	1,492,189	4.66	30,095,062
29	Saint Lucia	0.41	169,576	5.07	30,264,638
30	Burundi	0.46	8,075,188	5.53	38,339,826
31	Liberia	0.54	3,146,406	6.08	41,486,232
32	Antigua and Barbuda	0.58	72,377	6.65	41,558,609
33	Cambodia	0.61	15,507,538	7.26	57,066,147
34	Mali	0.66	10,914,989	7.92	67,981,136
35	Afghanistan	0.73	27,089,593	8.65	95,070,729
36	Somalia	0.78	12,448,179	9.43	107,518,908
37	Rwanda	0.83	8,959,095	10.26	116,478,003
38	Malawi	0.84	11,553,163	11.10	128,031,166
39	Eritrea	0.86	4,254,498	11.95	132,285,664
40	Belize	0.90	312,233	12.85	132,597,897
41	Seychelles	0.91	84,927	13.77	132,682,824
42	French Polynesia	0.94	266,935	14.70	132,949,759
43	Sierra Leone	1.02	5,159,619	15.72	138,109,378
44	Aruba	1.06	70,322	16.77	138,179,700
45	Laos	1.13	5,826,271	17.90	144,005,971
46	French Guiana	1.14	204,932	19.04	144,210,903
47	Maldives	1.16	303,732	20.20	144,514,635
48	Burkina Faso	1.20	12,318,213	21.40	156,832,848
49	Niger	1.30	12,533,242	22.70	169,366,090
50	Swaziland	1.40	1,173,758	24.10	170,539,848
51	Fiji	1.55	867,655	25.65	171,407,503

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
0.15				
0.15				
0.17				
0.14				
0.15				
0.16	Vermont	6.77	629,898	10.75
0.13				
0.12				
0.09				
0.09				
0.09	Rhode Island	10.58	1,104,999	9.57
0.09				
0.09				
0.10				
0.10	South Dakota	13.85	775,185	17.87
0.11				
0.11	Idaho	15.99	1,466,722	10.90
0.12	Delaware	17.19	860,154	19.98
0.12				
0.13				
0.14	New Hampshire	21.10	1,347,146	15.66
0.14	Hawaii	22.37	1,311,465	17.06
	Maine	22.52	1,342,524	16.77
0.13				
0.14				
0.15				

TABLE 2

GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
52	Uganda	1.68	28,574,909	27.34	199,982,412
53	Guyana	1.80	886,113	29.14	200,868,525
54	Barbados	1.81	267,353	30.95	201,135,878
55	Suriname	1.82	505,973	32.77	201,641,851
56	Congo (Kinshasa)	1.88	60,226,717	34.65	261,868,568
57	Mozambique	1.94	20,356,242	36.59	282,224,810
58	New Caledonia	2.00	243,233	38.59	282,468,043
59	Djibouti	2.03	790,709	40.62	283,258,752
60	Guadeloupe	2.04	458,174	42.66	283,716,926
61	Benin	2.11	7,714,766	44.77	291,431,692
62	Togo	2.21	5,527,332	46.98	296,959,024
63	Madagascar	2.22	18,996,075	49.20	315,955,099
64	Martinique	2.38	400,229	51.57	316,355,328
65	Macau	2.41	500,631	53.98	316,855,959
66	Zambia	2.45	11,486,812	56.43	328,342,771
67	Reunion	2.70	802,911	59.13	329,145,682
68	Namibia	2.73	2,083,405	61.87	331,229,087
69	Nepal	2.97	25,874,519	64.83	357,103,606
70	Congo (Brazzaville)	3.11	3,774,537	67.94	360,878,143
71	Mauritania	3.42	2,959,592	71.36	363,837,735

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
0.14				
0.15				
0.15				
0.16				
0.13	Montana	36.07	940,690	38.34
0.13				
0.14				
0.14				
0.15	Oregon	42.67	3,731,367	11.44
	Connecticut	43.03	3,568,112	12.06
	Nebraska	43.33	1,772,974	24.44
0.15	Alaska	46.35	673,681	68.80
0.16	North Dakota	47.00	624,700	75.24
	Nevada	48.64	2,582,604	18.83
0.16				
0.16				
0.17				
0.17				
0.18	New Mexico	59.94	1,949,272	30.75
0.19	Portugal	63.81	10,539,564	6.05
	Arkansas	64.17	2,788,856	23.01
0.18	Wyoming	65.30	510,002	128.04
	Utah	66.17	2,507,767	26.39
	Mississippi	67.51	2,920,925	23.11
0.19				
0.20				

