

**TESTIMONY OF
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INDUSTRIAL ENERGY CONSUMERS OF AMERICA
BEFORE THE
SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
ON
“LEGISLATIVE HEARING ON S.1733, CLEAN ENERGY JOBS AND AMERICAN
POWER ACT”
OCTOBER 29, 2009
WASHINGTON, DC**

Chairman Boxer, Ranking Member Inhofe, thank you for the opportunity to testify before the Senate Environment and Public Works Committee on S.1733 the Clean Energy Jobs and Power Act of 2009.

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$900 billion in annual sales and with more than 850,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of industries including: plastics, cement, paper, food processing, brick, chemicals, fertilizer, insulation, steel, glass, industrial gases, pharmaceutical, aluminum and brewing. Each of these industries is either significant consumers of natural gas or electricity or both.

IECA supports cost-effective climate action so long as it does not impair competitiveness. S.1733 is not cost-effective and would: reduce competitiveness, increase natural gas, electricity and transportation fuel costs, increase job losses, lower capital investment in the manufacturing sector, impede increased production, impede exports and increase imports.

The US manufacturing sector has lost over 5.1 million jobs in the last 10 years. Output and investment per GDP has fallen consistently and imports have risen sharply. (See charts below) This is not the time to implement risky unproven climate policy. The US economy cannot afford to lose any more jobs or shutdown facilities. Approximately 40,000 manufacturing plants have closed during the seven years ending in 2008. We have lost eleven industries that we were once dominant since the late 1990s. By late 2008, the US trade deficit with China alone was running at close to \$1 billion per day, amounting to more than \$90 per month or more than \$1100 per year for every American. As you can see, US manufacturing is significantly at risk.

Congress can achieve significant GHG reductions thru energy efficiency, the acceleration of the use of existing technology and investment in low carbon energy. Cap and trade is not needed to achieve any of these objectives. Examples include expanded use of CHP and recycled energy, energy efficiency improvement thru energy efficiency tax credits and improving energy efficiency in buildings. S.1733 does not adequately address these areas. Commercial and residential buildings consume 40 percent of our nation's total energy and over 70 percent of our nation's electricity and account for 405 million metric tons of GHG emissions. Driving energy efficiency in new and existing commercial and residential buildings must be a critical part of any meaningful national energy/climate policy. Codes, standards and incentives that will ensure that our buildings are significantly more efficient must be included in public policy that decreases energy consumption and reduces emissions. Energy efficiency products and technologies are major job creators. Many of these products, like insulation, windows and cool roof shingles are virtually 100 percent US-job centric from raw materials, supply chain, manufacturing, distribution all the way to their installation.

S.1733 includes provisions that provide declining allowances for the energy intensive and trade exposed manufacturing sectors. While helpful, this will not preserve the competitiveness of

these companies and will not allow for growth. These industries will be fully exposed to higher energy costs that could be substantial. Major questions exist as to how many companies and industries will be eligible for free allowances, and how many allowances they will need. Such considerations make clear that American companies will face new costs – likely significant new costs – in the short term.

While this provision partially addresses the needs of the energy intensive and trade exposed manufacturing facilities which comprise about 7000 facilities, they do nothing to protect the competitiveness of some 350,000 other manufacturing facilities. As energy costs goes up, almost all of these other manufacturers will become less profitable and susceptible to competition from imports and further job losses. Almost any product produced in the US can be produced offshore and imported.

Climate legislation should not be constructed such that border tariffs and adjustments are required to prevent imports of energy intensive product from countries that do not have similar GHG reduction costs. S.1733, because of higher energy and compliance costs imposes such measures upon the manufacturing sector. Given the costs of S.1733, it will be necessary that a border adjustment provision be included and they need to be in place at the beginning of the compliance period. However, IECA wants Congress to know that border adjustments at large, are not acceptable policy, will not work effectively (will not stop imports of energy intensive products) and will cause reciprocity by our trading partners and distort trade. This is not inconsequential. This issue, by itself, is reason not to use cap and trade that impose costs on the manufacturing sector.

