

Carbon Policy & The Impact on Business and Consumers

An overview of the Administration's overarching goals for creating clean, green technology and not to be dependent on foreign energy sources. There is a need for energy Security.

There is a flurry of legislative activity in the house and senate – which is unlikely to pass quickly, there will be watered down versions next year

- Austin, Texas has a unique situation: a utility owned and governed by the city. Since 1980s has been proactive about renewable energy sources and finding ways to decrease consumer demand. Goals are towards the future of 35% renewable energy sources by 2020.
- Legislation and Administrative Policy underestimate Natural Gas (while focusing on the unpopular Gasoline and the heavily lobbied Coal) and Natural Gas is a key part of Texas
- Texas is well positioned with non-carbons and carbons there are lots of resources for renewable energies.
- Other consequences of new admin policies: carbon credits – accounting implications, impact on industries other than O&G,
- There are parallels between O&G industry with other industries: offshore jobs, regulations, etc.
- Administrative Policy driven by: Which country is going to innovate and be a manufacturer of clean, green technology, not dependent on foreign energy sources

Panel Comments:

If you go back to the spring American recovery and reinvestment act – big boost to renewable energy sector. There had been a collapse in available funding for the renewable projects (financial collapse) needed grants and incentives

House: Waxman Markey bill – climate change bill in July

Senate bill is going to be tough new legislature – republicans likely won't support it

Democrats have some concern and need 100% support

Likelihood of new legislature through senate low this year –

Climate bill: cap in trade -- cap on emissions the industries can emit, goal by 2020, reduce emissions by 17%, by 2050 70% against 2005 – pretty aggressive – senate bill 20% by 2020

In order to mitigate impact, auction off free credits, (utilities 35% of free credits) other industries less favorably – refinery 2.5%, steel 13% and these will phase out over time until 2030. Pay to emit or innovate to reduce emission.

- Chevron actively addressing to address the climate change for many years.

Chevron trying to help other companies and groups reduce emissions.

Operating companies need to engage more in conferences and negotiations – to understand the Need for Balance, Between life and the complex issue of climate change. Need for energy and/or Need for a clean environment.

Unique in that a department of the city of Austin – they are unique, not as profit motivated as other forms, Driven by policy, governing body is "CITY COUNCIL?"

5 components – GHG from Austin, GHG from Austin Energy (99% of all), increasing stringency of building energy code, reduce emissions from community

Trying to merge local with how they see federal policy is headed

Looking at generation fleet, power plants, balanced portfolio, 1/3 nuclear, 1/3 coal, 1/3 gas, 12% comes from renewable source

Trying to conserve all forms of energy: Demand Side Conservation Efficiency and Green building programs started in 80s

Trying to mitigate demand for the energy – proactive in the area
Increase green types of energy sources – hope to get from 12% to 35% renewable to 2020
2020 plan:

- Reduce demand 720-800 megawatts by 2020.
- Reduced by 20% from previous 12 years.
- Increase renewable energy portfolio.
- 100-200 megawatts come from solar energy. Solar potential from rooftops from open ground space – survey....drive that technology change.
- Energy efficiency and renewable go to 20% by 2020.....in a great position to meet this.

- By far largest carbon emitter in US, far beyond NY, 7th in world with Canada and Germany
Huge impact on Texas – refiners and manufacturers were exposed to a lot of risk
Texas has a great abundance of non-carbon fuels – wind, grass, sun
Akin to the 1930s, when oil really took off in terms of demand, and Texas became huge after recession

World shifting towards new energy sources – lower carbon – and Texas is in a good position to benefit.

- Texas # 1 natural gas producer in the nation
- #1 hydro -- 9000mw of wind capacity in the state – 3x more than Iowa
- Could be #1 in solar if projects do take place – “we have the photons” and lots of land that nothing else will be built on
- States pushing for legislature (NJ & Massachusetts don't have the resources)
- A world where people want low carbon fuels, Texas will win.

NG is mostly domestically produced (in Texas), is low carbon, easy to manage, prices are fluctuation.
If Markets for natural gas increased, it would be great for Texas; it could be used for power generation and for transportation “A low carbon hand”

Texas' grid is less carbon intensive than in other states: opportunities to turn the constraint into the advantage. Texas has resources, expertise and ability to turn things into action.

Texas knows more about carbon and deforestation than anyone else in the world and it could be put to use in other places.

Follow-up “that sounded rosy”

We can do it if the right regulatory systems are in place. Retain hope for the future.

Panelist: I'd love for congress to wake up to the power of natural gas. The current bills/legislature don't really support NG. Looking to market forces to say, convert a coal plant to burn natural gas: that's a big capital outlay. We need help from congress understanding the power of NG. Congress is very weighted to protecting the coal industry and general utilities. Supporting energy consumption and no dialogue about oil, anything construed as supporting oil industry is never discussed. Emission allowances only 2.5% to refiners, refiners have to pay for their own direct emissions, and pay for gas that goes into consumer goes. These are operating costs to refiners—get passed along to consumer – consumption tax on gas (gas prices go up) – will blame people, indirect consumption act on gasoline.

- Austin policies might not directly support NG, but is indirectly supporting fuel switching from coal to NG. Austin is going to back off coal generation and reduce output from coal plant (losing money to do it). In order to switch resources to more efficient fuels. Combined cycle generation and renewable energy products (purchasing and ownership)....changing way they think and certain fuel pricesw. In that sense, natural gas is in favor.

JOBS ARE PARAMOUNT – unemployment is high. Will an increase in costs make an impact on the job situation, if new investment loss of jobs:

- Renewable energy generates more jobs per kw of energy than traditional fuels – but it is also true that it is less efficient – takes more manpower to get the same amount of energy.

How do we implement legislature in a way that creates jobs. Do it smoothly - Avoid disruption, creating winners and losers in a short time.

- It matters from a state and local perspective that green jobs tend to be local. A sold house now has to have an energy audit done – this has created a whole new industry, with lots of energy audit companies...job training component coupled with it.

Energy bills can be different by 100s in different homes, without energy audit, there is more important, useful information, useful for capital markets and purchasing decision.

- Steel industry has moved a lot of jobs overseas. Market forces are going to move to the lowest cost of capital (regulatory and tax compliance included). Taxes are adverse to all companies. Unintended consequences. Could be that good jobs in energy sector could be moved. We need to look at the quality of the jobs. Other factors pressuring companies to move jobs overseas. “Hurrah in the senate”, “ I can’t read 1000 pages and digest and determine the impact of it”

Is there an infrastructure and technology to store and margins to sell it?

- Texas has its own grid – more flexibility. Different market forces at play. Build transmission lines, wind farms. Wind has 30-35% capacity factor (goes counter to demand – highest in mid march). Solar trends in line with demand (sunniest in August).

Reduce commissions to reduce emissions, if market is so easy to manipulative, people manipulating markets: How will the regulations on the credits be traded?

- Broad-based credits will influence so many broad-range companies so its unknown. EPA auctions. How that trades is one of the big questions. “MY firm is looking at what are the accounting and tax implications of this credit – tax exemption – a big unknown”. A flurry of bills that specifically address market manipulations, “Carbon Fed”, limit derivatives, so that it’s transparent. Adds a lot of bureaucracy, but is aware. FTC has a role as well.