



European
Investment
Bank

The EU bank

7

reasons why
the energy
transition works
for Europe

**Climate answers from
the European Investment Bank's
Investment Report 2019/2020**

The European Union's transition to net-zero carbon emissions by 2050 is a big challenge, but also a massive opportunity to modernise the continent's economy and promote growth, employment, technological advancement and social inclusion. **The transition is economically and technically feasible, and is becoming easier as the cost of low-carbon technologies declines.**

To build a new, green economy, the European Union must adopt a **supportive regulatory framework that rethinks the taxation of energy and makes climate finance easier to come by.** Europeans need to question the way they produce and consume goods, balancing growth with well-being. Finally, they also must ensure that the people most vulnerable to the effects of climate change are protected, and that the burden of transitioning to a low-carbon economy is shared fairly within societies and between developed and developing countries.

In 2018, the European Commission adopted a strategic, long-term vision for climate change set out in the report *A Clean Planet for all*. The strategy confirms Europe's commitment to lead global climate action and presents cost-effective ways to achieve a net-zero contribution to greenhouse gas emissions by 2050 through a socially fair transition.

The European Investment Bank provides an overview of the European economy each year in our Investment Report, published by the Bank's Economics Department. **Here are the highlights from the climate chapter of the 2019/2020 report.**



www.eib.org/investment-report-2019

1

More jobs.

Green energy has created 4 million jobs in Europe so far. Another 492 000 will be created if the world commits to tackling climate change, according to an estimate by the European Commission. The energy transition will add 0.3% more jobs by 2050 than if nothing changes. In a more ambitious climate scenario, cutting global emissions could create 0.9% more new jobs.

2

New, fast-growing industries.

Renewable energy has grown out of its infancy and is entering a new phase of subsidy-free expansion. The cost of solar power has declined 75% from 2010-2018, while wind's cost has dropped 35%. Many challenges remain, however. Fossil fuel prices are still low and the industry is heavily subsidised, to the tune of \$5.2 trillion in 2017, according to the International Monetary Fund. These fossil fuel subsidies impair the cost competitiveness of renewable energy.

3

Less energy dependency.

The European Union's dependency on energy imports is expected to decline from 55% to 20% by 2050, according to an in-depth analysis by the European Commission on the continent's long-term carbon strategy. Locally produced renewable energy is increasingly competitive with fossil fuels.

4

More competitiveness.

EU industry reduced its energy intensity—that's the energy used to produce one unit of economic output—by 20% from 2005 to 2017. Some industries, such as steel, cement, chemicals, glass and plastics, still need to improve their energy efficiency. Improving industrial processes through digitalisation and automation and increasing the use of recycling and the re-use of materials could further boost the European Union's energy efficiency and overall competitiveness.

5

Empowered consumers.

Consumers will play an active role in the energy transition by adjusting their electricity demand and supplying energy to the grid. The energy transition will gradually turn consumers into “prosumers” who are able to sell back their excess electricity. Most EU countries already have the regulatory framework in place for this to happen.

6

Decarbonisation lead.

The European Union outperforms the United States and China when historic efforts to decarbonise our economy are taken into account. Europe started decoupling its economy from carbon emissions almost two decades ago, and our economy is now 20% less carbon-intensive than it was in 2000. In 2018, our carbon intensity was 20% lower than the United States and 70% lower than China.

7

Climate is crisis-proof.

Investment in renewable energy has grown substantially over the last two decades and was less affected by the financial crisis than any other type of investment.

Energy transition opportunities

The switch to a carbon-neutral economy presents enormous opportunities to tackle some of the thorny issues facing the European Union. Outdated tax policies, gaps in skills, a dearth of investment, rising inequality—all of these problems could in part be addressed by a continent-wide push to end our reliance on fossil fuels. We have to:

Overhaul energy taxes.

The EU Energy Taxation Directive has remained unchanged since its adoption in 2003, despite major developments in Europe's climate and energy policies and the emergence of many clean-energy technologies. The current tax directive hinders investment in cutting-edge new fuels, such as hydrogen, e-fuels (power-to-gas, power-to-liquid), bio-methane and organic fuels. Because the directive does not provide clear legal provisions on the taxation of these new products and processes, their preferential tax treatment is not ensured. The lack of tax provisions also makes electricity storage less interesting to investors in the European Union. In its current form, energy taxation is considered unfit to help Europe meet its climate objectives. Ursula von der Leyen, president-elect of the European Commission, has declared that reformed taxation is central to a European Green Deal.

Attract new investment.

For the energy transition to happen, investment in the various energy sectors needs to rise to 2.5% to 3% of gross domestic product (GDP) a year until 2050, or roughly 1.5% of GDP above business-as-usual. A majority of that investment, 60-65%, is needed to rehabilitate buildings, improve industrial processes and integrate new transport technologies, while 35-40% would go to reinforcing energy infrastructure, building plants using renewable energy sources and creating new energy-storage facilities as well as factories producing carbon-free hydrogen and synthetic fuels. To mobilise private investment, the public sector must play a catalytic role by sending the right price signals, ensuring regulation is conducive to investment, setting standards, and spreading information through tools like energy audits. Not least, governments need to provide clear signals on the path ahead, ending policy uncertainty and giving businesses the confidence to invest.

Ensure a socially just transition.

The costs of climate change will hit the poor hardest. Energy costs eat up an increasing share of disposable income for many lower-income households, which will have a tough time paying for the home renovations or energy efficiency measures necessary to make Europe carbon-neutral. Government policies should lighten the burden and actively protect the most vulnerable people. Failing to do this could erode public support for the energy transition.

The European Investment Bank is the EU bank, owned by the Member States. In 2018, the EIB Group provided nearly **€64 billion** for investments in and outside Europe. We are the **world's largest multilateral borrower and lender**.

In November 2019, the European Investment Bank's board approved a new energy lending policy and underscored the Bank's efforts to promote climate action and environmental sustainability. The EU bank is committed to:

- Stop financial support for unabated fossil fuel energy projects by the end of 2021
- Focus its financing on clean energy innovation, energy efficiency and renewables
- Unlock €1 trillion of EIB Group investment in climate action and environmental sustainability by 2030
- Align all its financing activities with the goals of the Paris Agreement from the end of 2020