A simple example of why border adjustments will not be effective is illustrated with aluminum, a very electricity intensive product. A Chinese producer of aluminum, when confronted with the threat of paying a border adjustment carbon fee will simply start producing the products that “uses” the bulk aluminum. Instead of importing the aluminum ingots, it will import aluminum auto wheels, aluminum auto fenders or aircraft parts. For glass, instead of bulk glass the foreign company imports glass bottles. The same applies to all of the energy intensive industries.

IECA does not support international “sector agreements” that call for trading and crediting between manufacturing companies in the same sector globally because it will result in companies from the US subsidizing GHG investments in our competitors facilities located in developing countries. S.1733 and HR 2454 both contain placeholders for such agreements.

IECA is deeply concerned that S.1733 will immediately and significantly drive up the demand and price for natural gas and electricity. Many in the electric power sector calculate that their industry will be short over 400 million metric tons of CO₂e as the program starts in 2012. The 400 million ton short fall is based upon the lower EPA GDP growth numbers for the US economy to 2030. Using last year’s higher EPA GDP forecast would result in about an 800 million ton CO₂e shortfall. Between now and 2012 is insufficient time for the power sector to decrease carbon emissions thru the use of carbon capture and sequestration, nuclear, domestic

or international carbon offsets, energy efficiency or renewable energy. Their only alternative is to use natural gas.

For perspective, if the electric power sector uses natural gas to displace coal to achieve 100% compliance, it would consume the equivalent amount of natural gas of about 4.6 TCF or roughly a 70 percent increase above 2008 power industry consumption. The largest increase in domestic production was only a 3% increase from 2006 to 2007. Clearly, the ability to rapidly increase production of natural gas to meet even a small portion of this potential demand does not exist. Furthermore, because natural gas fired power generation sets the marginal price of electricity in a growing portion of the US, as natural gas prices go up, so will the price of electricity to every homeowner, farmer and manufacturer.

The manufacturing sector emissions are low relative to other sectors, in part because we have consistently invested in energy efficiency and GHG reductions. We did the right thing, yet S.1733 fails to broadly recognize and provide GHG credits for these reductions. It also does nothing to reward companies for CHP and recycled energy. Companies with CHP and recycled energy should receive credit for the difference in carbon emissions/kwh from their electric generation compared to that of the utility had they purchased the power.

Given the Endangerment Finding, IECA encourages the Congress to act to deal legislatively to address this regulatory conflict. Manufacturers do not want the EPA to regulate GHG emissions under the Clean Air Act (CAA). The Clean Air Act was never intended to regulate carbon emissions. That being said, Congress needs to advance non-cap and trade legislation that is cost effective, does not impair competitiveness and removes the potential for regulation under the CAA.

Because the manufacturing sector competes globally, it is essential that all manufacturing globally have similar climate policy, costs and timing of implementation. When a manufacturer from a developing country decides to compete in international commerce, such companies should not have any developing country UNFCCC Kyoto climate protections. The US manufacturing sector often faces unfair competition from companies who are from developing countries. The differences in costs structures between a US versus foreign producer can be very significant. Many of these companies are owned by their government. Foreign producers receive energy subsidies, tax abatements, free buildings and sometimes do not pay taxes. Their costs are also lower because they do not pay social security, workman's compensation, disability, health care or match 401K contributions. We encourage the Congress to understand that many US companies are at a cost threshold that is making it very difficult to sustain their business let alone bare additional costs due to climate regulation. Climate legislation must be cost effective and not negatively impact competitiveness.

S. 1733 is too risky economically - especially for the manufacturing sector. The legislation assumes that a lot of things that have never been done before - can be achieved. This creates enormous risk - and this risk will be shifted to every consumer of energy.

