CAN EUROPE'S POSITION ON LONG-TERM CLIMATE TARGETS FOR THE EU.

September 2018

Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 150 member organisations from 35 European countries, representing over 1.700 NGOs and more than 40 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

EXECUTIVE SUMMARY

The 150+ CAN Europe membership agreed by consensus, based on the social and economic opportunities of the zero-carbon transition and the growing evidence of extreme impacts of climate change, to support the Paris Agreement's call to limit temperature rise to 1.5°C as the only acceptable threshold to avert dangerous climate change. To achieve this, based on recent science and the equity principles that underpin the Paris Agreement, the European Union would need to reduce its greenhouse gas emissions to net zero by 2040, and adapt its intermediary and sectoral targets accordingly.

CAN Europe calls for the European Union and its Member States to:

- **recognise that the only acceptable temperature target is to keep temperature rise below 1.5°C, which means that global cumulative greenhouse gas emissions need to be substantially reduced so that the world can be fully decarbonised by the middle of this century;**
- **accept that Europe has both the responsibility and the capacity to act faster than most other countries in the world;**
- **adopt a target to achieve net-zero greenhouse gas emissions by 2040;**
- **start immediately with the revision of its inadequate at least 40% reduction target for 2030 in line with the above;**
- **take action to rapidly increase the rate of emission reductions in all sectors of the economy;**
- **invest in protecting biodiversity in order to substantially reduce emissions from agriculture and forestry and increase the carbon removal capacity of natural ecosystems.**

Our world is warming and the impacts of this are more and more visible, also in Europe. The recent heat waves, droughts, forest fires, flooding, failed crops, and so on are all features we will need to cope with more and more in the coming years[1]. And while the damage in Europe is significant and devastating, we witness even more disastrous impacts in many vulnerable countries and communities around the world, who on top have most often hardly contributed to the climate change problem.

It should be clear that if countries want to avoid the most dangerous impacts of climate change, the lower end of the long-term objectives of the Paris Agreement should be what we should aim for. In Paris, 196 countries committed to both keep global average temperature rise well below 2°C above pre-industrial levels, as well as to pursue efforts to limit temperature increase to 1.5°C, while recognizing that a 1.5°C limit would significantly reduce the risks and impacts of climate change[2].

From the impacts that we are witnessing with the current +1°C warming[3], CAN Europe concludes that we have already gone beyond the option to keep our planet safe and that even with 1.5°C of warming, the world is going to experience unavoidable impacts such as extreme weather events and rising sea levels; and will come close or even cross tipping points leading to irreversible damages and devastating consequences.

1 see among many others: Will Steffen e.a. Trajectories of the Earth System in the Anthropocene. In: PNAS, August 2018. http://www.pnas.org/content/early/2018/07/31/1810141115

2 Article 2 of the Paris Agreement of December 2015. https://unfccc.int/sites/default/files/english_paris_agreement.pdf

3 World Meteorological Organisation. WMO Statement on the State of the Global Climate in 2017. March 2018. https://library.wmo.int/index.php?lvl=notice_display&id=20220#.W3hqLrixVPZ

According to scientific assessments, with present day warming of around 1°C, the 2018 heatwave would happen every four to five years. Climate models project that if the planet warms by 1.5°C, such heat waves would occur in 4 out of 10 summers, and 6 out of 10, if it warms by 2°C. There is growing scientific evidence that the difference in terms of impacts between 1.5°C and 2°C is substantial. For example, an extra 0.5°C could see global sea levels rise 10cm more by 2100 affecting an additional 10 million people; would double the number of people expected to suffer from water shortages; and tropical heat waves would last up to a month longer.[4] It is very likely that this will the message that will come out of the IPCC's Special Report 'Global Warming of 1.5°C'[5]. Hence countries should accept that their collective ambition to limit temperature rise to 1.5°C is the only acceptable target to work towards.

It is also likely that the new IPCC report will show how the world can ensure that global average temperature rise can be limited to 1.5°C. For this, all countries will need to substantially and urgently increase their current inadequate levels of individual and collective action. The EU will need to take its fair share of the action needed, both in terms of reducing greenhouse gas emissions and increasing carbon removals at home, but also by providing financial and other support to poor and vulnerable countries. This will enable them to increase emission reductions and removals, as well as help them to adapt to unavoidable climate impacts and to recover from regrettable loss and damages that are already happening.

