

TESTIMONY OF IAIN MURRAY
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LEGISLATIVE HEARING ON S. 1733, CLEAN ENERGY JOBS AND AMERICAN
POWER ACT

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
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Chairman Boxer, Ranking Member Inhofe, thank you for the opportunity to testify to this committee on the subject of S.1733, the Clean Energy Jobs and American Power Act.

My name is Iain Murray. I am Vice-President for Strategy at the Competitive Enterprise Institute, a free-economy, non-profit public policy group that has for twenty-five years opposed government interference in the workings of energy markets. I hold the Bachelor of Arts and Master of Arts degrees from the University of Oxford, the Master in Business Administration degree from the University of London and the Diploma of Imperial College of Science, Technology and Medicine. I have been examining public policy options relating to the environment for almost twenty years, having advised British ministers on the role of public transportation in London in the early nineties and having written on global warming since my immigration to the United States in 1998. Having worked within the British government and alongside European Union colleagues I bring personal experience of how other nations approach such policy problems.

The Competitive Enterprise Institute opposes passage of S.1733, in part precisely because it replicates policies that have been tried and failed by other nations and because it does not recognize that the path of emissions reduction is rightly unacceptable to developing

nations, which will mean the United States will be placed at a serious economic disadvantage.

This testimony will first examine policies adopted by the EU and its member countries and will conclude that they are ineffective at best, detrimental to their citizens at worst, before examining the position of the developing world, concentrating on their own public statements and the reality of what emissions reduction means for them and their economies.

Policies Adopted by the European Union

It is important to recognize first that the USA has been outperforming most countries in terms of emissions reduction since 2000. According to the United Nations Framework Convention on Climate Change and the International Energy Agency¹, the United States has reduced its greenhouse gas emissions² by 3 percent. By comparison, the only major economy to reduce its emissions more was France, at 6 percent. The United Kingdom managed a similar performance to the US at -2.9 percent. Most other economies performed much worse, as is shown in the chart at Annex 1. This should be taken into account when comparing policies and performance.

¹ UNFCCC, 2008 National Inventory Reports and Common Reporting Formats; IEA Online Energy Services.

² Includes emissions of carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons, as well as emissions and removals of carbon dioxide, methane, and nitrous oxide from land-use, land-use change and forestry activities.

The primary vehicle for European Union action to mitigate global warming is the European Emissions Trading Scheme (ETS). Indeed, the ETS is often spoken of as the model for any American cap-and-trade scheme for greenhouse gas emissions. However, the ETS has not been a success. A comprehensive review by British think-tank Open Europe in August 2007³ concluded the following:

The Emissions Trading Scheme (ETS) is supposed to be the EU's main policy tool for reducing emissions. But so far, it has been an embarrassing failure. In its first phase of operation [2005-2008], more permits to pollute have been printed than there is pollution. The price of carbon has collapsed to almost zero, creating no incentive to reduce pollution. Across the EU, emissions from installations covered by the ETS actually rose by 0.8%.

For those arguing that the second phase of the ETS (2009-2012) would be successful as the EU had "learned from the mistakes of Phase I," Open Europe sounded this warning:

Open Europe argues however that in fact things have gone backwards for the ETS. In the second phase of the ETS member states will be able to "import" external Kyoto "credits" from developing countries in order to meet their targets for reductions. This might be unobjectionable if these 'imports' reflected real emissions cuts. But these credits have already been exposed as highly flawed, and often fraudulent. They don't always reflect absolute reductions in emissions, whilst many of these credits are generated from projects in developing countries

³ Open Europe, "Europe's Dirty Secret," August 2007, <http://www.openeurope.org.uk/research/etsp2.pdf>

that would have happened anyway. Such credits actually mean increased pollution.

Furthermore, many credits will be generated through a system which allows polluters to bag massive profits for very little effort. Unsurprisingly, the main beneficiaries will be large, highly capitalized firms with the capacity to attract the attention of speculative investment in potentially lucrative 'green' projects. Meanwhile, community level development will be sidelined, and sub-Saharan Africa will see just 4% of total investment from Kyoto credits.

The Open Europe report finds that it is highly likely that the majority of CO₂ reductions in the next ETS phase will be simply 'bought in' through these imported permits. That means the ETS won't reduce emissions in Europe, and won't encourage companies to invest in low carbon technology – surely the main purpose of any serious climate change policy?

The report concludes that far from creating a credible basis for EU level action on climate change, the ETS has instead established a web of politically powerful vested interest groups, massive economic distortions and covert industrial subsidies. It will do practically nothing to fight climate change. It's good news for the traders and the large firms who will reap tens of billions of euros worth of profit through emissions trading. It's less good news for those who will suffer the consequences of global warming.

It should at this stage be noted that Phase I of the ETS has begun to be described as a "trial phase," as if it was only launched with the intention of testing it. This is not the case. My colleague Christopher Horner has examined the original directive and what was said about it at the time of the scheme's launch and concluded:

The Directive establishing the ETS, 2003/87/EC, doesn't say anything about a trial and neither does the ETS FAQ page. Nor did the Commission make mention of a test when it formally approved ETS, nor in the previous announcement when it was finalized — when, in fact, they hailed ETS as the means for bringing Kyoto coming into effect⁴.

