

**“America’s Onshore Energy Resources:
Creating Jobs, Securing America, and Lowering
Prices”**

Before the House Committee on Natural
Resources, Subcommittee on Energy and
Mineral Resources

Thursday, March 14, 2013

Testimony of
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Thank you Chairman Lamborn and Ranking Member Holt for the opportunity to testify before you and other Subcommittee Members on this important subject. My name is Paul Cicio and I am the President of the Industrial Energy Consumers of America (IECA).

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$1.1 trillion in annual sales, over 1,000 facilities nationwide, and with more than 1.4 million employees worldwide. It is an organization created to promote the interests of manufacturing companies through advocacy and collaboration 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 energy intensive industries including: chemical, plastics, steel, aluminum, paper, food processing, fertilizer, insulation, glass, industrial gases, pharmaceutical, brewing and cement.

IECA member companies are energy-intensive and trade-exposed (EITE). For these industries, the cost of energy can be from 10 to 85 percent of the cost of making their products (*see Appendix, Chart 1*). Energy-intensive trade-exposed industries are substantial consumers of natural gas, natural gas feedstock, and electricity produced from natural gas. Our competitiveness is dependent upon the price of energy relative to our offshore competitors.

My comments today will address the following points:

- Low cost natural gas is creating the opportunity for a U.S. manufacturing renaissance that will drive significant new capital investment, job creation and manufactured product exports
- Why low cost natural gas is creating the renaissance and what it means to the future of the U.S.
- Natural gas supply and price is heavily influenced by public policy decisions

Low cost natural gas is creating the opportunity for a U.S. manufacturing renaissance that will drive significant new capital investment, job creation and manufactured product exports.

The welcomed abundance of natural gas and natural gas liquids (NGLs) have resulted in over \$95 billion in announced capital investments in mostly energy-intensive manufacturing sector companies. They include chemicals, plastics, steel, aluminum, nitrogen fertilizer and glass. These investments are in commodity products and are the “building-block” products used to produce essentially everything that we as consumers use daily (*see Appendix, Chart 2*). These projects will increase natural gas demand by approximately 6 bcf/day or close to 10 percent of existing U.S. demand.

Every month the list of projects increase and every one of them is banking on our ability to produce an abundant supply at affordable prices. Plus, low cost natural gas has depressed wholesale power prices for the last two years, keeping a lid on industrial electricity prices.

We believe that these announcements are just the first wave of investment. The second wave of investment will be from the companies who purchase these products. As more capacity of

these energy-intensive commodity products come on stream, the downstream customers will also expand and invest to take advantage of this new found competitive supply of raw materials.

Historically, the manufacturing sector investment has averaged about 2 percent of U.S. GDP. As illustrated in Chart 3 (*see Appendix*), manufacturing capital investment peaked in the late 1990s and has been on the decline. Investment bottomed out in 2010 and is now increasing. We believe that the availability and affordability of natural gas is the major driver to this turn around in investment.

Please note that the sharp drop-off in capital investment from 1999 to 2004 is when natural gas prices doubled and then tripled. The drop in capital investment is consistent with the rising price of natural gas that started in that same time period and peaked in 2008 (*see Appendix, Chart 4*). During that time period, manufacturing lost over five million jobs and shut down nearly 55,000 facilities (*See Appendix, Chart 5*).

Since 2009, natural gas prices have fallen and capital investment bottomed out and is now rebounding rapidly. As the U.S. Bureau of Labor Statistics makes its capital investment numbers available for 2012, we anticipate a significant positive surge in total capital investment that will build upon 2011.

Manufacturing jobs have increased by 464,000 from 2010 to 2012. From 2009 to 2012, manufacturing exports have increased from \$917,945,207,512 to \$1,346,968,418,364, a 46% increase. Given the slow pace of global economic growth, increasing exports at this rate means that the manufacturing sector is rebounding. We believe that lower cost natural gas is the foundation of that growth.

Why low cost natural gas is creating the renaissance and what it means to the future of the U.S.

Energy-intensive manufacturers are unique and the only sector which requires globally competitive energy, is natural gas- and/or electricity-intensive, and competes globally in an environment of unfair competition (other countries often subsidize energy and manufacturing). Unlike other sectors, we will relocate facilities offshore to be competitive.