An assessment of 1.5°C compatible emission pathways indicates that, in order to stay below 1.5°C warming, global CO_2 emissions need to be at net-zero before 2050, and global greenhouse gas emissions would need to reach net zero soon thereafter.

Both the United Nations Framework Convention on Climate Change and the Paris Agreement emphasis the need for countries to act faster based on their historic responsibilities for greenhouse gas emissions and their economic capabilities to act. It is clear that the EU has both greater than average historic emissions and a greater than average GDP/capita, and so it should accept that it needs to act faster than others. Luckily the EU also has an abundant potential to act fast.

Hence, CAN Europe calls upon the EU to act fast and accept a target to achieve net-zero greenhouse gas emissions by 2040.

To achieve the net-zero target the EU will need a steep reduction in greenhouse gas emissions from all sectors. This will require a very rapid transition to a 100% renewable energy system, a fast phase-out of the use of fossil fuels, and decisive action to reduce emissions from land use, land use change and forestry, while increasing the capacity of our forests, wetlands,

4 For an overview of scientific evidence, see the Climate Analytics fact page: http://climateanalytics.org/briefings/1-5c-key-facts.html

5 The report is in its final stages of development. It should be adopted by the IPCC's General Assembly early October and is scheduled to be released on October 8th.

grasslands and farmlands to remove carbon from the atmosphere, through much greater efforts to conserve these ecosystems, and where necessary restore them and enhance their natural carbon removal capacity through ecosystem and forest landscape restoration. Furthermore, to avoid the most dangerous impacts of climate change, we also need to strongly invest in adapting our lifestyles to levels of consumption that our planet can sustain, in particular in the fields of transport, buildings and food consumption, as well as fully support the further development of the circular economy.

The proposed solutions offer multiple benefits in terms of economic development, employment, health improvement, biodiversity conservation, better use of raw materials, improved soil and water management and access to energy systems. In the energy sector for instance, the cost of renewable energy is comparable or lower than the generation cost of fossil and nuclear energy sources. Similarly investments in energy savings, storage and electrification all offer economic opportunities[6].

As the latest New Climate Economy Report states: *"The next 10-15 years will be a unique 'use it or lose it' moment in world's economic history, given the scale and nature of expected infrastructure investments, and the next 2-3 years will be the critical window when many of the policy and investment decisions that shape this period will be taken. EU needs to be sure to show the way, by doing what it takes to built a truly sustainable, climate resilient economy."*[7]

Taking action now will limit the economic cost that is linked to the impacts of climate change. In the EU alone, climate-related economic losses amounted up to 11.6 billion euro in 2015[8]. Furthermore, the economic costs for the EU would run up to €120 billion per year under a 2°C scenario, and up to €200 billion per year under 3°C[9]. And the costs in human suffering and ecosystem destruction outside the EU, and in particular in the most vulnerable countries, while being too easily ignored, will go far beyond what we will be witnessing in the EU itself.

While the zero-carbon transition will bring jobs and development, the benefits will differ across sectors and regions. It is imperative that governments at all levels ensure the transition will be fair and just, taking into account the needs of workers and vulnerable communities so as to ensure the transition will provide a better life for all. This also means governments need to engage and not shy away from making necessary choices and setting targets and policies that go against certain corporate interests. Governments need to integrate a holistic approach and long-term perspective in their actions.

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6 See: OECD. Investing in Climate, Investing in Growth. May 2017. http://www.oecd.org/environment/investing-in-climate-investing-in-growth-9789264273528-en.htm

7 Global Commission on the Economy and Climate: Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times. 2018. https://newclimateeconomy.report/2018

8 Eurostat. Sustainable Development in the European Union. Monitoring report on progress towards the SDGs in an EU context. 2017 Edition. November 2017. http://ec.europa.eu/eurostat/documents/3217494/8461633/KS-04-17-780-EN-N.pdf/f7694981-6190-46fb-99d6-d092ce04083f

9 EEA. Climate Change, Impacts and Vulnerability in Europe 2016. January 2017. https://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016

To achieve the rapid full decarbonisation needed to stay below 1.5°C, the EU will need to set clear long-term objectives for emission reductions and for carbon removals, but it will also be decisive to increase action in the short-term, including short-term actions to phase out fossil fuels, a revision of the 2030 Paris pledges (Nationally Determined Contributions - NDCs), and a drastic shift in financial flows from dirty fossil fuel subsidies to investments in renewable energy and energy efficiency alternatives, and to enable a just transition towards a clean economy by providing maximum support to workers and vulnerable citizens and communities.