Since Open Europe issued its report, the world has suffered a financial crisis with the result that emissions have reduced everywhere. This should not be counted as a success for the ETS. In fact, a new report published today by the British advocacy group The Taxpayers' Alliance⁵ finds that the second phase has so far been an expensive failure even with the emissions reduction. It concludes:

It is increasingly clear that the ETS just isn't working. The carbon price is so volatile that energy companies and environmentalists are calling for it to be fixed while ordinary families and manufacturing firms have to cope with an unpredictable addition to their energy bills. Windfall profits for energy companies

⁴ Christopher Horner, "Verdict: Failure," Planet Gore, May 19 2008.
<http://planetgore.nationalreview.com/post/?q=NGZmOGJIMjFiOTQzOWJkMTAzZmQ3MGUyMzI2NzA1MDc=>

⁵ Matthew Sinclair, "The Expensive Failure of the European Union Emissions Trading Scheme," October 2009. Published Thursday 29 October at <http://www.taxpayersalliance.com>

are paid for by the poor and the elderly. We estimate that the total bill to consumers across Europe has been between €46 billion and €116 billion since the start of the scheme, with British families paying more than £117 in 2008 [per household]. As the permits are increasingly auctioned, that will just mean the scheme is another tax, and a regressive one, supporting excess public spending.

I asked the author, Matthew Sinclair, what the study means for the United States. He told me⁶:

The European Union Emissions Trading Scheme has cost families across Europe tens of billions of dollars but it has been a goldmine for energy companies, which have made huge windfall profits. Despite that, it has failed to produce a stable carbon price, leaving consumers with an unpredictable addition to their bills.

Manufacturers already struggling to compete with emerging economies like India and China cannot cope with such a substantial addition to their costs, and driving them abroad won't help cut emissions but will mean lost jobs. Americans shouldn't make the same mistake and risk their prosperity following the same flawed strategy that Europeans are paying such a steep price for.

It should be noted that criticism of the EU's approach does not only emanate from supporters of free enterprise, but also from the environmentalist movement itself. Green MEP Caroline Lucas said in *The Guardian* this week⁷:

⁶ Personal communication with author

You report that EU environment ministers have proposed targets to cut global climate emissions from shipping and aviation in the run-up to Copenhagen (Report, 22 October), but you fail to mention that, because the targets would only be measured from 2005 levels – a reduction of 10% for aviation and 20% for shipping by 2020 – this would actually allow emissions to increase by up to one-third on 1990 levels. Here is a clear demonstration of the extent to which these industries still receive special treatment... What's more, it is likely that most of these reductions could be offset by carbon credits from projects whose true additionality and contribution to emission reductions remain in doubt.

In so saying, Ms. Lucas echoes precisely the criticisms of Open Europe that allowing international offsets significantly reduces the effectiveness of schemes in reducing actual emissions. Combined with the Taxpayers' Alliance's estimate of costs, it is clear that the EU's policy is one that represents real economic pain for no climate gain.

In short, the EU's policies on emissions reduction should not be a model for the United States to follow.

Policies Adopted by the United Kingdom

⁷ The Guardian, Letters to the Editor, October 26 2009,
<http://www.guardian.co.uk/environment/2009/oct/26/copenhagen-climate-summit-targets-gm>

The most recent vehicle by which the United Kingdom seeks to reduce greenhouse gas emissions is the Climate Change Act 2008. The United Kingdom's Committee on Climate Change, created by the Act, announced in December 2008 that national greenhouse gas emissions should be reduced by at least 80% by 2050 and by 34% by 2022 (or 42% if an international agreement on climate change is reached)⁸.

The UK's own governmental analysis of the benefits and costs of the Act bears investigation. Before the Act was debated in the House of Commons, the Impact Assessment suggested that the costs of the then bill would amount to some £205 billion, but that the maximum benefits ascribable to the bill totaled £110 billion. These costs and benefits related to an initial assessment that national greenhouse gas emissions would be reduced by 60% by 2050. On questioning by former Trade and Industry Secretary the Rt Hon Peter Lilley MP, the Minister of State for Energy and Climate Change told him that, "We are likely to find that the costs, which covered a very large range, were exaggerated."⁹ However, a revised Impact Assessment issued after passage of the Act found that costs had risen to as much as £404 billion, resulting in a cost to each household of £20,000.

At the same time, benefits had risen from the previous estimate of £110 billion to a new estimate of over £1 trillion. Mr. Lilley noted, however, that the only change in methodology given in the new assessment justified only a doubling of the benefits. Such

⁸ Committee on Climate Change 2008, "Building a low-carbon economy—the UK's contribution to tackling climate change," 1 December. <http://www.theccc.org.uk/reports/>

⁹ Letter from Rt Hon Peter Lilley MP to Rt Hon Ed Milliband MP, Secretary of State for Energy and Climate Change, April 20, 2009. <http://www.peterlilley.co.uk/article.aspx?id=10&ref=1421>,

a massive increase in benefits from a version signed off on by Ministers only months earlier should arouse suspicion.

Moreover, independent analyses of the Climate Change Act suggest that the Committee's targets are wildly optimistic. For instance, Professor Roger Pielke, Jr., of the University of Colorado employed both a bottom up approach ("based on projections of future UK population, economic growth, and technology") and a top down approach ("deriving implied rates of decarbonization consistent with the targets and various rates of projected economic growth") to analyze the Act and found that¹⁰:

Both approaches indicate that the UK economy would have to achieve annual rates of decarbonization in excess of 4 or 5%. To place these numbers in context, the UK would have to achieve the 2006 carbon efficiency of France by about 2015, a level of effort comparable to the building of about 30 new nuclear power plants, displacing an equivalent amount of fossil energy. The paper argues that the magnitude of the task implied by the UK Climate Change Act strongly suggests that it is on course to fail.

In passing the Act, the UK Parliament has therefore imposed significant costs on its citizens, by its own admission in the order of many thousands of dollars, in pursuit of a goal that it is very likely to fail to reach. The UK's approach is therefore not an appropriate model for the US to follow.

¹⁰ Pielke, Jr., R. A., 2009. The British Climate Change Act: A Critical Evaluation and Proposed Alternative Approach, *Environmental Research Letters*, Vol. 4, No. 2. June 18 2009.

