



Eight Reasons Not to Give Up Hope — And Take Climate Action

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GENEVA (IDN) — Although once again the scientific community has made clear this week that we are not doing enough to limit global warming to the crucial 1.5°C threshold, the findings of the latest Intergovernmental Panel of Experts on Climate Change report, are not all doom, and gloom.

We've taken a careful look at the influential report, beyond the headlines, and UN News has identified eight positive takeaways from the IPCC report on mitigation, which we hope will reduce feelings of climate anxiety.

1. Electric vehicles are on the rise

The use of electric vehicles is accelerating around the world, and powered by low-carbon electricity, they are reducing greenhouse gas emissions from land-based transport.

According to IPCC scientist Sudarmanto Budy Nugroho, investments in active transport infrastructure, combined with the deployment of electric micro-mobility - for example e-scooters and e-bikes - can further support greenhouse gas emissions reductions.

“This can also make mobility more accessible to all, including marginalised populations”, the expert said.

The IPCC highlights that sustainable biofuel can offer additional mitigation benefits in land-based transport, in the short and medium term.

Many mitigation strategies in the transport sector would have various co-benefits, including air quality improvements, health benefits, equitable access to transportation services, reduced congestion, and reduced material demand.

2. The cost is going down for low-emission technologies

According to the report, the unit costs of several low-emission technologies have fallen continuously since 2010.

The cost of “key technologies such as solar, wind and electric vehicles, have come down greatly. This can help us reduce emissions a lot. There exist options in all sectors to reduce emissions by half, by 2030”, author Masahiro Sugiyama explains.

To be more exact, from 2010 to 2019, solar energy costs have decreased 85 per cent, wind energy 55 per cent, and lithium-ion batteries, 85 per cent.

Innovation policy packages have enabled these cost reductions and supported global adoption.

The scientists argue that both tailored and comprehensive policies addressing innovation systems, have helped overcome the distributional, environmental, and social impacts potentially associated with global diffusion of low-emission technologies.

3. Mitigation Laws are expanding

The expert authors of the report say, with high confidence, that there has been a ‘consistent’ expansion of policies and laws addressing climate mitigation since the IPCC published its Fifth Assessment Report in 2014.

“This has led to the avoidance of emissions that would otherwise have occurred and increased investment in (low-carbon) technologies and infrastructure”, the report says.

By 2020, over 20% of global greenhouse gas emissions were covered by carbon taxes or emissions trading systems, although coverage and prices have been insufficient to achieve deep reductions.

Moreover, by 2020, there were ‘direct’ climate laws focused primarily on reductions in 56 countries covering 53% of global emissions.

In many countries, policies have enhanced energy efficiency, reduced rates of deforestation and accelerated technology deployment, leading to the avoidance of - and in some cases reduced or removed - emissions

However, policy coverage of emissions and finance are still uneven across sectors, they warn.

Scientists also highlight how the Kyoto Protocol, which in 1997 committed industrialized countries and economies to reduce greenhouse emissions, have led to reduced emissions in some countries and has been instrumental in building national and international capacity for reporting and accounting emissions.

Likewise, the 2015 Paris Agreement, with near universal participation, has led to policy development and target-setting at national and sub-national levels, in particular in relation to mitigation, as well as enhanced transparency of climate action and support.

“While a lot of the decarbonization policies that have been put in place around the world have had a positive impact on innovation, technology, deployment, and environmental outcomes, in some cases, they have also had a short-term negative impact on vulnerable groups, low-income groups, and in some cases that they have favoured, for example, large firms over small firms.

“We have also found that this is something that can be avoided by designing policies in a different way or putting in place complementary policies”, explains expert Laura Diaz Anadon.

4. It’s still possible to change industrial emissions

The experts say that net-zero carbon emissions from the industrial sector, while challenging on a significant scale, are still possible.

“Reducing industry emissions will entail coordinated action throughout value chains to promote all mitigation options, including demand management, energy and materials efficiency, circular material flows, as well as abatement technologies and transformational changes in production processes”, the report explains.

To progress towards net zero, industries can take advantage of the new production processes using renewable energies, green hydrogen, biofuels and controlling carbon management.

5. Cities present a big opportunity for climate action

The report underlines that urban areas provide key opportunities for climate mitigation.

“All cities can contribute towards a net zero future by integrating sectors, strategies and innovations, whether established, growing or emerging cities. The way urban areas continue to be planned, their interactions with the energy system and demands on materials, determine multiple opportunities with benefits for people and the planet”, expert Siir Kilkis explains.

Some effective urban measures, include more walkable areas and greater renewable energy penetration.