The U.S. manufacturing sector is the largest consumer of natural gas, as a fuel and feedstock, and natural gas-fired electricity, consuming approximately 40 percent of all U.S. natural gas. We also consume approximately 30 percent of all electricity.

Energy-intensive manufacturing companies produce the building block commodity products that are used by "all" other manufacturing to produce their products as illustrated in Chart 6 (*see Appendix*). Energy-intensive products are essential for U.S. economic growth. Chart 7 and 8 (*see Appendix*) illustrate that all other sectors of the economy are dependent upon these energy-intensive products for the manufacture of a wide array of industries that span defense industries to consumer products.

However, when energy prices rise, domestic energy-intensive products have a difficult time competing with imports. This is what happened when natural gas prices rose and peaked in 2008. U.S. manufacturing facilities shut down and imports increased.

The manufacturing sector is a highly valued sector. According to the U.S. Bureau of Economic Analysis, every dollar of manufacturing economic activity returns \$1.35 of indirect economic activity (*see Appendix, Chart 9*). This is the highest return as compared to any other sector of the economy. The average of all other sectors is only \$0.75 of indirect economic activity for every one dollar. Lastly, according to NAM, for every manufacturing job created there are five to eight more jobs created in the larger economy.

Natural gas supply and price is heavily influenced by public policy decisions.

Public policy decision making directly impacts the availability and price of natural gas and electricity prices, and this fact distinguishes natural gas from other products.

We urge this Congress and the Administration to fully appreciate that their decisions regarding natural gas will impact all consumers and especially the manufacturing sector and the health of the economy. Depending upon your decisions, we can either be helped or hurt.

The U.S. has an abundant supply of natural gas and we believe that using this natural gas to produce manufactured products that are used domestically to create jobs, economic growth and exports of finished manufacturing products, will return the tremendous value to this great country.

Thank you.