It should here be noted that the Tyndall Center for Climate Change Research in the UK regards the Climate Change Act's targets as not ambitious enough. According to a story in the UK's Daily Telegraph¹¹, it has stated that the only way to keep temperatures below 2°C above pre-industrial levels is for the UK to reduce emissions by 70 percent by 2020. To do so would require a "planned recession." No further comment is necessary.

Germany, Spain and Renewable Technologies

It is often asserted that Germany and/or Spain are showing America the way when it comes to "green" energy technologies and that adopting similar policies would make America a world leader and give her a comparative advantage. However, closer examination reveals that these technologies are supported only by unsustainable levels of government investment and that the so-called "green jobs" supported by these subsidies are temporary at best.

Germany's "feed-in tariff," for instance, is often hailed as an example of how sustained government intervention on behalf of renewable technologies can result in new energy technologies gaining the maturity needed to compete against established technologies. The Renewable Energy Sources Act (EEG), originally introduced as the Electricity Feed-in Law of 1991, for example, has for almost two decades required utilities to purchase electricity generated from renewable technologies at 90 percent of the retail rate of electricity, significantly exceeding the cost of conventional electricity generation. The

¹¹ Louise Gray, "Planned Recession Could Avoid Catastrophic Climate Change," September 30 2009.

new law, passed in 2000, guarantees this rate for twenty years and goes so far as to provide more favorable terms for certain technologies, far above the production cost of 2 to 7 Euro-Cents (2.9-10.2 Cents US \$) per kilowatt hour (kWh).

A new study from the Rheinisch-Westfälisches Institut (RWI) in Essen, Germany, analyzes the effects of these laws¹². Their findings are worth quoting at length. To begin with, they conclude that the substantial subsidies represented by the feed-in tariffs have not established the industries despite two decades of operation:

With a feed-in tariff of €59 per kWh in 2009, solar electricity generated from photovoltaics (PV) is guaranteed by far the largest financial support among all renewable energy technologies.

Currently, the feed-in tariff for PV is more than eight times higher than the wholesale electricity price at the power exchange and more than four times the feed-in tariff paid for electricity produced by on-shore wind turbines.

Even on-shore wind, widely regarded as a mature technology, requires feed-in tariffs that exceed the per-kWh cost of conventional electricity by up to 300% to remain competitive.

¹² Manuel Frondel, Nolan Ritter & Colin Vance “Economic impacts from the promotion of renewable energies: The German experience,” October 2009. <http://www.rwi-essen.de/>

By 2008 this had led to Germany having the second-largest installed wind capacity in the world, behind the United States, and largest installed PV capacity in the world, ahead of Spain. This explains the claims that Germany's feed-in tariff is a great success.

Installed capacity is not the same as production or contribution, however, and by 2008 the estimated share of wind power in Germany's electricity production was 6.3%, followed by biomass-based electricity generation (3.6%) and water power (3.1%). The amount of electricity produced through solar photovoltaics was a negligible 0.6% despite being the most subsidized renewable energy, with a net cost of about \$12.4 billion for 2008.

Next, the study points out that the high cost of subsidizing these industries has been born by consumers:

The total net cost of subsidizing electricity production by PV modules is estimated to reach US \$73.2 billion for those modules installed between 2000 and 2010. While the promotion rules for wind power are more subtle than those for PV, we estimate that the wind power subsidies may total US \$28.1 billion for wind converters installed between 2000 and 2010.

Consumers ultimately bear the cost of renewable energy promotion. In 2008, the price mark-up due to the subsidization of green electricity was about €2.2,

meaning the subsidy accounts for about 7.5% of average household electricity prices.

The study goes on to conclude that not only has the promotion of these technologies been anything but cost-effective in terms of emissions reduction, the net effect of the subsidies in climate terms has been zero:

Given the net cost of €41.82/kWh for PV modules installed in 2008, and assuming that PV displaces conventional electricity generated from a mixture of gas and hard coal, abatement costs are as high as \$1,050 per ton.

Using the same assumptions and a net cost for wind of €3.10/kWh, the abatement cost is approximately \$80. While cheaper than PV, this cost is still nearly double the ceiling of the cost of a per-ton permit under Europe's cap-and-trade scheme. Renewable energies are thus among the most expensive GHG reduction measures.

There are much cheaper ways to reduce carbon dioxide emissions than subsidizing renewable energies. CO₂ abatement costs of PV are estimated to be as high as \$1,050 per ton, while those of wind power are estimated at \$80 per ton. By contrast, the current price of emissions certificates on the European emissions trading scheme is only 13.4 (Euro) per ton. Hence, the cost from emission reductions as determined by the market is about 53 times cheaper than employing PV and 4 times cheaper than using wind power.

Moreover, the prevailing coexistence of the EEG and emissions trading under the European Trading Scheme (ETS) means that the increased use of renewable energy technologies generally attains no additional emission reductions beyond those achieved by ETS alone. In fact, since the establishment of the ETS in 2005, the EEG's net climate effect has been equal to zero.

The study then addresses the argument that the tariffs have created jobs and finds this argument without merit:

While employment projections in the renewable sector convey seemingly impressive prospects for gross job growth, they typically obscure the broader implications for economic welfare by omitting any accounting of off-setting impacts. These impacts include, but are not limited to, job losses from crowding out of cheaper forms of conventional energy generation, indirect impacts on upstream industries, additional job losses from the drain on economic activity precipitated by higher electricity prices, private consumers' overall loss of purchasing power due to higher electricity prices, and diverting funds from other, possibly more beneficial investment.

