The A-List

Three cheers for the new EU energy policy for 2030. While last week’s announcement was criticised by some observers as a retreat on clean energy (and praised by some businesses for the same alleged reason), it was no retreat at all. The EU maintains its global leadership in pointing the way out of the climate-energy morass. The new goals are sound but will require considerable diligence to implement.

The EU remains the only region of the world to take seriously the world’s commitment to keep global temperatures from rising more than 2C. The 2C target implies a steep decline in carbon-dioxide emissions, and hence a fundamental transformation of the world’s energy system by the middle of the 21st century. The European Commission’s Energy Roadmap 2050 framework adopted in 2011 stands out as a unique contribution to that goal.

The 2C goal imposes a global carbon budget, meaning a cumulative amount of CO2 that can be emitted globally while still remaining under the 2C increase with a sufficiently high probability. The best guess is that the world has about 400bn tons of carbon left to emit. With current global emissions about 10bn tons a year and rising sharply, the time is running out. A realistic scenario would require a cut to about 4bn tons of carbon (15bn tons of CO2) or less by 2050, and then on to near-zero net emissions during the second half of the 21st century.

Only the EU is doing the systematic carbon arithmetic, even if the politicians are not yet doing their homework to implement the budget. Energy Roadmap 2050 recognises the bottom line: with a world economy growing roughly threefold by 2050 and emissions falling by more than half, the high-income world will need to cut CO2 emissions by about 80 per cent.

That can only be accomplished through a dramatic change in how energy is produced and used. Most importantly, all coal must stay under the ground unless it is combined
with carbon capture and sequestration. The internal combustion engine must give way to electric (including fuel-cell) vehicles. Boilers and furnaces need to give way to co-generation and electric heat pumps. Steelmaking needs to shift to direct reduced iron and similar technologies.

These changes will not happen over night. They require decades of consistent policy, not years. But they can happen, and that is where the new EU goals come in. The 40 per cent reduction of CO2 (compared with 1990) now set for 2030 puts the EU on the pathway to an 80 per cent reduction by 2050. The key to understanding last week’s announcement is that it is another step towards the mid-century goal.

Critics have complained that the targeted renewable energy share – at least 27 per cent by 2030 – is EU-wide rather than binding on a country-by-country basis. Yet it would make no sense to set a uniform target that applies to every country. The entire success of Europe’s transformation, and of any region in the world for that matter, will be a regional system that links diverse forms of renewable energy (wind, solar, geothermal) and diverse forms of energy or carbon storage with integrated grids, transport (electric rail) and industrial production. Indeed, Europe’s success will depend on linking up with solar and wind energy in north Africa and the Middle East, as in the Desertec concept. Energy nationalism is the foe of sane low-carbon energy policy.

European businesses are complaining bitterly that the climate goals are putting the EU at a serious competitive disadvantage. This is wrong. First of all, the sharply lower energy prices in the US will partly equalise when natural gas exports pick-up, as they will. Second, Europe’s vocation is not to be a major petrochemicals producer. Europe does not need to be another Texas or Louisiana. Europe’s true vocation is to have the world’s most sophisticated single market in high-technology machinery, sophisticated services, quality education and clean-green environment. Third, energy costs are a very modest part of the story of industrial competitiveness outside of a very few narrow energy-intensive segments.

Of course, none of this is an excuse for bad energy policies. The EU emissions trading
scheme is one such flawed policy. It is a spot market trying to encourage a 40-year transformation. It would be much smarter to set technology pathways to mass electric vehicles, mass electrification of buildings and the phase-out of coal. A commitment to a gradually rising carbon tax would help as it would change today’s long-term investment calculations of utilities, construction companies and automotive producers. And do not get out of nuclear power. A low-carbon world needs it, will build it and should as well buy safe and high-quality European exports.

Europe faces the challenge of being ahead of the rest of the world. It is admittedly not a comfortable place. The US seems uniquely destructive these days, with public rhetoric on energy policy almost totally in the hands of the Koch brothers. Yet even the US is recognising the end of coal and the inevitability of a low-carbon future. Europe will find a partner there, though the US will take a few years longer to embrace a 2050 roadmap. China and India too have come around: their futures, including their access to clean air and water, depend on a radical change of direction, and they know it now at the top.

The critics would therefore be wise to pull back their attacks, support the new 2030 European targets, champion smarter policies to achieve them, and join the rest of us living in rearguard countries such as the US to push the entire world to follow the European lead at the decisive climate negotiations scheduled for Paris in December 2015.

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