

## Policy paths for tackling climate change

### STRONGER ACTION NEEDED TO MEET MITIGATION GOALS

- ▶ **More needs to be done** to reduce greenhouse-gas emissions if the global rise in temperatures is to be kept to below 2°C.
- ▶ **Stronger action at the global, national and local levels** is needed, backed by robust reviews to monitor progress and highlight shortcomings.
- ▶ **Carbon markets** need continued reforms to make them work more effectively.
- ▶ **Investment and other policy approaches** can do more to promote innovative technologies.
- ▶ **Non-energy emissions** must also be increasingly targeted, for example in agriculture, forestry and waste.

#### What's the issue?

The world is now almost certainly facing a rise in global temperatures due to human activities. To limit this increase to 2°C or less above pre-industrial levels, stronger action is needed now to cut emissions of greenhouse gases (GHGs), with the aim of reaching zero net emissions by 2100. The long-term nature of this challenge may tempt countries to delay – or continue to delay – taking action. That would be a mistake. Because CO<sub>2</sub> lingers in the atmosphere for centuries or even longer, the sooner we curb emissions, the better our chances of limiting the temperature rise.

“Countries are running out of time to make the policy adjustments needed to meet their targets and keep alive the long-term goal of limiting the temperature rise to 2°C,” according to OECD Environment Director Simon Upton. “Governments need to construct a policy pathway that will lead to zero net carbon emissions by the end of the century.”

Energy – which includes power generation and transport – typically accounts for more than 70% of emissions in OECD countries. That makes it a priority area for action. But other areas, too, must contribute to reducing emissions, including agriculture, forestry, industry, transport and waste. In particular, protecting forests not only reduces emissions but also helps to remove CO<sub>2</sub> from the atmosphere.



See: [www.oecd.org/newsroom/photosandvideos/](http://www.oecd.org/newsroom/photosandvideos/)

Fighting climate change will require political will and lifestyle changes.

#### Why is this important?

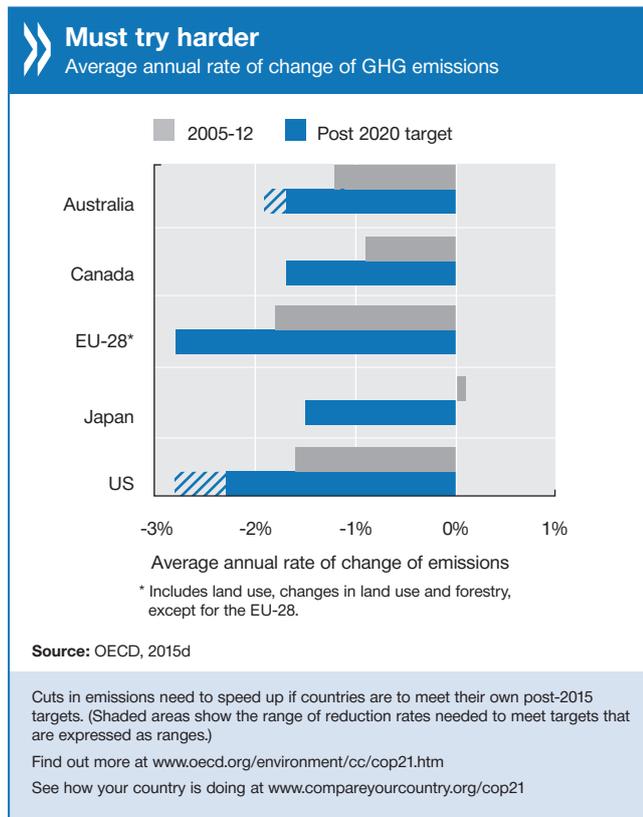
There are reasons to be concerned about progress so far in cutting emissions. On the plus side, some progress has been made in delinking economic activity and GHG emissions – each unit of GDP now produces fewer emissions than before. This proves that economic growth and lower emissions are not irreconcilable. Some progress has also been made in lowering carbon emissions in energy production, although coal still accounts for around 45% of electricity production across OECD and partner economies.

However, aggregate emissions of GHGs have been rising since the 1990s. At current rates, the world will use up its carbon “budget” by around 2040, making it highly unlikely to limit the rise in temperatures to 2°C or less. So, while progress is being made, it is still not enough.

#### What should policy makers do?

There is no single solution to cutting emissions, although many of the current and potential policy approaches can be grouped under just a few headings. The first is the need for action at the global, national and local levels, backed by the setting – and robust monitoring – of targets and goals. The second is carbon pricing, with the aim of ensuring the price of fossil fuels fully reflects their environmental impact. And the third is the development of cleaner energy sources and energy efficient technologies as well as greater efforts to regulate emissions from sectors like agriculture and waste.

**Take action globally, nationally and locally:** In advance of the COP21 climate change conference at the end of 2015, more than 150 countries submitted their targets and goals for reducing GHG emissions. Regrettably, many are not on course to meet their targets when compared with historical rates of



emissions reduction. To get on track, urgent and significant cuts in emissions are needed. Clearly, setting targets alone is not enough. A robust review process must ensure that, firstly, targets are ambitious enough to meet climate change goals, and, secondly, countries are doing enough to meet those targets. Where countries are not on track, adjustments will be needed.

At the national level, many countries have set out national climate change plans to complement their international commitments. Such programmes need to be supported by efforts to ensure that all aspects of policy are aligned towards ending GHG emissions.

At the local level, important mitigation efforts are already being made by cities and regions. For example, Copenhagen has set itself the target of phasing out GHG emissions by 2025. Many regional governments and cities are also working with non-state actors, such as civil society and businesses, on mitigation efforts under the umbrella of the “Solutions Agenda,” launched at COP20 in Peru.

**Improve carbon pricing:** The aim of carbon pricing is to ensure that prices better reflect the cost of emitting GHGs into the environment. As market forces are brought into play, users have an incentive to cut their carbon consumption; there is also an incentive for businesses to invest more in low-carbon technologies. Such pricing can take many forms, including energy taxes and carbon taxes (or taxes on each unit of CO<sub>2</sub>

emitted). While such taxes have been introduced in a number of countries, they are generally too low and contain too many exemptions.

Similarly, there are issues with emissions-trading systems, which also aim to create a functioning carbon market. In such systems, countries – and increasingly sub-national regions and businesses – are allowed to emit GHGs up to a certain level. Where they fail to use their full allowance, they can sell any leftover units. However, reforms are needed to these systems to raise the price of allowances, which are still too low, and to ensure a much wider range of emissions is covered.

Indeed, attempts to better price carbon are often undermined by subsidies and policies that artificially lower the cost of fossil fuels. Some countries, such as Indonesia and India, have taken ambitious actions to eliminate or reduce such subsidies. If carbon pricing is to be effective, others need to follow suit.

**Cut GHG emissions:** Despite the need to develop innovative technologies to counter climate change, public investment in research and development remains relatively low. However, policy can also encourage such technologies in other ways. For example, governments may pay a premium to producers of energy from renewable sources. In addition, regulatory policy – such as fuel economy standards for vehicles – is also widely used, often with twin goals, such as reducing carbon emissions and reducing air pollution.

Other important policy areas in climate change mitigation include reducing the destruction of forests; further reducing the emissions intensity of agriculture; and reducing GHG emissions from industrial processes and waste. In this latter area, there is significant potential for mitigation through measures covering the entire life cycle of materials – from production to consumption.



## Sources

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