The legislation makes a lot of assumptions that would potentially lower the cost of the legislation. Importantly, all of the assumptions have ever been done before. Example include:

- Requiring reductions at 20% below 2005 levels by 2020 without an abundant and affordable supply of low carbon energy.
- Relying on domestic and international offsets will be abundant and low cost. Developing a new supply of 1.5 - 2.0 billion tons of offsets.
- Assuming that CCS technology will be commercialized and cost-competitive in less than 10 years.
- Assuming that carbon can be traded on primary and secondary markets without excessive speculation. We have still not been able to reduce excessive speculation in existing commodity markets.
- Assuming that electric utilities can reduce their GHG emissions to 3% below 2005 by 2012 and not result in massive fuel switching to natural gas, driving up the price of natural gas and electricity.
- Assuming that you can provide allowances for CO2 compliance costs to EITI sectors and not reimburse for higher energy costs and not expect job losses.
- Assuming the Congress does not have to do anything to protect 350,000 manufacturing facilities from higher GHG and energy costs without their losing competitiveness.

Climate legislation is a federal, not state regulatory issue. Imposing both federal and state regulations on the manufacturing sector will result in higher un-necessary costs of compliance and not achieve additional GHG reductions. S.1733 does not preempt regional, state and local registry requirements and reduction goals.

Recommendations to reduce GHG emissions

Below are several very important steps that can be taken by congress that will result in significant GHG reductions without use of cap and trade and can be acted upon immediately.

Establish a 10 percent energy efficiency credit for manufacturing for a period of 10 years that is applicable to all fossil fuel and electricity consuming equipment

Increase performance standards on electricity and fossil fuel consuming devices

Setting higher energy efficiency standards for industrial equipment and technology associated with consumption of electricity or fossil fuels is cost effective and will provide a sustained long term improvement GHG reductions. This also has the effect of setting performance standards for imported products that will compete for US business. Just as regulations have and are being promulgated to improve appliance standards, the same can be done with industrial equipment. As companies do maintenance on existing facilities or build new facilities, more energy efficiency equipment will be utilized.

Mandate an increase in utility purchases of electricity from manufacturing and commercial building recycled energy and combined heat and power (CHP) projects

A December 1, 2008 Department of Energy report entitled “Combined Heat and Power – Effective Energy Solutions for a Sustainable Future” indicates that if the US increases CHP capacity from 9 percent to 20 percent of the grid by 2030, we can avoid 60 percent in the growth of US GHG emissions. Doing so also will increase the competitiveness of the manufacturing sector and increase jobs. To achieve this requires removing economic and market barriers at the federal and state levels.

Jump start the clean industrial revolution by creating a industrial sector low-cost loan program

Increased productivity and energy efficiency occurs when companies invest in existing or new facilities. Companies rarely invest during economic down turns like we are seeing today because there is uncertainty in the near-term return on investment. And, unless we act, the job creation will not occur. The solution is the development of a clean industrial revolution program that allows companies to borrow money from the Treasury at low interest rates, not require payment for four years and give ten years to pay it back. Not requiring payment for four years overcomes the short term concerns of a short term return on investment. Unlike some other business tax incentives, this program requires the investment be made in the US creating maximum benefit for the country.

Increase the Investment Tax Credit for Recycled Energy and Combined Heat and Power
Improve the applicability of the investment tax credit for waste energy and CHP projects by extending the 10% ITC.

Increase depreciation rates for all manufacturing sector capital assets to increase cash flow

Most assets fall under a depreciation schedule of 15-20 years. We recommend it be accelerated to 7 years.

Establish federal energy efficiency standards for existing and new homes and commercial buildings

Buildings consume 40 percent of US energy and they last for 80 to 100 years yet there is no federal requirement for consistent energy efficiency improvement. We support federal energy efficiency improvement standards set through collaboration with state governments.