Proponents of renewable energies often regard the requirement for more workers to produce a given amount of energy as a benefit, failing to recognize that this lowers the output potential of the economy and is hence counterproductive to net

job creation. Significant research shows that initial employment benefits from renewable policies soon turn negative as additional costs are incurred. Trade-and other assumptions in those studies claiming positive employment turn out to be unsupportable.

In the end, Germany's PV promotion has become a subsidization regime that, on a per-worker basis, has reached a level that far exceeds average wages, with per-worker subsidies as high as \$240,000.

It is most likely that whatever jobs are created by renewable energy promotion would vanish as soon as government support is terminated, leaving only Germany's export sector to benefit from the possible continuation of renewables support in other countries such as the US.

(We shall see the truth of this last statement validated when we discuss Spain below.)

The study finally examines the arguments that the policies have made Germany more energy secure and a leader in energy innovation. Neither of these can be supported:

Due to their backup energy requirements, it turns out that any increased energy security possibly afforded by installing large PV and wind capacity is undermined by reliance on fuel sources — principally gas — that must be imported to meet domestic demand. That much of this gas is imported from unreliable suppliers calls energy security claims further into question.

Claims about technological innovation benefits of Germany's first-actor status are unsupported. In fact, the regime appears to be counterproductive in that respect, stifling innovation by encouraging producers to lock into existing technologies.

In summary, Germany's experience with feed-in tariffs and extensive, decades long support of renewable energy technologies have provided none of the benefits generally claimed for such policies. As such, it does not provide an appropriate model for US policy.

A similar story applies in regards to Spain, which also decided to use government intervention in the market to make itself a "world leader" in renewable energy technology. A study from a team from King Juan Carlos University in Madrid led by Dr. Gabriel Calzada¹³ found that the opportunity costs of public investment in renewable energy were very high, resulting not just in significant numbers of jobs destroyed or their creation averted, but in unsustainable bubbles in the renewable sector:

The most paradigmatic bubble case can be found in the photovoltaic industry. Even with subsidy schemes leaving the mean sale price of electricity generated from solar photovoltaic power 7 times higher than the mean price of the pool, solar failed even to reach 1% of Spain's total electricity production in 2008...

¹³ "Study of the effects on employment of public aid to renewable energy sources," March 27, 2009. <http://www.juandemariana.org/pdf/090327-employment-public-aid-renewable.pdf>

[T]he only way for the “renewables” sector - which was never feasible by itself on the basis of consumer demand - to be “countercyclical” in crisis periods is also via government subsidies. These schemes create a bubble, which is boosted as soon as investors find in “renewables” one of the few profitable sectors while fleeing other investments. Yet it is axiomatic, as we are seeing now, that when crisis arises, the Government cannot afford this growing subsidy cost either, and finally must penalize the artificial renewable industries which then face collapse.

Having recognized the unsustainability of the subsidies, the Spanish government decided to reduce the size of subsidies to renewable energy. Analyses suggested that the solar industry was on course to lose 40,000 jobs this year. However, it may be that the US taxpayer is now subsidizing employment in Spanish industry. Under a new program that provides grants to renewable energy providers who opt for cash payments rather than the 30 percent investment tax credit, the Treasury Department has announced grants totaling \$295 million to Spanish renewable giant Iberdola, out of a total of \$502 million awarded¹⁴.

Other important findings from the Spanish study included the confirmation of findings relating to the ETS, British and German policies, that they impose significant burdens on taxpayers:

¹⁴ “Treasury grants’ big winners: wind companies,” Greentech.com, Sept 1 2009.
<http://www.greentechmedia.com/articles/read/treasury-grants-big-winners-the-wind-people/>

Renewables consume enormous taxpayer resources. In Spain, the average annuity payable to renewables is equivalent to 4.35% of all VAT collected, 3.45% of the household income tax, or 5.6% of the corporate income tax for 2007.

If the US wishes to avoid all these problems, it should not follow the models presented by Europe.

What Emissions Reductions Will Mean for the Developing World

In its analysis of the Chairman's mark of the legislation before you, the Environmental Protection Agency comments as follows:

Given the CO₂e concentrations for the various scenarios, we can also calculate the observed change in global mean temperature (from pre-industrial time) in 2100 under different climate sensitivities. Assuming the G8 goals (reducing global emissions to 50% below 2005 by 2050) are met, warming in 2100 would be limited to no more than 2 degree Celsius (3.6 degrees Fahrenheit) above pre-industrial levels under a climate sensitivity of 3.0 or lower.

It is important to realize what exactly is required to meet the goal of emissions 50 percent below 2005 levels and what that means for the developing world.

The plain fact is that, as can be seen in the chart below, emissions increases over the next 40 years are predicted to come overwhelmingly from the developing world, such that emissions from Annex II Kyoto nations will be almost twice those of Annex I nations by 2050 (see graph at Annex 2).

What this means is that to hit a target of 50% global emissions reduction by 2050, there will need to be significant reductions in emissions from business-as-usual by the developing world nations. The size of the reduction demanded of developing nations is very much dependent on what level of emissions reductions the developed world manages (see chart at Annex 3). If, for instance, the developed world is able to completely eliminate its emissions by 2050, then developing world emissions will need to reduce by about 62 percent from business-as-usual. If, however, the developed world is only able to halve its emissions, developing world emissions will need to drop by 85 percent from business-as-usual.

This in itself would prove difficult for countries that need access to the most affordable energy possible in order to grow, prosper and raise their living standards. However, it does not tell the whole story. The developing world lags considerably behind the developed world in terms of per capita emissions, and developing world populations are likely to continue to grow. This means that, in order to achieve 50 percent reductions in global emissions, per capita emissions in the developing world countries will have to reduce from their current, energy-starved levels *even if the developed world completely eliminates its emissions* (see chart at Annex 4). If the developed world is only able to

halve its per capita emissions from 2005 levels, then to achieve a global 50 percent reduction, developing world per capita emissions would have to reduce by 85 percent. Even if the developed world were able to reduce its emissions by 80 percent, per capita emissions in the developing world would have to reduce by 71 percent and developing world per capita emissions would still need to be less than per capita emissions in the developed world. This is likely to prove unacceptable to developing world nations, and rightly so.