APPENDIX

CHART 1

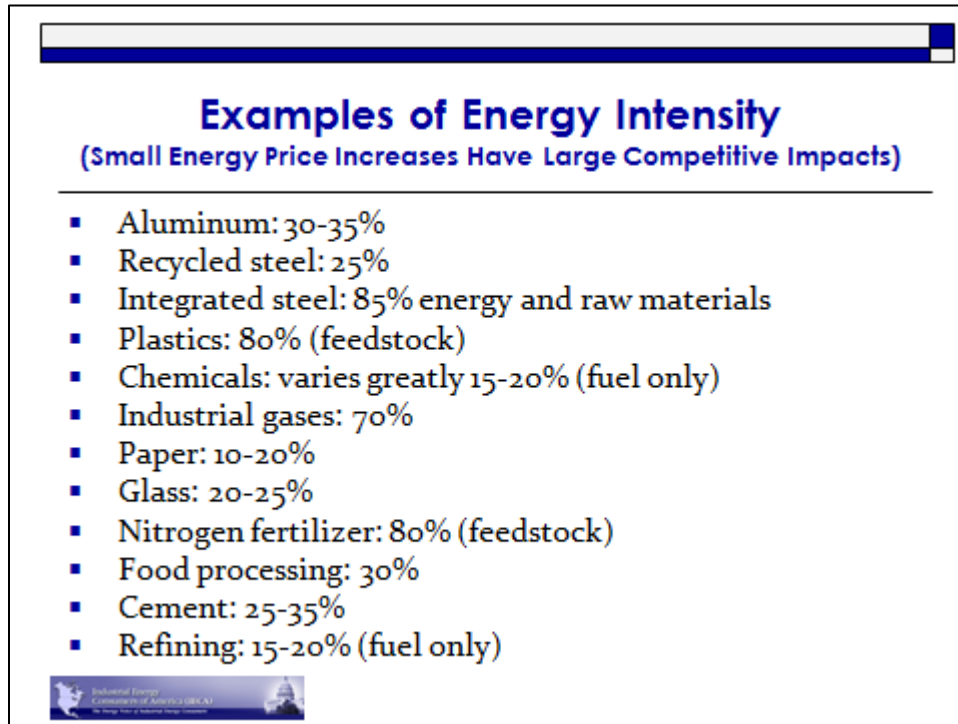


CHART 2

INDUSTRY TO INVEST \$95 BILLION IN MANUFACTURING RENAISSANCE <i>Newly announced investments below to exceed 6 bcf/day</i>				
Chemicals and Fertilizer				
No.	Company	Location	Date Online	Project Type
1	Dow	St. Charles, LA	2012	Ethylene Restart
2	Dow	Freeport, TX	2017	New Ethylene
3	Westlake	Lake Charles, LA	2012	Ethylene Expansion
4	Williams Olefins	Geismar, LA	2013	Ethylene Expansion
5	INEOS	Chocolate Bayou, TX	2013	Ethylene Debottleneck
6	LyondellBasell	Laporte, TX	2014	Ethylene Expansion
7	Westlake	Lake Charles, LA	2014	Ethylene Expansion
8	Aither Chemicals	WV or PA or OH	2016	New Ethylene
9	Exxon Mobil	Baytown, TX	2016	New Ethylene
10	Chevron Phillips	Baytown, TX	2017	New Ethylene
11	Formosa	Point Comfort, TX	2017	New Ethylene
12	Braskem	WV	2017	New Ethylene
13	Sasol	Lake Charles, LA	2018	New Ethylene
14	Shell	PA	2018	New Ethylene
15	Eastman	Longview, TX	2012	Ethylene/Polypropylene Expansion
16	Indorama	Under Consideration	2018	New Ethylene
17	LyondellBasell	Channelview, TX	NA	Ethylene Expansion
18	Sabic	Under Consideration	NA	New Ethylene

19	Occidental/Mexichem JV	Ingleside, TX	2016	New Ethylene
20	PTT Global Chemical	Under Consideration	NA	New Ethylene
21	Orascom Construction	Beaumont, TX	2011	Ammonia Restart
22	Orascom Construction	Beaumont, TX	2012	Methanol Restart
23	Orascom Construction	Lee County, IA	2015	New Fertilizer
24	Potash Corp	Geismar, LA	2013	Ammonia Restart
25	Potash Corp	Augusta, GA	2013	Ammonia Expansion
26	Rentech Nitrogen	East Dubuque, IL	2013	Ammonia Expansion
27	Austin Powder	Mosheim, TN	2014	Ammonia Expansion
28	LyondellBasell	Channelview, TX	2014	Methanol Restart
29	Methanex	Geismar, LA	2015	Methanol Migration
30	CF Industries	Donaldsonville, LA	2015	Ammonia Expansion
31	CF Industries	Port Neal, IA	2015	Ammonia Expansion
32	Incitec Pivot	Under Consideration	NA	Ammonia Migration
33	Koch Fertilizer	Various	NA	Ammonia Expansion
34	LSB Industries	Pryor, OK	NA	Ammonia Restart
35	Dyno Nobel	Waggaman, LA	2015	New Ammonia
36	Celanese	Clear Lake, TX	2015	New Methanol
37	CHS Inc.	ND	2016	New Ammonia
38	Agrium	Under Consideration	2017	New Fertilizer
39	Dakota Gas	Beulah, ND	2016	New Fertilizer
40	ND Corn Growers Association	ND	NA	New Fertilizer
41	Ohio Valley Resources	Rockport, IN	2016	New Ammonia
42	Mosaic	St. James Parish, LA	2016	Ammonia Expansion
43	Dow	Freeport, TX	2015	New Propylene
44	Dow	Freeport, TX	2018	New Propylene
45	Eastman	Under Consideration	2015	New Propylene
46	Formosa	Point Comfort, LA	2016	New Propylene
47	LyondellBasell	Channelview, TX	2014	New Propylene
48	Mitsui	Ohio	2012	Propylene Expansion
49	Enterprise	Mont Belvieu, TX	2013	Propylene Expansion
50	Enterprise	Mont Belvieu, TX	2015	New Propylene
51	Exxon Mobil	Baytown, TX	2016	2 New Polyethylenes
52	Chevron Phillips	Old Ocean, TX	2017	2 New Polyethylenes
53	Eastman	Longview, TX	2012	EthylHexanol Expansion
54	Chevron Phillips	Baytown, TX	2014	New Hexene
55	Huntsman Chemical	McIntosh, AL	NA	Epoxy Expansion
56	INEOS	Gulf Coast	NA	Ethylene Oxide
57	Kuraray	Pasadena, CA	2014	EVOH Expansion
58	Lanxness	Orange, TX	NA	Nd-PBR
59	Lubrizol	Deer Park, TX	2015	Plastic Resins
60	Honeywell Specialty materials	Mobile, AL	2012	Adsorbents; Catalysts
61	Westlake	Geismar, LA	2013	New Chlor-Alkali
62	Dow-Mitsui JV	Freeport, TX	2013	New Chlor-Alkali
63	Molycorp	Mountain Pass, CA	NA	New Chlor-Alkali and rare earth metals mining
64	Formosa	Point Comfort, TX	2012	Chlorine/Caustic Soda
65	Formosa	Point Comfort, TX	2012	Ethylene Dichloride
66	Shintech	Plaquemine, LA	2012	VCM
67	Shintech	Plaquemine, LA	2012	Chlorine/Caustic Soda
68	Shintech	Plaquemine, LA	2012	PVC
69	Occidental	Jacksonville, TN	2013	Chlorine and Caustic Soda