(Charts are listed below)

Sector Emissions Profile (Tg CO₂e)

Direct Emissions	1990	2007	Difference	Indirect Emissions	1990	2007	Difference
Residential	344.5	355.3	+3.0%	Residential	605.5	874.5	+30.7%
Commercial	392.9	407.6	+3.6%	Commercial	549.3	843.6	+34.9%
Industrial	1,496.0	1,386.3	-7.9%	Industrial	670.6	694.9	+0.3%
Transportation	1,543.6	1,995.2	+22.6%	Transportation	3.1	4.9	+36.7%

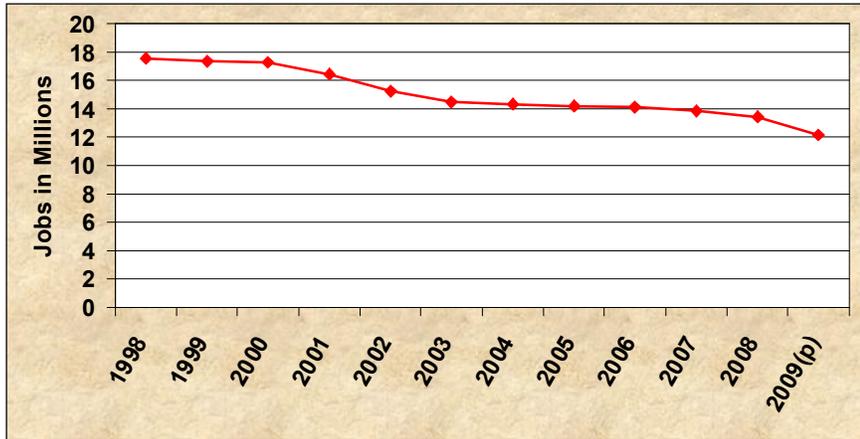
Total CO ₂ e Emissions	1990	2007	Difference
Residential	950	1,229.8	+22.8%
Commercial	942.2	1,251.2	+24.7%
Industrial	2,166	2,081.2	-3.9%
Transportation	1,546.7	2,000.1	+22.7%
Electricity	1,859.1	2,419.1	+23.1%

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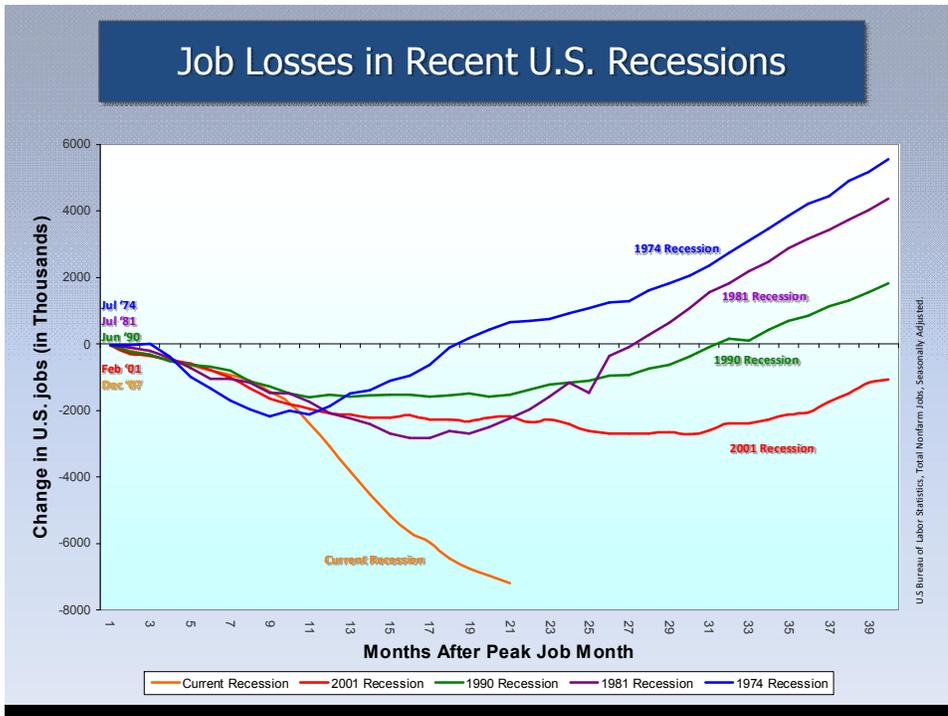
Source: EPA

