

Book Review

David Buchan (2009)

Energy and Climate Change: Europe at the Crossroads

Oxford: Oxford University Press

Angela Carpenter
University of Leeds

This book, which looks at a range of aspects about the European Union and issues surrounding climate change, would be of interest to audiences in both the fields of European Policy and Practice and Environmental Studies. It is written in a clear manner, which makes it accessible to readers in academia, industry, NGOs and any audience interested in European policy on the environment or in the development of European regulations on policy on climate change. Buchan has produced a very wide ranging, well researched book which looks at the history and development of climate change regulations, which is seen as one of the most significant issues facing the EU in all its 50 year-history (p. 1). It covers aspects including energy taxation, the European Emissions Trading Scheme, and also EU targets in the short and longer term, together with alternative energy sources, the relationship between the EU and Russia over energy, and liberalisation of the European energy market in the 1990s.

The role of Europe as a collective body, its Member States working together towards a commitment to reduce emissions of greenhouse gases, is seen as key. Buchan sees the EU's strength as being its ability to take that collective action and offer a model to other countries and regions on how to take positive action to combat climate change. Its Member States have very diverse energy sources – for example, France has 80 % of its energy coming from low-carbon nuclear, while Poland generates 95% of its energy from high carbon coal (p. 13) – which means that it is not an easy process to reach common ground on climate change policy. However, that very diversity is seen as positive in responding to threats to its energy sources – as one source is lost or reduced, another can be substituted. Energy security is an important issue. Chapter 8, for example, outlines the problems that arose between Russia, Ukraine and Belarus in 2006-2007 when Russia stopped oil and gas from flowing to Western Europe, followed by military conflict between Russia and Georgia which resulted in to gas flowing into Ukraine for a two week-period (p. 79). Russia is considered to be Europe's "mainstay supplier of [oil and gas] for the future" (p. 80) and Buchan indicates that maintaining strong relations between the EU and Russia is vital in maintaining EU energy security, particularly in light of the predicted increase in the EU's dependence on fossil fuel imports by 2030.

Early chapters of the book look at the EU energy market and liberalisation including third party access to Member States' energy sectors. Buchan indicates that the UK and Scandinavian countries opened up their energy markets to outside countries, but France and Germany were resistant to anything that might change their own national energy industries (p. 21). The book examines the actions of various European energy companies

and national governments, post-liberalisation. Some companies acted in their own interests rather than helping to do away with national monopolies, one of the main aims of liberalisation of the energy market, while some governments protected the interests of their own national companies, controlled prices and passed new laws to prevent companies from other countries entering their markets.

Having highlighted relations with Russia as one energy security issue, the book looks at the relationship between Russia and the EU including the history of relations between them since the 1960's. It provides a strong discourse on how political change in Russia has influenced that relationship. With almost half of the EU's imported gas, a third of its oil and a quarter of its coal imports, plus almost all its enriched uranium fuel coming from Russia (p. 91), that relationship is vital to EU energy security. The enlargement of the EU in 2004 led to some difficulties in relations with Russia. Many of the new accession states hold strong anti-Russian opinions and may have seen accession to the EU as providing them with a stronger voice in energy foreign policy. However, Buchan notes that there is some dissonance between those new countries wishing to "rid themselves of near total dependence on Russia", while older Member States do not wish to "offend Moscow in any way that could jeopardise (...) energy trade and investment links with Russia" (p. 92). The climate change agenda is also introduced in detail in Chapter 10. This issue has received consensus among EU Member States for many years. Much of Europe will be affected by climate change – either negatively through increased migration from Southern Mediterranean and Sub-Saharan African countries, or positively through "less need for winter heating and higher crop yields" (p. 110) in Northern Europe.

The book considers actions taken by the EU, its Member States and individuals to combat climate change through actions such as the Emissions Trading Scheme (ETS), developed initially as a means of implementing the 1997 Kyoto Protocol targets. Problems are highlighted and progress towards Kyoto targets are discussed in detail, as is how the ETS has been developed over time. Later chapters look at the move towards Green Power, bio-fuels for transport and nuclear power as alternatives to fossil fuels which can reduce climate change impacts and lead to a low-carbon energy market in Europe. However, such measures can be very expensive in terms of research and development, as well as infrastructure investment. While the EU sees carbon capture and storage technology as vital to achieving its ambitions to reduce its dependence on fossil fuels and develop alternative energy sources, the costs may be beyond the EU unless they can get industries and companies involved in the development of the technology. If, however, they could get such technology in place, benefits would be high, particularly if countries such as China and India followed the EU's lead in introducing this technology.

The EU has already played a part in working towards reducing climate change impacts: through its activities at Kyoto; through setting targets for greenhouse gas reductions; through the introduction of energy saving measures such as improved labelling on consumer white goods (TV, washing machines); reducing emissions from aircraft using its airports; and through setting stricter standards on energy performance for new buildings or renovations, for example. Climate change remains high on the EU agenda and it is seen as vital that the EU continues to take a strong lead and strong action in this area. As Buchan concludes, "in normal peacetime, policy failure is not catastrophic. If a policy fails, we can [always] demand that our governments re-do it. But combating climate change is more like war: you don't have time to return to the drawing board" (p. 214). Buchan's book illustrates how the EU's lead on climate change issues has been a uniting force within Europe over many years and the importance that the EU continues to take action, both internally and externally, to help create the policies that may reduce the impacts of climate change, both in the short and long term.