September 09

EUROPEAN EXPERIENCE:

European Coalitions Lessons Learned

Professor Michael Evan Goodsite B.Sc., M.Sc., MBA, Ph.D. Department of Atmospheric Environment National Environmental Research Institute Aarhus University MGO@DMU.DK



European issues, no different than US?

- EU White Paper "Adapting to Climate Change: Towards a European Framework for Action": "Climate change will lead to significant economic and social impacts..."
- Local decision makers can't plan locally based on what scientific climate models predict will happen at the global level in 50 or 100 years, or even next year. Research programming input from coalitions
- Balance between short and long term gains when
 focused on EU contribution to a global 450 ppm policy

European status: no different than US?

- Most existing EU adaptation methods are a result of extreme weather events (2002 floods and 2003 heat waves) i.e. reactive, not proactive planning – coalitions planning proactively
- Local governments must not just participate in research programming, they must co-participate in research as a team of planners, engineers, architects and scientists – coalitions are addressing this
- Are the skills, incentives and resources in place for this to be a success?

European vision: energy system can be based on renewable energy. Dialog key

- Actions now for peak CO2 emission within next 15-20 years:*
- 1. Interconnected international (EU) intelligent power grid
- 2. Research for new energy systems and technology (EIIT)
- 3. Definite framework conditions and directives from authorities (C&T, Tax)
- 4. Research in low energy buildings (look to Germany and Austria)
- Carbon Capture and Storage implementation

 (in power plant and high energy consuming industries)
- 6. European wide Transmission System Operator (independent from power production)
- 7. Energy storage technologies (for the grid and transport of energy)

*modified by Goodsite from Workshop on Future Energy Systems: Risø, DTU, Nov. 2008

NATIONAL ENVIRONMENTAL RESEARCH INSTITUTE

Professor Michael Goodsite MBA, PhD September 09 Slide 5 of 56

AARHUS UNIVERSITY Strategic climate questions from European local governments and firms: Coalitions as "think tanks"

- Will the US ratify and support a COP 15 agreement? >
- Will the US implement COP 15 measures? >
- What does the outcome of COP 15 mean for us? >
- What should we invest in and when do we make the > investment given other priorities than just climate?
- How should we diversify to maximize our investment and > minimize our exposure to climate impact risk?
- How do scientists best communicate with local decision > makers?
- How do we ensure sustainable prosperity and create jobs? >



From impact to adaptation is "simply" a strategic change process:

Vision	Skills	Incentives	Resources	Action Plan	Change
	Skills	Incentives	Resources	Action Plan	Confusion
Vision		Incentives	Resources	Action Plan	Apprehension
Vision	Skills		Resources	Action Plan	Gradual Change
Vision	Skills	Incentives		Action Plan	Frustration
Vision	Skills	Incentives	Resources		False Start

Chart modified and used with permission from prof. Mary Teagarden, Thunderbird School of Global Management

From impact to adaptation in Europe

- 77% of the European countries do not yet have a National Adaptation Strategy. So far only exists in 5 countries: Denmark, Finland, France, the Netherlands and Spain*
- On October 9th, Norway announced some of the most ambitious plans in Europe
- National climate policy needs to allow for incentives at the local level to drive innovative mitigation and adaptation
- Coalitions must communicate vertically as one voice
 *CIRCLE report

Professor Michael Goodsite MBA, PhD September 09 Slide 8 of 56

A hurdle is planning and implementing strategic change locally – common ground?

- Many are looking to England, Sweden and now Norway to see how they integrate national plans at the local level
- > Why not drive national plans from the local level?
- Do we have the vision, skills, incentives and resources at the local level to make a proactive action plan?
- > How do we judge a good adaptation plan and result?
- > How do other communities either adapt or adopt these plans? There is not enough communication

A hurdle is balancing incentives and resources: Case of Denmark

- Denmark has had a carbon tax since 1993 and allows for CO2 trade since 2006 – positive experience so far for both
- A number of Danish communities are becoming CO2 neutral with support from the state, the same is true for other European communities
- Climate and sustainable energy test beds, to improve the status of low income municipalities
- aggressive and deliberate municipal investment strategies to develop a prosperous "green economy" and fossil fuel independent municipality e.g. in Lollland (Courtesy of Silvia Magnoni, BASS)

District Heating an Example of Success in Denmark

- Bramming Municipality district heating (courtesy of Municipal Envir. Director Steen Thøgersen)
- Normal electrical production efficiency with natural gas fired generators ca. 40% and the heat is wasted
- With district heating production efficiency was raised to <u>90%</u> i.e. 50% "free" – with co-generation
- This is the same in the Danish municipalities with cogeneration
- > A town that needs heating should use district heating

NATIONAL ENVIRONMENTAL RESEARCH INSTITUTE

Professor Michael Goodsite MBA, PhD September 09 Slide 11 of 56

Conclusions: European coalition successes are largely due to national funding incentives and a common purpose

- Aggressive introduction of policies at all political levels promoting renewable energy and saving
- There are good European cases from municipal to national level to compare yourself (benchmark) to
- Beware of "climate carpet baggers" even though they are (generally) well intentioned
- > There is no best practice established yet
- A great deal of research is needed, focused at the local level
- > Coalitions with a purpose greater than themselves succeed

NATIONAL ENVIRONMENTAL RESEARCH INSTITUTE AARHUS UNIVERSITY

Professor Michael Goodsite MBA, PhD September 09 Slide 12 of 56

Thank you for your attention and invitation

1 act for

So, enough with the talk. Let's do something.



The opinions expressed are my own

MGO@DMU.DK

Source: freebies at Our Iceberg is Melting homepage