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National Manufacturing Jobs 1998-2009 Net Job Loss=5.41 Million Jobs

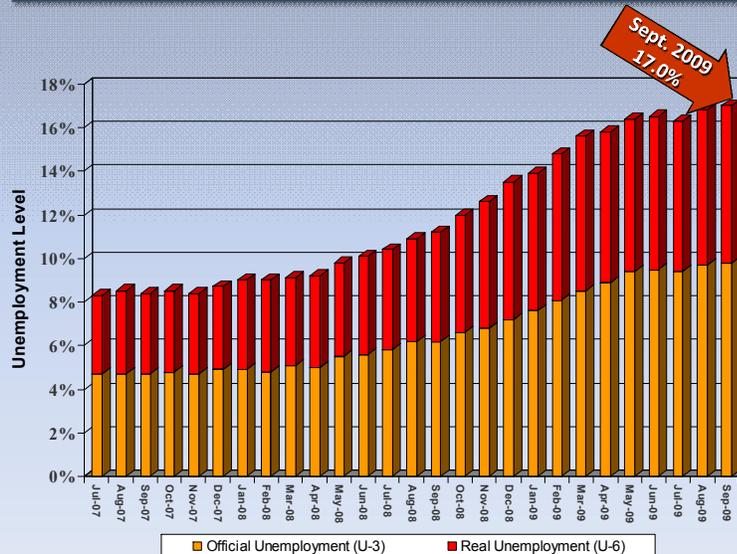


Source: Bureau of Labor Statistics



Official vs. Real Unemployment

(accounts for part-time workers who used to work full time and people who have stopped looking for work)



Unemployment Classifications

Category U-6: This is the most comprehensive of the alternative measures, and BLS expects it to be used to demonstrate the degree to which existing and potential labor resources are not being utilized. It captures workers who are visibly underemployed and all persons who are “marginally attached” to the labor force. Specifically, the formula adds the following workers:

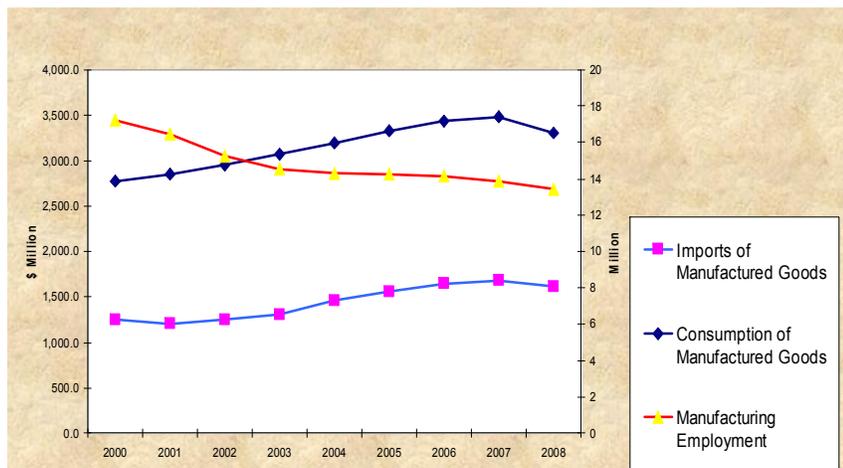
- Total unemployed workers (U-3)
- All “marginally attached” workers
 - Persons not in the labor force who want a job, and explicitly available for work, and have looked for work sometime in the past year (or since the end of their last job if they held one within the past year), but are no longer looking for work for some reason.
 - This includes “discouraged workers”
 - A sub-class of marginally attached workers, who are not currently looking because they believe there are no jobs available or there are none for which they would qualify.
 - Currently the definition of discouraged worker includes people who have stopped looking for work, but have made some attempt to find a job within the past year. Once these people have been “discouraged” for more than a year, they are no longer included. Prior to 1993, this was not the case; people who had not looked within a year were still included. Some analysts believe this has cut the number of discouraged workers in half.
- Total workers employed part time for economic reasons
 - Persons who want and are available for full-time work but have had to settle for a part-time schedule.