**TABLE 2**

**GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES**

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
72	Tanzania	3.69	38,870,348	75.06	402,708,083
73	Botswana	4.01	1,893,526	79.07	404,601,609
74	Equatorial Guinea	4.01	1,120,061	83.07	405,721,670
75	Paraguay	4.03	5,745,610	87.10	411,467,280
76	Haiti	4.04	8,429,006	91.14	419,896,286
77	Mauritius	4.10	1,292,309	95.25	421,188,595
78	Bahamas	4.40	335,142	99.64	421,523,737
79	Nicaragua	4.49	5,701,141	104.13	427,224,878
80	Ethiopia	4.57	73,872,056	108.70	501,096,934
81	Senegal	4.88	11,069,755	113.58	512,166,689
82	Gabon	5.19	1,461,679	118.77	513,628,368
83	Brunei	5.98	403,500	124.75	514,031,868
84	Cote d'Ivoire (Ivory Coast)	6.07	20,169,352	130.82	534,201,220
85	Uruguay	6.25	3,271,771	137.07	537,472,991
86	Honduras	6.32	6,827,496	143.39	544,300,487
87	Costa Rica	6.38	4,504,013	149.78	548,804,500
88	El Salvador	6.42	6,672,218	156.19	555,476,718
89	Ghana	6.54	21,801,662	162.73	577,278,380
90	Cameroon	6.81	17,775,743	169.55	595,054,123
91	Mongolia	8.60	2,601,641	178.15	597,655,764

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
0.19	Kansas	77.61	2,758,285	28.14
0.20	Massachusetts	80.42	6,495,752	12.38
	Iowa	81.11	2,961,494	27.39
	Maryland	82.53	5,749,540	14.35
0.20	Washington	85.23	6,423,470	13.27
0.21	South Carolina	89.84	4,313,497	20.83
0.22	Colorado	94.53	4,839,694	19.53
0.23	Arizona	98.83	6,180,525	15.99
0.24	Oklahoma	100.09	3,580,846	27.95
	Minnesota	101.11	5,225,320	19.35
	Wisconsin	104.06	5,596,141	18.59
0.24				
0.22				
0.22	West Virginia	113.79	1,816,832	62.63
0.23				
0.24	Virginia	129.22	7,769,233	16.63
	Tennessee	129.38	6,029,843	21.46
0.24	New Jersey	136.68	8,874,740	15.40
0.26	Missouri	139.82	5,829,136	23.99
0.26	Alabama	144.97	4,558,509	31.80
0.27	North Carolina	152.33	8,838,795	17.23
	Kentucky	154.85	4,208,244	36.80
0.28				
0.28				
0.28	Georgia	176.52	9,303,383	18.97
0.30	Michigan	181.98	10,215,775	17.81

TABLE 2

GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
92	Cyprus	8.65	971,391	186.80	598,627,155
93	Kenya	8.91	35,062,192	195.71	633,689,347
94	Sudan	10.27	36,618,745	205.97	670,308,092
95	Yemen	11.02	21,306,342	216.99	691,614,434
96	Guatemala	11.18	13,110,745	228.17	704,725,179
97	Bolivia	11.78	9,492,607	239.95	714,217,786
98	Burma	12.03	4,916	251.99	714,222,702
99	Jamaica	12.15	2,710,063	264.14	716,932,765
100	Sri Lanka	12.25	19,796,874	276.39	736,729,639
101	Zimbabwe	12.43	12,398,897	288.82	749,128,536
102	Panama	13.35	3,172,537	302.18	752,301,073
103	Lebanon	17.16	4,556,561	319.34	756,857,634
104	Jordan	19.52	5,375,307	338.86	762,232,941
105	Angola	20.65	13,313,553	359.51	775,546,494
106	Dominican Republic	21.24	9,260,258	380.76	784,806,752
107	Tunisia	21.78	10,342,253	402.53	795,149,005
108	Ecuador	23.63	12,090,804	426.17	807,239,809
109	Bahrain	23.79	738,874	449.95	807,978,683
110	Oman	24.39	2,452,234	474.35	810,430,917
111	Peru	28.59	28,920,965	502.94	839,351,882
112	Morocco	30.59	30,534,870	533.53	869,886,752
113	Trinidad and Tobago	34.05	1,330,164	567.58	871,216,916

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
0.31				
0.31	Louisiana	200.38	4,526,963	44.26
0.31	Turkey	212.96	75,863,600	2.81
0.31	Indiana	226.86	6,331,097	35.83
	New York	227.62	19,363,947	11.75
0.32	Illinois	229.38	12,897,374	17.79
0.34				
0.35	Ohio	254.64	11,494,336	22.15
	Florida	260.03	18,361,189	14.16
0.37				
0.38				
0.39	Pennsylvania	290.27	12,439,246	23.34
0.40				
0.42				
0.44				
0.46				
0.49	California	395.37	37,329,035	10.59
0.51	Australia	406.52	20,984,595	19.37
	France	408.10	61,350,009	6.65
0.53				
0.56				
0.59	Italy	487.89	59,546,696	8.19
0.60				
0.61				
0.65	United Kingdom	583.16	60,363,602	9.66
	Canada	599.80	32,440,970	18.49