The plain fact is that, throughout the industrial age, emissions and growth have been tightly correlated. This is because growth occurs fastest when the energy on which it is based is most affordable. That is why the prophesied Atomic Age of nuclear-powered energy never appeared. Even before large-scale anti-nuclear protests concerned at the safety aspects of nuclear power began in the Western world, the number of new nuclear plant permits applied for was declining because the large capital cost of building a nuclear plant made it uncompetitive with coal- and gas-fired power. The extra regulations demanded by the anti-nuclear movement simply increased those costs. Only in countries where governments decided to absorb those up-front costs, such as France in decades past, did nuclear establish itself as a major source of power. Indeed, we can learn much from the optimistic forecasts of the early nuclear age. As Canadian economist Vaclav Smil has noted, "the US Atomic Energy Commission's 1974 forecast had 1.2 TW of nuclear capacity installed in the US in the year 2000: the actual 2000 total was 81.5 GW, less than 7% of the original forecast, an order of magnitude forecasting miss."

That is why unconventional technologies will not be the energy source of choice for developing nations. They require as much “bang-per-buck” as possible in order to lift their people out of poverty and are unlikely to be impressed by arguments that they should choose more expensive forms of energy, a decision which will necessarily involve large opportunity costs in terms of poverty relief. As we have seen in the case of Germany, renewable energy remains uncompetitive after many years of government subsidy. Therefore, even if the developed world were to commit to subsidize the developing world’s use of such technologies, such a commitment would necessarily need to be open-ended, and would represent a significant extra tax on developed world economies, one that would surely grow as developing world populations grew. This is likely to prove unacceptable to the populations of developed world nations.

It seems likely, therefore, that the only form of developed world subsidy of the developing world’s energy infrastructure that might prove mutually acceptable is limited-time subsidy of the construction of large numbers of nuclear power plants, perhaps on the basis of loans to be paid back from the savings resulting from much more affordable power per kilowatt hour following construction. This, however, is likely to prove unacceptable to the mainstream environmental establishment.

There is also an argument that the developing world is rapidly moving ahead of the developed world, specifically the United States, in terms of renewable energy production. This, however, is both less and more than it seems. The reason why China, for instance,

is able to produce so many wind turbines is that its energy costs are currently very low. Making turbines is an energy-intensive business and China's coal-powered power plants are able to supply the energy at much lower cost than in the west. That is why, for instance, the British wind-turbine manufacturer Vestas has recently had to lay off 625 workers¹⁵, in yet another striking example of the impermanence of so-called "green jobs."

The Positions of Developing World Nations in their Own Words

Bearing these points in mind, it is therefore instructive to look at what the leading countries in the developing world are saying on the subject of emissions reduction. In this respect, the position taken by the G77 group of developing nations at the meeting of the UNFCCC in Bangkok, Thailand, in early October is especially illuminating. Senior G77 representatives, including those from China and South Africa, walked out of the meeting in protest at developed world attempts to secure emissions reductions from developing world countries¹⁶. South African spokesman Alf Wills said:

The G77 is extremely concerned with the notion that there is a clear intention being shown that developed countries, who are party to the Kyoto Protocol, of not agreeing to new targets for the second commitment period of the Kyoto Protocol.

He further told Reuters news agency:

¹⁵ BBC News, "Sit in workers ignore court order," August 4 2009.
http://news.bbc.co.uk/2/low/uk_news/england/hampshire/8183323.stm

¹⁶ Reuters, "Senior G77 Members Protest Steps to Change Kyoto Pact," October 7 2009

The G77 rejects the notion and proposal to collapse or 'cut and paste the good parts of the Kyoto Protocol' (one wonders what the bad parts are) into a new single legal instrument under the Convention.

G77 members are concerned that developed nations, including the EU, are worried that, (in the words of an EU diplomat quoted by Reuters,) “If all we get is a second commitment period to the Kyoto Protocol ... [and] ... there's no balancing legally binding agreement from developing countries ... then the risk will be that those countries inside the protocol with a commitment [to reduce emissions] will either weaken their commitment, not take a commitment or not ratify.” In other words, developed nations are concerned that developing nations must commit to reduce their emissions or the developed nations will be harmed economically. This position is unacceptable to the G77.

At the same time, Sudanese ambassador Lumumba Di-Aping told African news agency Panapress¹⁷,

On proposals to have developing countries commit to emission targets, Lumumba said developed countries needed to accept that economic and sustainable development were important and needed to accept the right of developing countries to pursue rapid development.

¹⁷ Panapress, “G77, China accuse rich nations of discarding Kyoto protocol,” October 8 2009. http://unfccc.int/files/meetings/intersessional/bangkok_09/press/application/pdf/panapress_g77_china_accuse_rich_nations_of_discarding_kyoto_protocol.pdf

(It should be noted that a consistent theme in these complaints is that the actions are those of rich countries together, often specifically the European Union. This should be remembered when blame is inevitably cast on the United States, and specifically this noble house, should no meaningful agreement be forthcoming in Copenhagen.)

It is also helpful to review the recent statements of Indian Environment Minister Jairam Ramesh, and the reaction within India to these statements. Last week, Mr. Ramesh appeared to distance himself from the G77 stance and suggested that India should “listen more and talk less” at climate talks. The internal reaction was furious and Mr. Ramesh has been forced, as they say, to clarify his position. In the statement issued in reaction to a report in the Times of India on October 19, Mr. Ramesh said¹⁸:

Yesterday, a leading newspaper had carried a news item on a discussion note that I wrote on climate change. The news item has quoted only partially and selectively from this note, and significantly added its own editorial interpretations, thereby completely distorting and twisting its meaning.