CAN
CLIMATE ACTION NETWORK
Europe

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CAN Europe template

Public consultation on draft EU Long term strategy

List of background documents underlining CAN Europe input to the public consultation on the EU's long term strategy

Long term greenhouse gas emissions reductions

- CAN Europe key priorities for the new EU long term climate strategy http://www.caneurope.org/docman/energy-union-governance/3355-can-europe-briefing-paper-a-new-eu-long-term-climate-strategy/file
- Letter of 14 EU Member States and members of the Green Growth Group: *"This new strategy should be based on the latest available science, especially the next special IPCC report on 1.5°C. To inform the discussion, the proposal should consider several pathways for reducing GHG emissions towards carbon neutrality in compliance with the long-term objectives of the Paris Agreement, including a 1.5°C scenario and at least one pathway towards net zero GHG emissions in the EU by 2050 followed by negative emissions thereafter. The proposal should examine, inter alia, the consistency of the current European GHG emission reduction target of at least 40% in 2030 compared to 1990 with a trajectory for the different long-term pathways considered, taking into account the principles of equity as well as cost effectiveness."* https://www.ecologique-solidaire.gouv.fr/sites/default/files/2018.06.25_statement_ggg_climat.pdf
- Joeri Rogelj, Alexander Popp et al. (2018). Scenarios towards limiting global mean temperature increase below 1.5 °C https://www.nature.com/articles/s41558-018-0091-3
- Climate Analytics briefing on "Differential climate impacts for policy-relevant limits to global warming: The case of 1.5°C and 2°C" http://climateanalytics.org/briefings/for-most-vulnerable-countries-1-5c-warming-limit-is-critical-above-it-climate-impacts-rise-rapidly.html

Consumers

Housing and offices

- Climate Action Tracker (2017). A policy spotlight on energy efficiency in appliances and lights could see big climate gains: analysis. https://climateactiontracker.org/publications/policy-spotlight-energy-efficiency-appliances-and-lights-could-see-big-climate-gains-analysis/

Sectors

Energy

- RAP (2018). Destination Paris: Why the EU's climate policy will derail without energy efficiency https://www.raponline.org/knowledge-center/destination-paris-why-eus-climate-policy-will-derail-without-energy-efficiency/
- EnergyWatchGroup (2017). Global Energy System based on 100% renewable energy - power sector

http://energywatchgroup.org/wp-content/uploads/2017/11/Full-Study-100-Renewable-Energy-Worldwide-Power-Sector.pdf
- RAP (2018). Energy Efficiency First: A Key Principle for Energy Union Governance http://www.raponline.org/wp-content/uploads/2018/04/rap-bayer-key-principle-for-energy-union-governance-2018-april-17.pdf

The role of Forests and Land Use

- Fern (2018). Protect and Restore: how forests can help the EU tackle climate change https://fern.org/ProtectAndRestore
- H. Bottcher et al. 2018). Forest Vision Germany: Description of methodology, assumptions and results. https://www.greenpeace.de/files/publications/20180228-greenpeace-oekoinstitut-forest-vision-methods-results.pdf
- Harper, A. et al. (2018). Land use emissions play a critical role in land-based mitigation for Paris climate talks. *Nature Communications* 9 https://www.nature.com/articles/s41467-018-05340-zource

Actors

- Statement of the Higher Ambition Coalition multi-stakeholder group calling for an alignment of the EU long term strategy with the 1.5°C target of the Paris Agreement http://www.caneurope.org/docman/climate-energy-targets/3356-statement-of-the-coalition-for-higher-ambition/file

Adaptation

- CAN Europe (2018). Position on adaptation to climate change in Europe. http://www.caneurope.org/docman/climate-energy-targets/3362-can-europe-position-on-eu-adaptation/file
- UNEP (2018). Principles in Practice: Integrating Adaptation into Long-term Strategies. http://adaptation-undp.org/principles-practice-integrating-adaptation-long-term-strategies-0

Specific sectoral questions

Reducing industrial greenhouse emissions

- Climate Action Tracker (2017). Manufacturing a low-carbon society: How can we reduce emissions from cement and steel? https://climateactiontracker.org/documents/60/CAT_2017-10-18_DecarbIndustry_CATAnalysis.pdf