“All of this is possible while cities improve air quality, increase job opportunities, expand urban green and blue infrastructure, and provide other co-benefits for sustainable development around the world as well as climate adaptation”, the IPCC author adds.

The mitigation efforts in cities have to concentrate on:

- Reducing or changing energy and material consumption
- Greening electrification
- Enhancing carbon uptake and storage in the urban environment.

Another point of action has to do with the building sector. In some global scenarios, existing buildings, if retrofitted – and buildings yet to be built - are projected to approach net zero greenhouse gas emissions in 2050, if policy packages, which combine ambitious sufficiency, efficiency, and renewable energy measures, are effectively implemented and barriers to decarbonisation are removed.

“Mitigation action in the building sector brings health gains through improved indoor air quality and thermal comfort, as well as reducing financial stress in all world regions.

Overall, decarbonizing the building stock contributes to human well-being”, author Yamina Saheb highlights.

6. Economic measures are being deployed

The report notes that many regulatory and economic instruments have already been deployed successfully.

“These instruments could support deep emissions reductions and stimulate innovation if scaled up and applied more widely... Economy-wide packages, consistent with national circumstances, can meet short-term economic goals while reducing emissions and shifting development pathways towards sustainability”, the authors explain.

According to the data, total tracked financial flows for climate mitigation and adaptation increased by up to 60% between 2013-14 and 2019-20, but average growth has slowed since 2018.

These financial flows remained heavily focused on mitigation, are uneven, and have developed heterogeneously across regions and sectors.

However, the authors note that economic instruments have been effective in reducing emissions, complemented by regulatory instruments mainly at the national and also sub-national and regional level.

“Where implemented, carbon pricing instruments have incentivized low-cost emissions reduction measures...Equity and distributional impacts of such carbon pricing instruments can be addressed by using revenue from carbon taxes or emissions trading to support low-income households, among other approaches”, they add.

They highlight with high confidence that removing fossil fuel subsidies would reduce emissions, improve public revenue and macroeconomic performance, and yield other environmental and sustainable development benefits

“Fossil fuel subsidy removal is projected by various studies to reduce global CO₂ emissions by 1-4%, and Greenhouse gas emissions by up to 10% by 2030, varying across regions”, the report says.

7. People care, and they're engaged

The IPCC authors recognise in their assessment that many citizens around the world care about nature, and environmental protection, and are motivated to engage in climate action.

“Yet they may face barriers to act, which can be removed by actions, for example, by industry, businesses, and governments”, explains author Linda Steg.

She adds that many governments are currently struggling with the question of whether people will really support some radical changes.

“This assessment report shows that public acceptability is higher when cost and benefits are distributed in a fair way, and when fair and transparent decision procedures have been followed”, the expert outlines.

8. CO₂ removal is now essential to reach our goals – but its complicated...

The report shows that getting to net-zero greenhouse emissions requires more than emissions

reductions, and involves an option called carbon dioxide removal (CDR).

“It involves removing carbon dioxide from the atmosphere and storing it on land, in the ground or in the ocean”, explains author Masahiro Sugiyama.

The impacts, risks and co-benefits of CDR deployment for ecosystems, biodiversity and people, will be highly variable depending on the method, site-specific context, implementation and scale.

However, reforestation, improved forest management, soil carbon sequestration, peatland restoration and blue carbon management, are examples of methods that can enhance biodiversity and ecosystem functions, employment and local livelihoods, depending on context.

Likewise, ocean fertilisation, if implemented, could lead to nutrient redistribution, restructuring of ecosystems, enhanced oxygen consumption and acidification in deeper waters.

Moreover, in addition to deep, rapid, and sustained emission reductions, carbon dioxide removal can fulfil three different complementary roles globally or at country level:

1. Lowering net CO₂ or net greenhouse emissions in the near-term.
2. Counterbalancing ‘hard-to-abate’ residual emissions (e.g., emissions from agriculture, aviation, shipping, industrial processes) in order to help reach net zero in the mid-term.
3. Achieving net negative CO₂ or GHG emissions in the long-term, if deployed at levels exceeding annual residual emissions.

“Well-designed land-based mitigation options to remove carbon can also benefit biodiversity and ecosystems, help us adapt to climate change, secure livelihoods, improve food and water security. Options include protecting and restoring natural ecosystems such as forests, peatlands, wetlands, savannas, and grasslands”, highlights IPCC author Mercedes Bustamante.

Of course, much more remains to be done.

Unless governments everywhere reassess their energy policies, the progress achieved won't be enough to keep our planet out of harm's way. The UN Secretary-General outlines it in a video message.