TABLE 2

GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
114	Cuba	35.51	11,365,124	603.09	882,582,040
115	Bangladesh	39.90	137,493,990	642.98	1,020,076,030
116	Qatar	40.67	824,355	683.65	1,020,900,385
117	Libya	52.55	6,293,910	736.20	1,027,194,295
118	Serbia and Montenegro	54.41	10,752,915	790.61	1,037,947,210
119	Syria	55.34	19,514,386	845.95	1,057,461,596
120	Colombia	57.82	47,289,570	903.77	1,104,751,166
121	Vietnam	60.51	85,031,436	964.28	1,189,782,602
122	Chile	64.86	15,818,840	1,029.14	1,205,601,442
123	Israel	69.32	7,237,384	1,098.46	1,212,838,826
124	Kuwait	72.96	2,730,603	1,171.43	1,215,569,429
125	Korea, North	73.00	23,510,379	1,244.43	1,239,079,808
126	Philippines	78.61	87,236,532	1,323.04	1,326,316,340
127	Algeria	80.45	33,506,567	1,403.49	1,359,822,907
128	Hong Kong	82.66	7,150,254	1,486.15	1,366,973,161
129	Iraq	87.91	27,162,627	1,574.05	1,394,135,788
130	Nigeria	98.32	162,082,868	1,672.37	1,556,218,656
131	Pakistan	111.87	167,806,831	1,784.24	1,724,025,487
132	Papua New Guinea	117.76	6,157,888	1,902.00	1,730,183,375
133	Singapore	136.28	3,654,103	2,038.28	1,733,837,478
134	United Arab Emirates	147.70	3,981,978	2,185.98	1,737,819,456
135	Argentina	148.87	38,237,770	2,334.85	1,776,057,226
136	Venezuela	149.32	25,641,462	2,484.17	1,801,698,688
137	Egypt	154.21	72,478,498	2,638.37	1,874,177,186
138	Malaysia	161.73	28,294,120	2,800.11	1,902,471,306
139	Thailand	230.10	67,249,456	3,030.21	1,969,720,762

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
0.68				
0.63				
0.67	Texas	696.20	23,702,052	29.37
0.72				
0.76				
0.80	Germany	867.41	82,509,367	10.51
0.82				
0.81				
0.85				
0.91				
0.96				
1.00	Japan	1,264.62	128,646,345	9.83
1.00				
1.03				
1.09				
1.13				
1.07	Russia	1,718.70	143,406,402	11.98
1.03				
1.10				
1.18				
1.26				
1.31				
1.38				
1.41				
1.47				
1.54				

**TABLE 2**

**GREENHOUSE GAS EMISSIONS FROM U.S. STATES AND INDUSTRIALIZED COUNTRIES COMPARED TO DEVELOPING COUNTRIES**

Rank for GHG Emissions (Least to Most)	Developing Country	2006 Cumulative GHG Emissions (MMTCO <sub>2</sub> )	2007 Cumulative Population Estimate	Cumulative Developing Country Emissions (MMTCO <sub>2</sub> )	Cumulative Developing Country Population
140	Indonesia	323.89	224,481,720	3,354.10	2,194,202,482
141	Taiwan	324.22	23,001,442	3,678.32	2,217,203,924
142	Brazil	352.38	186,771,161	4,030.70	2,403,975,085
143	Saudi Arabia	382.06	24,069,943	4,412.76	2,428,045,028
144	Mexico	403.40	106,457,446	4,816.15	2,534,502,474
145	Iran	420.61	70,431,905	5,236.76	2,604,934,379
146	South Africa	449.55	49,660,502	5,686.31	2,654,594,881
147	Korea, South	509.76	51,300,989	6,196.07	2,705,895,870
148	India	1,171.46	1,129,667,528	7,367.53	3,835,563,398
149	China	5,032.81	1,325,082,380	12,400.34	5,160,645,778

Cumulative Developing Country Emissions per Million People (MMTCO <sub>2</sub> )	U.S. State or Industrialized Country with GHG Emissions Greater Than or Equal to Cumulative Developing Country GHG Emissions	2006 GHG Emissions of U.S. State or Industrialized Country	2007 Population Estimate of U.S. State or Industrialized Country	GHG Emissions per Million People for U.S. State or Industrialized Country (MMTCO <sub>2</sub> )
1.53				
1.66				
1.68				
1.82				
1.90				
2.01				
2.14	United States	5,877.00	301,967,681	19.46
2.29				
1.92				
2.40				