Let me reiterate India’s non-negotiables in the ongoing international climate change negotiations.

While India is prepared to discuss and make public periodically the implementation of its National Action Plan on Climate Change, India will never

¹⁸ The ThaIndian, “India’s interests alone will direct climate policy: Jairam Ramesh,” October 20 2009. http://www.thaindian.com/newsportal/enviornment/indias-interests-alone-will-dictate-climate-policy-jairam-ramesh_100263174.html#ixzz0V58bxTYo

accept internationally legally binding emission reduction targets or commitments as part of any agreement or deal or outcome.

There could be no clearer statement of India's continued refusal to accept limits on its growth and its commitment to lift its people out of poverty.

As for China, it was reported last month that Chinese premier Hu Jintao had promised to make "notable cuts" in emissions, when what Hu actually said was,

We will endeavor to cut carbon dioxide emissions per unit of GDP by a notable margin by 2020 from the 2005 level.

In other words, Hu has promised to reduce China's *emissions intensity*, not its total emissions. As the China Economic Review summarized, "Even if China meets this target, its overall emissions may continue to rise indefinitely.¹⁹" In fact, this proposal mirrors exactly President George W. Bush's approach to emissions.

China's national plan on climate change stresses that "sustainable development and poverty eradication" remain the country's first priorities. Explaining this when the plan was launched in 2007, Ma Kai, chairman of China's National Development and Reform Commission, said,

¹⁹ China Economic Review, "Hu promises 'notable' cutback in China's emissions," September 23 2009

China is a developing country. Although we do not have the obligation to cut emissions, it does not mean we do not want to shoulder our share of responsibilities... The international community should respect the developing countries' right to develop.²⁰

This remains China's position today. When China and India recently signed an agreement on their approach to global warming, Jairam Ramesh noted that the two countries stand united in their approach to Copenhagen. Neither country will accept binding emissions reduction targets.

The Likelihood of a Meaningful Agreement at Copenhagen

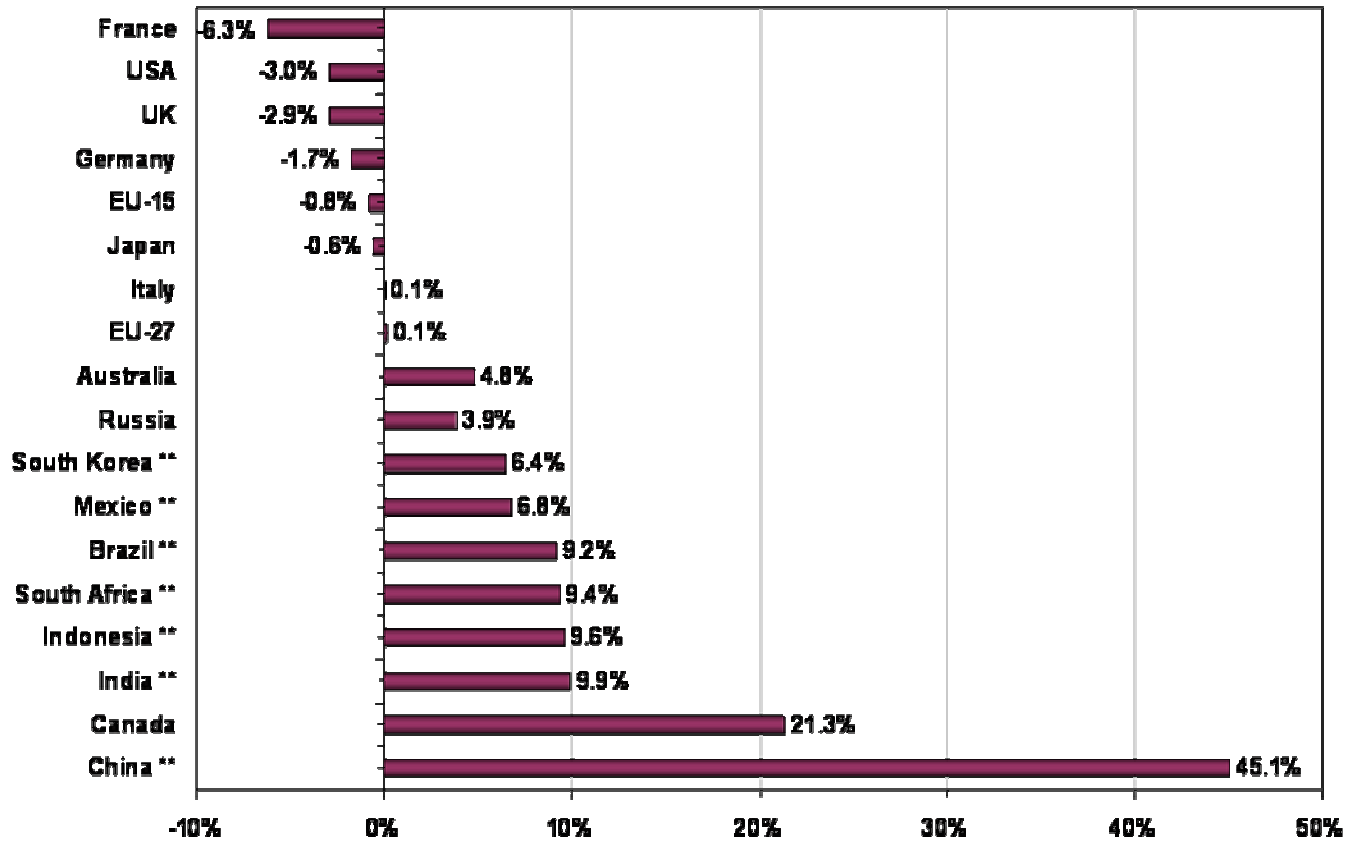
Earlier this year, Rajendra Pachauri, head of the UN Intergovernmental Panel on Climate Change said, " It is crucial that in Copenhagen in December 2009 governments from across the world reach agreement on tackling the challenge of climate change on a collective basis." Such a collective agreement is looking very distant at the moment. The developed nations, led by the European Union, appear to be demanding that developing nations take on binding emissions reductions. The developing nations, led by China and India, not only refuse to take on such binding promises, but are also demanding large amounts of subsidy and technology transfer from the developed world to jump-start their renewable energy industries.

