

The winds of change

With the climate change issue becoming ever more a major cause for concern, a new green movement is fast taking shape in the European Union, with Denmark leading the way. And rightly so, because of all the countries in the EU, Denmark is ahead in its use of renewable energy.



With the climate change issue becoming ever more a major cause for concern, a new green movement is fast taking shape in the European Union, with Denmark leading the way. And rightly so, because of all the countries in the EU, Denmark is ahead in their use of renewable energy.

In fact, since the energy crisis of the 1970s, the country has transformed itself - from being 99 per cent dependent on foreign energy sources such as oil and coal, to being completely energy self-sufficient, and eventually becoming a net exporter of natural gas, oil and electricity today.

Across Europe, we've seen an amazing take-up of renewable energy, as in wind, wave, water, and also solar countries like Denmark which bought into the idea 10 to 15 years ago," says **Jacqueline McGlade**, executive director of the European Environment Agency in Copenhagen.



McGlade, a speaker on a panel on climate change at the European Business Summit in Brussels, singles out Thisted, a Danish community which she says produces enough energy for their own needs - enough that they have become energy independent and thus are largely operating "off-grid".

In times of excess they even export their energy back to the grid. Each person in the community, she says, pays virtually nothing for energy, and the extra money then goes into building hospitals and schools.

While Denmark is leading the way, many other countries around the world are still playing catch

up.

People will act, but only when there's been such a crisis that they're forced to act, says another panelist, **Joan MacNaughton**, senior vice-president of power and environmental policies at Alstom. Of course we've seen a current example of that in the financial sector, when suddenly very urgent, very radical, very large-scale actions are being taken across the world. We don't want to get to the crisis before we have that sense of urgency, that sense of priority, and the investment needed to tackle this. The investment will be less if we do it earlier; the chances of success will be much greater if we do it earlier.



Still, MacNaughton maintains that she has qualified optimism regarding climate change, especially in Europe where there is an enactment of a very ambitious and active climate change package. She says that awareness and concern to tackle the issue has grown very significantly, though translating that into action, will be the true barometer of the sincerity of the intent.

However, investment in green initiatives, she adds, will remain a big challenge. Climate change isn't necessarily the first concern for people who are worried about their own job prospects. The economic downturn has had a major effect to pause the growth of that concern. It's not the top of everybody's agenda at the moment. But should it be? Yes. Why? Because the less we get our emissions starting to fall, within the next 10 years or so, we face the prospects of possibly irreversible and very serious damage.

Already, the signs are ominous. According to McGlade, at least 10 to 20 per cent of European countries are facing critical water shortages. Referring to this as the hidden underbelly of climate change, she adds that many countries are fast approaching their acceptable thresholds.

Many countries have gone beyond what we call safe 20 per cent exploitation levels. What that means is they're using 50 per cent of the water that falls on the territory for extraction, which means it's not replenishing the systems, not going into ground water, not available then for households for drinking water and so on.

We need to be moving away from a demand economy for water to supply, she cautions. Put a meter on your wall and we'll just measure it and we put a price on it. We're fast moving to a situation

where having the meter isn't enough, because no matter how carefully you think you can use water, the supply just simply won't be there.

What's missing, she adds, is an understanding of the urgency. We heard in Europe there are attempts to stick to a two-degree rise in temperature associated with climate change gases. From our calculations, actually that's even too much. One degree will radically take us outside of our comfort zone for growing crops, the way our buildings work, the way we actually consume and move around that urgency or enormity of the problem has still yet to bite.

On a positive note, Europe scores higher on its ability to harness power from the wind. We've just put up a wind potential map, which, taking into account all the legislation for nature and so on, we can still produce two-and-a-half times the amount of electricity that's currently consumed within the European Union, McGlade says. So the potential is there. What we lack are the grids that get you from the outposts of Europe into either manufacturing centres or to a relatively large set of communities.

The bottom line: we need to be more vigilant on how we consume energy, says MacNaughton. One of our great contributors towards reducing carbon emissions could be energy efficiency the only way that you're going to contain your CO₂ emissions, is if you're going to be able to take carbon out of energy. We can do it, but we need the right mixture of financial incentives, government action, to enable it to happen.

Find article at

<https://knowledge.insead.edu/csr/the-winds-of-change-1653>

Download the Knowledge app for free



Visit **INSEAD Knowledge**
<http://knowledge.insead.edu>