Energy security and climate change: a new industrial revolution

If left unaddressed, by 2030 the energy situation in Europe will be one of increasing need and declining supply. Dependency on high priced imports of oil, gas and coal from third countries will increase from its current 50 per cent to about 60 per cent while fossil fuels could represent up to 80 per cent of Europe's energy mix. On top of this, supplies will be drawn from some of the world's most politically volatile areas. Given the sheer energy intensity of our economies, the scope for vulnerability and turbulence is immense.

As if this were not enough, the impact of climate change on the global economy could dwarf the impact of the current financial and economic crisis. Failure to take adequate measures could result in a significant rise in the planet's temperature by the end of the century, leading to the disappearance of whole regions, huge flows of climate refugees and to billions being left without water. At best, we would face changing patterns of desertification, rising sea levels, severe drought and higher temperatures – with all their respective consequences.

The challenges we face are enormous and call for an urgent response along with a huge mobilization of resources. For instance, carbon productivity (how much GDP we get for every tonne of carbon we emit) will need to increase ten-fold to meet existing carbon emission targets; and we need to achieve this in "only" 40 years. The potential for social, economic and political destabilisation is therefore real. Yet to tackle these Herculean tasks, we cannot simply rely on the market. Instead, wide ranging public interventions and support are needed to initiate a "new industrial revolution". The EU must transform this challenge into a real opportunity.

González et al. *Project Europe 2030: challenges and opportunities.* May 2010. p. 31 – 32.