²⁰ BBC News, "China unveil climate change plan," June 4 2007.

It is therefore unlikely that any agreement will be reached that is meaningful in terms of emissions reduction. There will surely be some agreement reached, that will of course be hailed as an historic agreement, probably noting that it was reached despite America's stance, but in the cold light of day it will fall some way short of binding parties to make the sort of hard choices that are needed if we are to stabilize CO2 concentrations in the atmosphere at anything like the level of 450 ppm, never mind the new demands for 350 ppm.

What this means is that the strategy of emissions reduction for tackling global warming risks is increasingly becoming a dead end. The circle of emissions reduction cannot be squared with the requirements of developing nations to reduce poverty under current technology. America should recognize this and develop a truly innovative approach to combating global warming that concentrates on adaptation measures, building resiliency among developing nations and encouraging innovation in energy technology (rather than relying on old technologies that have not proved up to the challenge). As the bill before this house does not do this, instead modeling itself on the failed policies of Europe, the Competitive Enterprise Institute opposes passage of S.1733.

Changes in Net GHG Emissions¹ 2000-2006 from 17 Major Economies

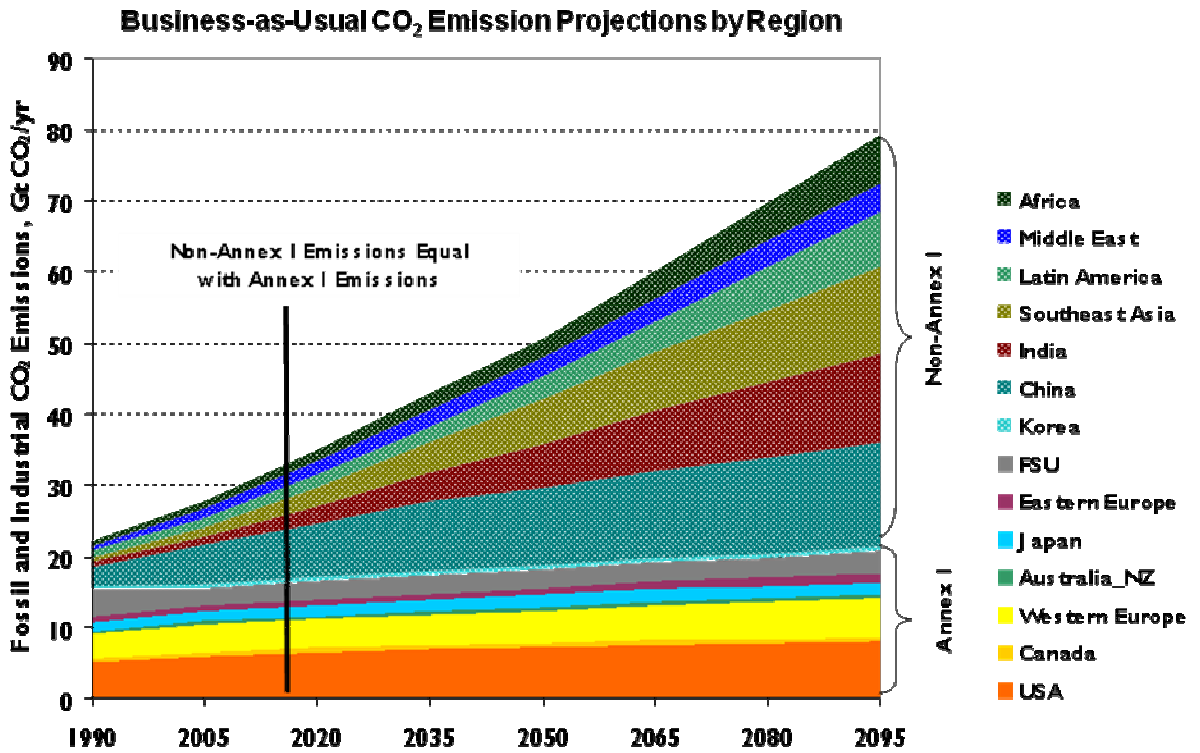


¹ Includes emissions of carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons, as well as emissions and removals of carbon dioxide, methane, and nitrous oxide from land-use, land-use change and forestry activities.

** No UNFCCC data available for time period; 2001 through 2005 IEA data used.

Sources: UNFCCC, 2008 National Inventory Reports and Common Reporting Formats and IEA Online Energy Services.

