

## Background document:

### Questions and answers on the EU-China Leaders' Statement on Climate Change and Clean Energy (16 July 2018)

#### 1. What are the greenhouse gas emissions of the EU and China?

According to the *Trends in Global CO<sub>2</sub> Emissions 2017 Report*<sup>1</sup> by the European Commission's Joint Research Centre and the PBL Netherlands Environmental Assessment Agency, in 2016 China emitted 10.5 billion tonnes of CO<sub>2</sub> (29.3% of the global total 7.4 tonnes per capita, 0.5 tonnes per dollar of GDP), while the EU-28 emitted 3.4 billion tonnes (9.5% of the global total, 6.8 tonnes per capita, 0.2 tonnes per dollar of GDP).

In comparison, US CO<sub>2</sub> emissions in 2016 stood at 5 billion tonnes (14% of the global total, 15.6 tonnes per capita, 0.3 tonnes per dollar of GDP). Total global emissions of CO<sub>2</sub> in 2016 were calculated at 35.8 billion tonnes (emission data for other greenhouse gases is more difficult to calculate).

#### 2. What has been achieved so far?

EU-28 greenhouse gas emissions in 2016 were down by 23% compared to 1990 levels<sup>2</sup>, while the EU economy grew by over 50%. In China, CO<sub>2</sub> emissions per unit of the economy fell by more than half from 1990 to 2016<sup>3</sup>.

In absolute terms, however, because its economy grew massively in this period, China's CO<sub>2</sub> emissions rose from 2.3 billion tonnes in 1990 to 10.5 billion tonnes in 2016 – but they seem to have stabilised in recent years (see also point 4 below).

#### 3. What international commitments have been taken?

Under its Nationally Determined Contribution (NDC) to the Paris Agreement on climate change, the EU and its Member States have committed to a binding target of reducing greenhouse gas emissions by at least 40% by 2030 compared to 1990 levels.

Under its own NDC, China has determined its 2030 objectives as follows: (i) A peak in CO<sub>2</sub> emissions by 2030 and best efforts to reach this peak early; (ii) Reduce CO<sub>2</sub> emissions per GDP unit by 60-65% from 2005 levels; (iii) Increase the share of non-fossil fuels in primary energy consumption to around 20%; and (iv) Increase forest stock volume by around 4.5 billion cubic meters compared to 2005 levels. In addition, China has committed to a peak in emissions of other greenhouse gases (methane from energy activities, nitrous oxide from industry and croplands) by 2020.

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<sup>1</sup> See appendices in: [http://www.pbl.nl/sites/default/files/cms/publicaties/pbl-2017-trends-in-global-co2-and-total-greenhouse-gas-emissions-2017-report\\_2674.pdf](http://www.pbl.nl/sites/default/files/cms/publicaties/pbl-2017-trends-in-global-co2-and-total-greenhouse-gas-emissions-2017-report_2674.pdf) (Figures under point one above are rounded to one decimal)

<sup>2</sup> <http://www.consilium.europa.eu/en/press/press-releases/2017/11/16/joint-statement-of-the-estonian-presidency-and-the-european-commission-on-behalf-of-the-eu-at-cop23-un-climate-change-conference/pdf>

<sup>3</sup> See footnote 1

Achieving the Paris Agreement's long-term temperature goal (limiting the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit this rise to 1.5°C) will depend largely on the questions of when China's emissions will peak, at which level, and how quickly emissions reductions will take place thereafter.

#### **4. What is China doing to combat climate change?**

China's thirteenth five-year plan for climate change, issued in November 2016, sets a target of reducing CO<sub>2</sub> emissions per unit of GDP by 18% by the end of 2020 compared to 2015. This would allow China to surpass its commitment for 2020 under the Paris Agreement. In recent years, the Chinese government has implemented ambitious policies and measures to reduce pollution, increase energy efficiency and the use of renewable energy sources and peak the country's greenhouse gas emissions – including through low-carbon cities, and supporting low-carbon technologies. Targets for renewable energy supply and non-fossil fuel energy have been set, while, significantly, China also launched a nationwide emissions trading scheme in 2017, although its operational start will likely take several years.