Reducing greenhouse emissions from transport

- Climate Action Tracker (2018). Potential reductions in freight transport emissions in the EU. https://climateactiontracker.org/media/images/CAT_H.TransportMemo_PR_Graphic_2018.05.18.original.png
- Electrification potential of trucks. Transport&Environment (2017). Roadmap to climate-friendly land freight and buses in Europe. https://www.transportenvironment.org/publications/roadmap-climate-friendly-land-freight-and-buses-europe
- Transport&Environment (2017). Electrofuels what role in EU transport decarbonisation? https://www.transportenvironment.org/sites/te/files/publications/2017_11_Briefing_electrofuels_final.pdf
- DN VGL - DNV GL Low Carbon Shipping Towards 2050. https://www.dnvgl.com/publications/low-carbon-shipping-towards-2050-93579
- EEA, EASA (2016). European aviation environmental Report 2016. https://publications.europa.eu/en/publication-detail/-/publication/796e6041-fc83-11e5-b713-01aa75ed71a1/language-en
- Electrek (2018). A new fleet of all-electric ferries with massive battery packs is going into production. https://electrek.co/2018/03/05/all-electric-ferries-battery-packs/

Role of CO2 removal

- Fern (2018). Six problems with BECCS https://fern.org/BECCSbriefing
- Harper, A. et al. (2018). Land use emissions play a critical role in land-based mitigation for Paris climate talks. *Nature Communications* 9 https://www.nature.com/articles/s41467-018-05340-zource
- EASAC (2018). Negative emissions technologies: What role in meeting Paris Agreement targets? https://easac.eu/fileadmin/PDF_s/reports_statements/Negative_Carbon/EASAC_Report_on_Negative_Emission_Technologies.pdf
- EASAC Multi-functionality and sustainability in the European Union's forests https://www.easac.eu/fileadmin/PDF_s/reports_statements/Forests/EASAC_Forests_web_complete.pdf
- Fern (2018). Protect and Restore: how forests can help the EU tackle climate change https://fern.org/ProtectAndRestore
- Letter (2018) from 800 scientists to the EU Parliament regarding forest biomass https://www.euractiv.com/wp-content/uploads/sites/2/2018/01/Letter-of-Scientists-on-Use-of-Forest-Biomass-for-Bioenergy-January-12-2018.pdf
- Carbon Brief (2017). Biomass subsidies 'not fit for purpose', says Chatham House. https://www.carbonbrief.org/biomass-subsidies-not-fit-for-purpose-chatham-house
- The Finnish Climate Change Panel (2015). Climate impacts of forest use and carbon sink development. http://www.ilmastopaneeli.fi/uploads/selvitykset_lausunnot/Climate%20impacts%20of%20forest%20use%20and%20carbon%20sink%20development_Finnish%20Climate%20Change%20Panel_2015.pdf

- UK Forest Research Commission (2018). Carbon impacts of biomass consumed in the EU - Supplementary analysis and interpretation for the European Climate Foundation. https://europeanclimate.org/wp-content/uploads/2018/05/CIB-Summary-report-for-ECF-v10.5-May-20181.pdf
- FERN (2018). Covered in smoke: why burning biomass threatens European health. https://fern.org/report/biomassandhealth

Other

- Climate related economic losses amounted to EUR 11.6 billion in 2015: Eurostat. Sustainable Development in the European Union 2017. http://ec.europa.eu/eurostat/documents/3217494/8461633/KS-04-17-780-EN-N.pdf/f7694981-6190-46fb-99d6-d092ce04083f
- Total economic costs of a 2°C temperature rise to be around 120 billion euro per year. European Environment Agency; Climate change, impacts and vulnerability in Europe 2016. https://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016
- Review of previous energy and climate modelling: Delft (2014). Review of the Impact Assessment for a 2030 climate and energy policy framework. https://www.cedelft.eu/publicatie/review_of_the_impact_assessment_for_a_2030_climate_and_energy_policy_framework/1476
- Net generation capacity in GW of Solar energy in the 2020 forecast was projected to be 53 GW, while the 2016 reference scenario shows a net generation capacity of 136 GW in the 2020 forecast. That is a change in expectation of +155%. http://bruegel.org/2018/04/developing-the-eu-long-term-climate-strategy/
- Inflation of discount rates in previous Commission modelling, example buildings. The Commission currently use a discount rate of 10%. This is almost double the average rate used by national governments and regions. https://www.eceee.org/static/media/uploads/site-2/policy-areas/eceee_april18_infographbriefing_final.pdf