Annex 2:

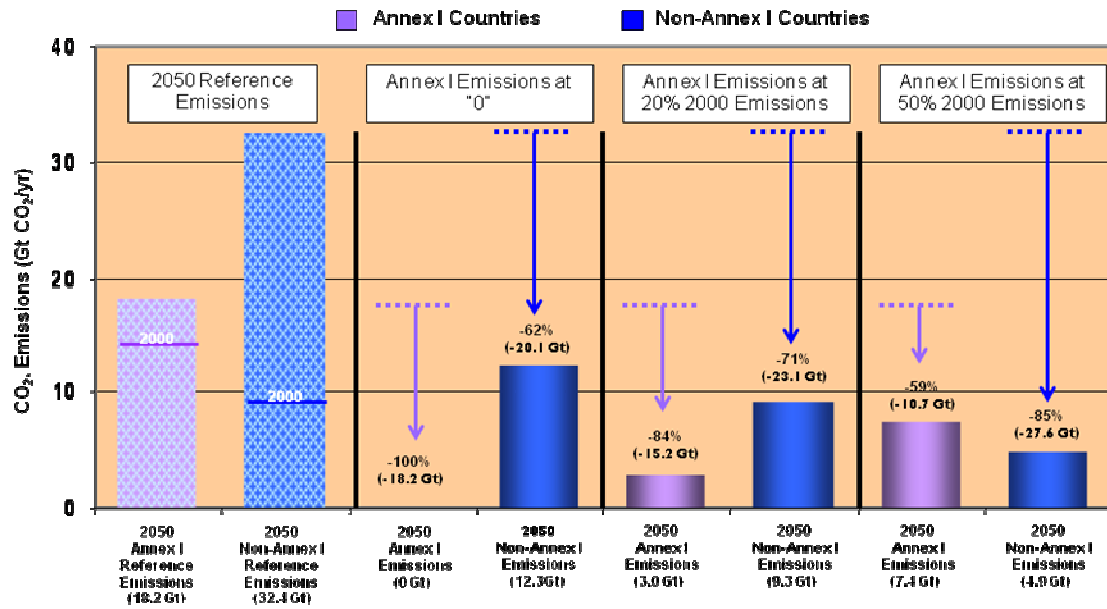


Data derived from *Global Energy Technology Strategy, Addressing Climate Change: Phase 2 Findings from an International Public-Private Sponsored Research Program*, Battelle Memorial Institute, 2007

Annex 3:

To Achieve a 50% Reduction in Global CO₂ Emissions by 2050, Need Significant Reductions from Developing Countries

Annual Gigaton CO₂ and Percent Reductions from 2050 Reference³



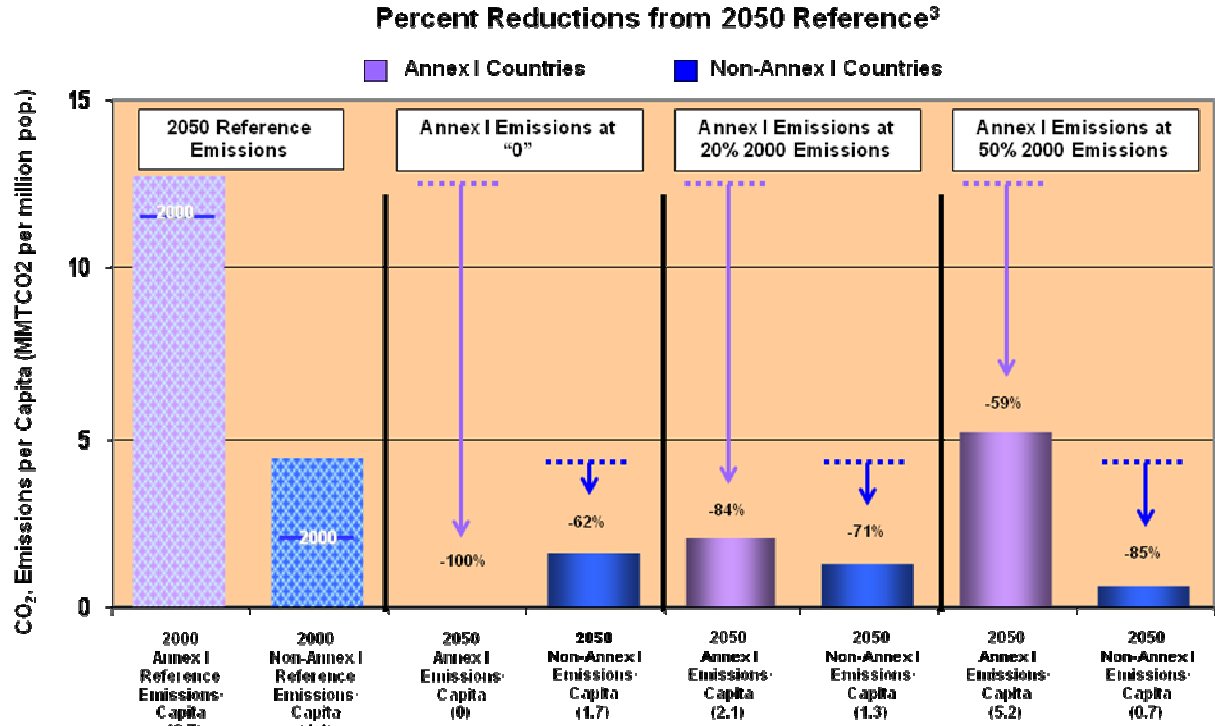
¹ Includes fossil and other industrial CO₂.

² 50% of 2000 global GHG emissions equals 12.3 Gt.

³ Equals reduction from 2050 reference for that group (i.e., Annex I or Non-Annex I).

Source: Climate Change Science Program, 2007. *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations* (MINICAM Model results)

To Achieve a 50% Reduction in Global CO₂ Emissions by 2050, Per Capita Emissions from Developing Countries Must Go Down



¹ Measured as MMTCO₂ per million people, excluding LULUCF.

² 50% of 2000 global CO₂ emissions equals 12.3 Gt

³ Equals reduction from 2050 reference for that group (i.e., Annex I or Non-Annex I).

Source: Climate Change Science Program, 2007. *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations* (MINICAM Model results).