Unemployment Classifications

Category U-3: This is the official unemployment number, the formula for which has been largely unchanged since 1940, and represents the total unemployed, as a percent of the civilian labor force. For this category, if you did any work at all during the reference week, you are considered employed. If you did no work, but searched for a job sometime in the 4 weeks prior to the survey, you are “unemployed.”

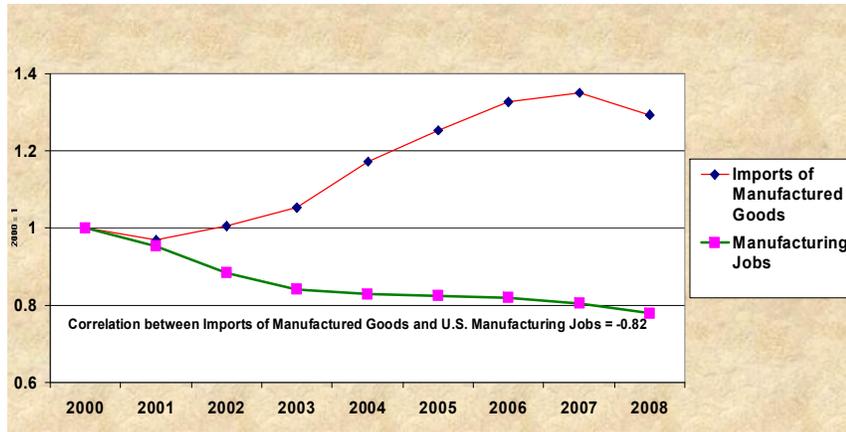
If you do not meet either test, you are “not in the labor force.”

Manufacturing, Imports, and Employment



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Imports and Employment in Manufacturing, 2000 - 2008



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Investment in Industrial Equipment as Percent of Real GDP 1990-2008



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Source: Bureau of Economic Analysis

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US Manufacturing – Under Siege by Energy Intensive Imports

- Sixteen energy intensive product categories under the “Industrial Supplies and Materials” of the U.S. Census Bureau
- Imports from 2000 to 2003 were about unchanged while imports from 2003 to 2008 rose a staggering 270%.

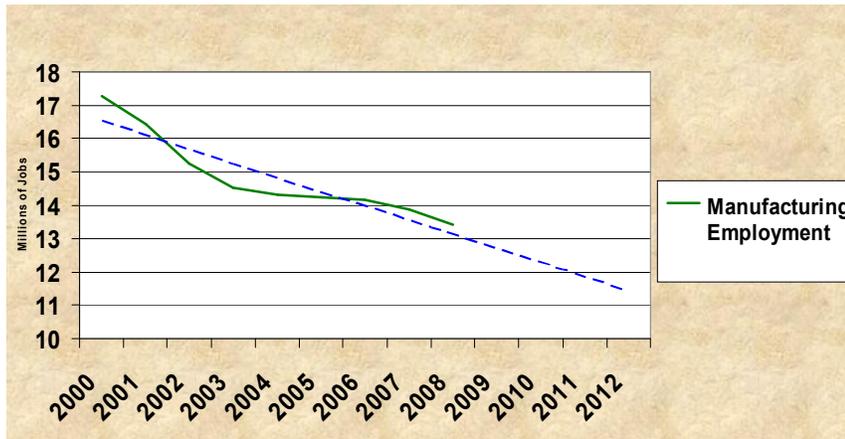
Global Balances in Manufacturing Trade (\$ millions)

