

IEAGHG Information Paper: 2017-IP31; Mission 2020 – A new global strategy to "rapidly" reduce carbon emissions

A new global initiative called Mission 2020 has been launched by Christiana Figueres, the former Executive Secretary of the UNFCCC, who oversaw the signing of the Paris Agreement in November 2015. The aim of Mission 2020 is to bring "new urgency" to the "global climate conversation" with a call to begin "rapidly declining" global greenhouse gas emissions by 2020. See http://www.mission2020.global/ for more details.

Mission 2020's premise is that the Paris Agreement gave the world a roadmap to address climate change once and for all. 194 nations universally adopted this agreement, committing to holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C

Mission 2020 states that, whilst global CO_2 emissions have remained stable for the last three years, it is felt that bending the curve of emissions downwards by 2020 is the only way to limit global warming and ensure that the Sustainable Development Goals remain within our reach. It will also pave the way to delivering a just transition to net zero emissions by 2050.

Mission 2020's case for this action is set out in a detailed report called: '2020 The Climate Turning Point#, which can be found at:

http://www.mission2020.global/2020%20The%20Climate%20Turning%20Point.pdf.

The Mission 2020 Initiative was launched in April 2017, but details of the proposed actions were recently published in the Journal Nature, see:

https://www.nature.com/news/three-years-to-safeguard-our-climate-1.22201.

The paper sets out a six-point plan to for the actions the world needs to undertake by 2020:

- 1. **Energy.** Renewables make up at least 30% of the world's electricity supply up from 23.7% in 2015. No coal-fired power plants are approved beyond 2020, and all existing ones are being retired.
- 2. **Infrastructure.** Cities and states have initiated action plans to fully decarbonize buildings and infrastructures by 2050, with funding of \$300 billion annually. Cities are upgrading at least 3% of their building stock to zero- or near-zero emissions structures each year.
- 3. **Transport.** Electric vehicles make up at least 15% of new car sales globally, a major increase from the almost 1% market share that battery-powered and plug-in hybrid vehicles now claim. Also required are commitments for a doubling of mass-transit utilization in cities, a 20% increase in fuel efficiencies for heavy-duty vehicles and a 20% decrease in greenhouse-gas emissions from aviation per kilometre travelled.
- 4. Land. Land-use policies are enacted that reduce forest destruction and shift to reforestation and afforestation efforts. Current net emissions from deforestation and land-use changes from about 12% of the global total. If these can be cut to zero next decade, and afforestation and reforestation can instead be used to create a carbon sink by 2030, it will help to push total net global emissions to zero, while supporting water supplies and other benefits. Sustainable



agricultural practices can reduce emissions and increase CO_2 sequestration in healthy, well-managed soils.

- 5. **Industry.** Heavy industry is developing and publishing plans for increasing efficiencies and cutting emissions, with a goal of halving emissions well before 2050. Carbon-intensive industries such as iron and steel, cement, chemicals, and oil and gas currently emit more than one-fifth of the world's CO₂, excluding their electricity and heat demands.
- 6. **Finance.** The financial sector has rethought how it deploys capital and is mobilizing at least \$1 trillion a year for climate action. Most will come from the private sector. Governments, private banks and lenders such as the World Bank need to issue many more 'green bonds' to finance climate-mitigation efforts. This would create an annual market that, by 2020, processes more than 10 times the \$81 billion of bonds issued in 2016.

The authors of the paper suggest these goals may be idealistic at best, unrealistic at worst. However, we are in the age of exponential transformation they think (maybe they should say hope) that such a focus will unleash ingenuity.

John Gale 29/06/2017