70	Dow Agrosciences	Freeport, TX	NA	Herbicide
71	Mitsubishi Chemical Holdings Corp.	Freeport, TX	2017	Acrylic Resin
Steel & Aluminum				
72	Alcoa	Upper Burrell, PA	2012	Expansion
73	Alcoa	Lafayette, Indiana	2014	New
74	ArcelorMittal	Cleveland, OH	2012	Expansion
75	Carpenter Technology	Reading, PA	NA	Expansion
76	Carpenter Technology	Limestone County, AL	2013	New
77	Coilplus	North Carolina	2014	Expansion
78	Essar Steel	Nashwauk, MN	2015	New
79	Gerdau	St. Paul, MN	2014	New
80	Nucor	Blytheville, AK	2014	Expansion
81	Timken	Canton, OH	2014	Expansions
82	United States Steel	Lorain, OH	Completed 10/12	Expansions
83	United States Steel	Leipsic, OH	NA	New Steel
84	Metal-Matic	Middleton, OH	2012	Expansion
85	Vallourec and Mannesmann	Youngstown, OH	NA	New
86	Welspun	Little Rock, AK	NA	Expansion
87	Nucor	St. James Parish, LA	2013	New
88	Voestalpine	Under Consideration	NA	Iron
89	Borusan Mannesman	Under Consideration	2014	Steel Pipe
Tires				
90	Bridgestone	Aiken, SC	2014	New off-road radial tire/expansion passenger/light truck tire
91	Continental	Sumter, SC	2013 start/2021 full capacity	Passenger and light truck tires
92	Michelin	Anderson, SC	2015	Earthmover tires (OTR)
93	Bridgestone	Bloomington, IL	2013	OTR Tires
Plastics				
94	M&G Group	Corpus Christi, TX	NA	New PET Plant
95	M&G Group	Corpus Christi, TX	NA	New PTA Plant
96	Huntington Foam	Greenville, MI	NA	Expansion
97	JM Eagle	Sunnyside, WA and Meadville, PA	NA	Polyethylene expansion
98	Springfield Plastics	Auburn, IL	2012	Polyethylene expansion
99	Kyowa America	Portland, TN	NA	Plastic Injection Molding
100	Lanxess	Gastonia, NC	Opened 9/12	Plastic
Natural Gas to Liquids				
101	Shell	LA or TX	NA	New
102	Sasol	LA	2018	New
103	Calumet Specialty Products Partners	Karns City, PA	2014	New
Glass				
104	Sage	Fairbaul, MN	Opened 9/12	Dynamic; Electrochromic Glass
Transportation & Transportation Equipment				
105	Caterpillar	Athens, GA	NA	Tractors and Excavators
106	Airbus	Mobile, AL	2015	Airplanes
107	Honda Motor Co.	Anna, OH	2012	Advanced Transmission Components

(Current as of January 2013)