	US	EU-27	Japan	China
2001	-\$282,027	\$69,746	\$164,394	\$30,858
2002	-\$336,630	103,487	184,039	38,886
2003	-\$369,258	110,115	209,270	46,598
2004	-\$434,470	139,997	254,379	86,185
2005	-\$469,141	161,973	257,579	172,773
2006	-\$484,360	152,707	274,896	277,250
2007	-\$450,839	168,249	310,510	401,376
2008	-\$389,825	247,215	337,514	538,960
-----Balance Totals: 2002-2008-----				
	-\$2,934,523	\$1,083,743	\$1,828,187	\$1,562,028

Source: Global Trade Information Services and MBG Information Services

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Past and Forecast Manufacturing Employment, 2000 - 2012



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U.S. CO₂ Emissions vs. Major Developing Countries (in million tonnes)

Country	% Change 1990-2006
United States Of America	-9.3%
Argentina	63.3%
India	67.8%
Brazil	70.9%
Korea	76.5%
China	95.1%
Kuwait	132.6%
Indonesia	192%
Malaysia	170%
Saudi Arabia	175.1%
Thailand	328.4%

Source: International Energy Agency

Industrial Energy Consumers of America

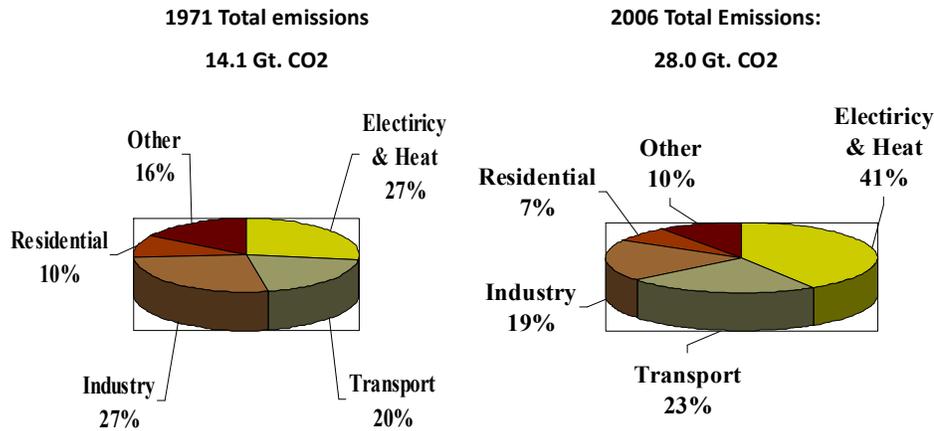
Manufacturing and Construction CO₂ Emissions in Developed Countries (in million tonnes)

Country	% Change 1990-2006
Spain	39.2%
Ireland	17.7%
Canada	16.2%
Switzerland	10.3%
Netherlands	7.3%
Australia	5%
Norway	.7%
Japan	-8%
Italy	-5.9%
United States of America	-9.3%
France	-10%
Sweden	-14.2%
Russia	-24%
Germany	-34.2%
Poland	-36.1%
Ukraine	-52.8%

Source: International Energy Agency

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Global GHG Emissions by Sector

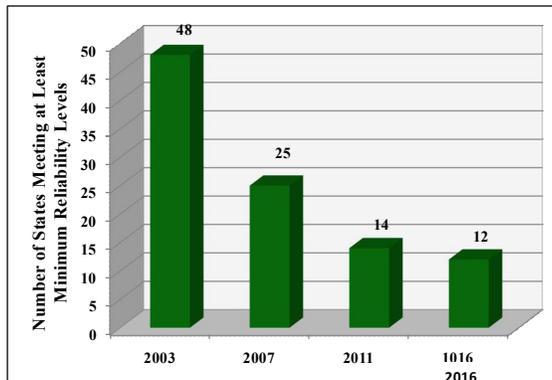


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The Steady Erosion of Electric Reliability in the U.S. 2003-2016

By 2016, only one in four states will be in a reliability region meeting NERC's minimum acceptable standards



Number of contiguous states in reliability regions where available capacity margin meets minimal accepted level -- 15%

