EU governments should place greater emphasis on infrastructure projects in their efforts to tackle climate change

The European Union has positioned itself as one of the most proactive global organisations on climate change, with its Member States participating in an Emissions Trading System designed to progressively limit greenhouse gas outputs. Corentin Cohen writes that while the EU has chosen to place most of its focus on using taxation to discourage emissions, there are a number of ways in which EU countries can use investment in essential infrastructure to create ways for people to ‘be green’ and get real benefits from doing so. He suggests that this approach is the only way for Europe to successfully tackle the issue of climate change, and that it could provide opportunities for increasing citizens’ affinity for European integration.

While European governments focus on CO2 taxation in their efforts to tackle climate change, more emphasis should be placed on the central role that infrastructure plays in reducing carbon emissions. Transport, energy and housing infrastructure are a prerequisite to pricing policies. They could also offer an opportunity to renew everyday attitudes about the European Union.

**Pricing is a solution for industry players, but people need alternatives first**

Infrastructure conditions our way of living as much as it reveals our mental landscape. When talking about infrastructure, people immediately think of highways, railways, dams and airports. Infrastructure is referred to as a set of defined objects that allow production. According to the prevailing orthodox economic view, the main tool of the EU’s climate package is the pricing and market mechanism. It is tasked with dealing with and progressively motivating industries and major emitters to adopt green strategies.

The underlying aim of infrastructure is to allow for production. The responsibility for emissions hinges on the market. Carbon prices and taxes are meant to give a signal to industry players. However, they have shown limited efficiency in adjusting their industrial choices. For the general population, carbon taxes are more of a burden and they increase inequalities. They leave the poorest with no direct lifestyle alternative and the feeling of an ecological burden weighing on their everyday lives.

Pricing will not be efficient if the EU does not offer incentives for other alternatives. Recent studies, including the case of Nigeria – where energy subsidies were cut before developing infrastructure – have shown that pricing policy is not enough to curb or mitigate emissions. Alternatives and infrastructure need to be in place before taxing CO2. This is not just for emerging countries. In France, the “ecotax”, which is designed to raise revenues for the government to finance railway and
maritime projects, has led to a major uprising in Brittany. As it happens, in Nigeria, strong protests forced the government to pull back on its plans.

**Infrastructure is central to curbing emissions and improving the effectiveness of pricing policies**

Infrastructure is a prerequisite to curbing emissions. Renewable energy, grids, but also urban infrastructure, improving green mobility and low-emission transport should be priorities. Transport accounts for a quarter of emissions in the EU and energy production for more than 35 per cent. In both these fields, infrastructure can play a major role.

In the UK, trips shorter than 2 kilometres account for 16 per cent of CO2 emissions. Biking, electric cars and a strong public transport network are key solutions to help mitigate CO2. As James Woodcock’s models demonstrate, cycling and walking can also have positive side effects, in term of reducing disability and increasing longevity and health, while decreasing emissions. The costs of bicycle sharing systems and bike lanes are cheap and they are easy steps to take. All these policies are as much related to infrastructure as to urban development. They imply long-term decisions, greater responsibility and freedom of experimentation for cities.

Infrastructure is crucial because it can lead to better acceptance of climate pricing policies and reduce the sense that such policies have been imposed on unwilling citizens. Infrastructure, such as multimodal transport, allows people to adopt new lifestyles and reengage with the political project of European integration. New attitudes could be developed through a voluntary infrastructure policy, paving the way for energy independence, innovation and efficiency, while creating jobs in highly competitive new industries.

For those concerned with unemployment, the economic arguments may resonate more than the ecological ones. Communicating the concrete gains of these policies should also be a priority. Zero-energy or passive housing can cut heating costs for individuals. Such technology may have high upfront costs, but these investments in reducing energy use must be shown to be economically effective.

**We do not need (much) more money than we already have to finance infrastructure**

How could we finance this new infrastructure? For the long-term, a first step could be to use part of the benefits of the Emissions Trading System to directly invest in strategic infrastructure, helping development and reducing CO2 emissions. A second way is to progressively decrease energy subsidies while encouraging alternatives. But pricing policies alone will not generate the required funds for a long while. Considering the budget restrictions that EU Member States currently face, they will have less weight. Investors are still reluctant to finance limited or long-term profitable projects. Different options for financing investments must be made available. This would give more power to cities and local authorities.

Blanca Fernandez and David Gierten from the OECD have emphasised new financial sources such as tax increment financing and land value capture that, along with municipal bonds, green bonds and a low density tax, could generate resources. Private-public partnerships could also be a solution. At another level, creative financing solutions could be developed. For instance, Paris could pay for its biking system with poster board advertising. Investments are also a way to limit future costs. The models presented by Brigid Knopf and Eva Schmid show that the electricity grid offers an attractive return on investment. While paving the way for a common European energy market, €1 invested could bring €1.8 to €3.4 of benefit.

Infrastructure financing could also come from relocation effects. If we look at Spain, Portugal or Greece, nearly 50 per cent of their accumulated debt between the first quarter of 2009 and the fourth quarter of 2011 was linked to energy imports. The development of solar energy would create an opportunity for them to export electricity to Northern Europe, limit import costs and reduce costs for industry across the board. Many solutions exist to tackle climate change, but European countries must act together, invest and drive innovation in order to succeed and to create a better future for their citizens.
About the author

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Corentin Cohen is a PhD candidate in Political Science and International Relations at Sciences Po and the CERI in Paris. He received bachelors in Philosophy and in Geography with highest Honours. He studied at the ESCP Europe business school and received a M.Res in Political Science from Sciences Po. His graduate thesis entitled “An approach through images of the 2006 conflict between Hezbollah and Israel” received a INA (National Audiovisual Institute) research prize in 2013.

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