CHART 3

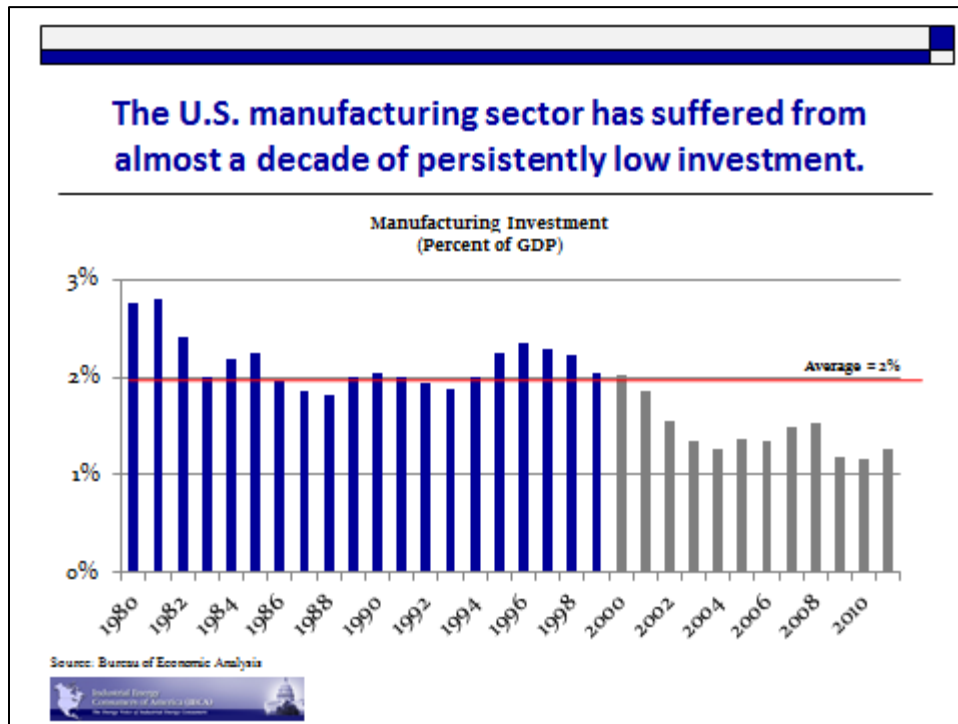


CHART 4

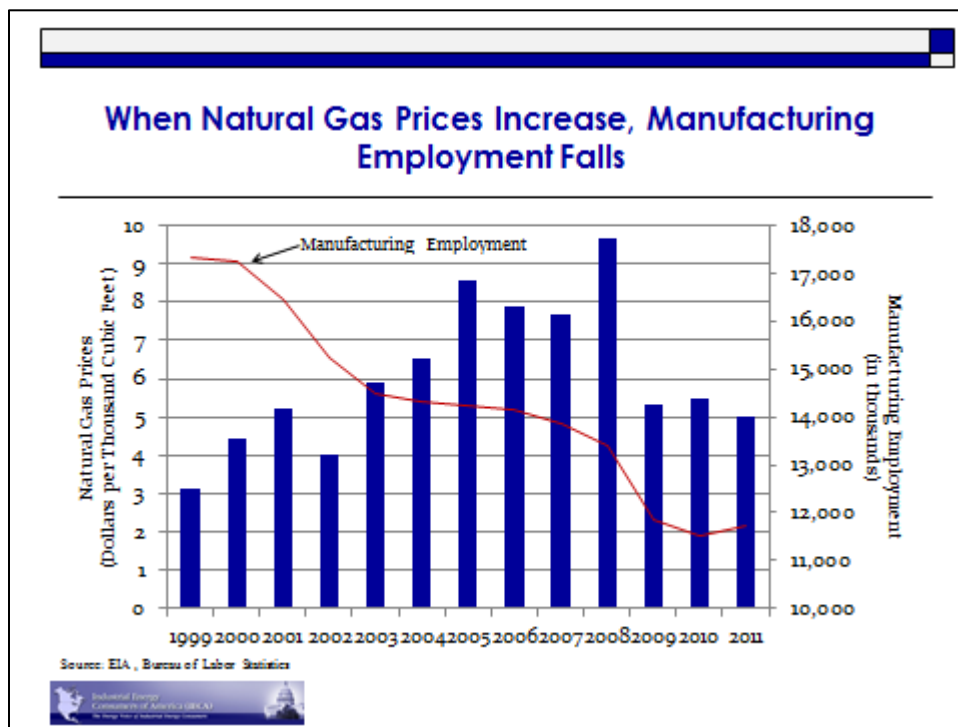


CHART 5



CHART 6

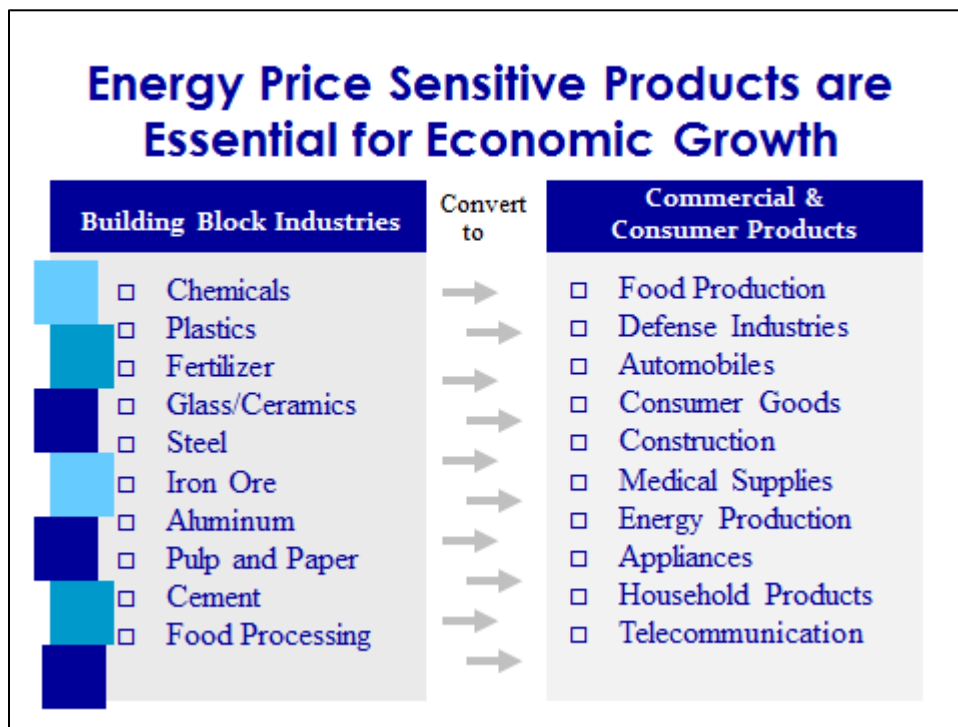


CHART 7

Energy Intensive Products are Essential to Economic Growth

- The aerospace/defense industry uses steel, iron ore, aluminum, plastics and chemicals.
- The air transport industry uses steel, iron ore, aluminum, plastics and chemicals.
- The auto and truck industries use steel, iron ore, aluminum, plastics, chemicals.
- The beverage industry uses aluminum, steel, iron ore, paper, glass and plastic.
- The biotechnology industry uses chemicals.
- The commercial and home building construction industry uses brick, steel, iron ore, aluminum, wood, cement and glass.
- The oil and gas industry uses steel, iron ore, chemicals, cement.
- The chemical industry uses chemicals, steel, iron ore, cement and glass.
- The computer industry uses plastics, chemicals, and glass.
- The electrical equipment industry uses steel and iron ore.
- The electric and gas utility sector uses steel, iron ore and cement.
- The food industry uses fertilizer, chemicals, plastics and paper.




CHART 8

Energy Intensive Products are Essential to Economic Growth

- The heavy construction industry uses steel, iron ore and rubber.
- The home furnishing industry uses wood, glass, chemicals.
- The home appliance industry uses steel, iron ore, aluminum, glass and wood.
- The household products industry uses chemicals, plastic; paper, glass.
- The machinery industry uses steel, iron ore, chemicals and plastics.
- The maritime industry uses steel and iron ore.
- The packaging industry uses plastics, paper, aluminum, steel and iron ore.
- The paper / forest products industry uses steel, iron ore and chemicals.
- The refining industry uses steel, iron ore, chemicals and cement.
- The pharmaceutical industry uses chemicals, glass, steel and iron ore.
- Railroads use steel and iron ore.
- The toiletries/cosmetics industry uses chemicals, plastics, paper, and glass.




CHART 9