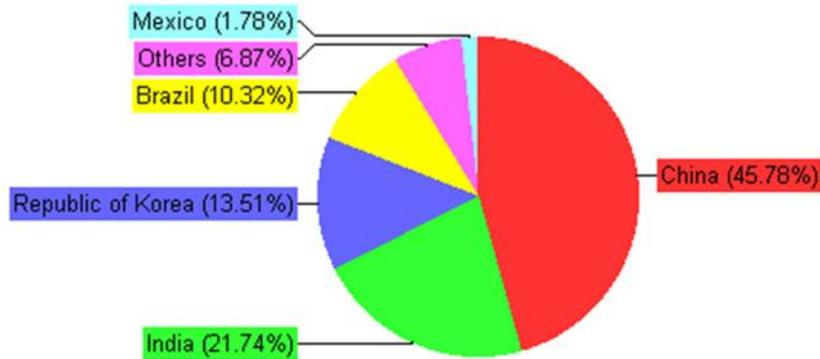
Reliability is being compromised due to inadequate generation capacity

- > No nuclear plants by 2019
- > Planned base load coal plants are being cancelled
- > Options to replace the scale (size) of cancelled coal generation are both limited and very expensive

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CERs issued by host party. Total 328,487,858

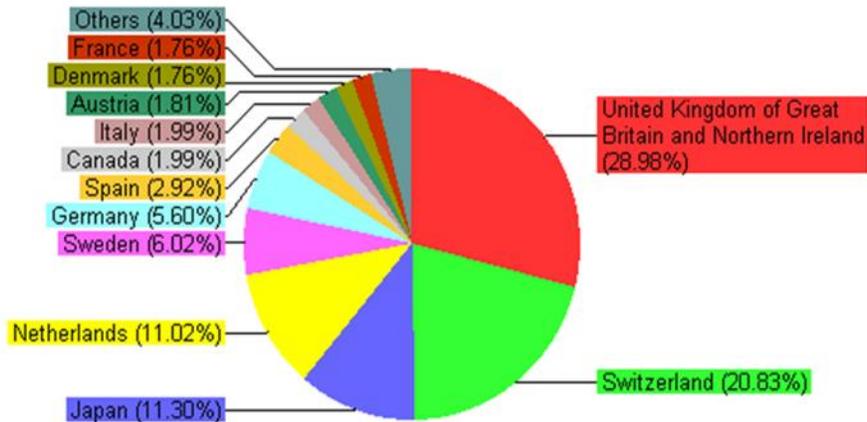


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Source: UNFCCC September 2009

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Countries/entities who own registered projects

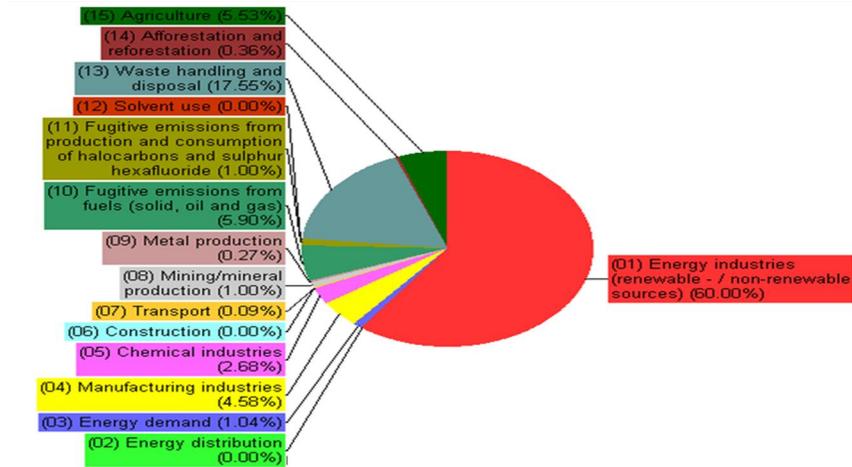


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Source: UNFCCC September 2009

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Distribution of registered project activities by scope



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Source: UNFCCC September 2009

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