From 2013 to 2015, the aforementioned *Trends in Global CO<sub>2</sub> Emissions* report shows a levelling off of China's CO<sub>2</sub> emissions at slightly above 10 billion tonnes per year. In January 2017, China announced the suspension of around 100 coal power plant projects that were under construction or planned. However, according to the International Energy Agency, in 2017 China's energy-related greenhouse gas emissions rose slightly, due to strong economic growth.<sup>4</sup>

#### **5. What has the 2015 EU-China climate change statement achieved?**

The previous EU-China climate change statement<sup>5</sup> of June 2015 contributed to the adoption of the Paris Agreement (PA) at COP21 six months later. The fact that two main players in the UN Framework Convention on Climate Change (UNFCCC) had agreed on key principles for the PA (common But differentiated responsibilities in the light of national capacities; balanced agreement on mitigation, adaptation, and other aspects; increasing ambition over time) contributed to its successful adoption. The strong wording in the statement on a low-carbon economy, society and development helped to create a constructive atmosphere in Paris and also sent an important signal to the private sector.

Outside the UNFCCC, the EU and China agreed to reinforce their climate dialogue in other relevant fora such as International Civil Aviation Organization, the International Maritime Organization and the Montreal Protocol. This dialogue has subsequently contributed to the adoption of three important international agreements in 2016, on aviation and shipping emissions and the global phase-down of hydrofluorocarbons (HFC).

Bilaterally, the 2015 EU-China statement laid the ground for a vast range of climate cooperation activities, most importantly on emissions trading systems (ETS). In recent years, the EU and China have built up intensive technical cooperation on ETS. Experiences gained in the EU will be useful for China's planned roll-out of a nationwide ETS, launched in 2017.

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<sup>4</sup> <https://www.iea.org/geco/emissions/>

<sup>5</sup> <http://www.consilium.europa.eu/en/press/press-releases/2015/06/29-eu-china-climate-statement/>

## 6. Why is EU-China cooperation on climate change crucial at this point?

According to a recent report from the International Energy Agency, global CO<sub>2</sub> emissions from energy rose again in 2017 after a three-year plateau. This shows the formidable challenge that remains to achieve a global peak and long-term reduction in emissions. The EU and China are crucial partners in addressing this challenge and channels of communication and cooperation are important.

The forthcoming special report of the International Panel on Climate Change (IPCC) on limiting global warming to 1.5°C (SR1.5)<sup>6</sup> and the COP24 climate conference in Katowice, Poland, in December will be important milestones in the global fight against climate change.

## 7. What is new in the 2018 statement?

At a crucial time for sustaining the global momentum of the Paris Agreement (PA), it is important that the EU and China have reconfirmed their own commitments and have decided to step up their co-operation to enhance implementation of the PA. The focus has moved from preparation of the agreement to its forceful implementation. Both sides commit to adopting the PA work programme (rulebook), the main expected outcome at COP24 in Katowice.

While the 2015 EU-China statement was negotiated and adopted by climate experts on the sidelines of the EU-China leaders' summit, its 2018 successor has moved to the core of the leaders' agenda. It will be adopted at President and Prime Minister level. Thematically, the new statement is broader, as it also covers clean energy.

The 2018 statement underlines the need for global low greenhouse gas emission development. This will only be possible through a clean, low-carbon energy transition. The statement goes 'beyond Paris' by making the link between global free trade and investment, a multilateral rule-based system and the full development of a low-emission economy.

Bilaterally, the statement strengthens EU-China climate cooperation in the coming years, through a new bilateral ETS project, enhanced expert cooperation on mid-century climate strategies and new working groups and expert dialogues in key energy and transport areas. Triangular climate cooperation with developing countries is also a further promising area for action.

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<sup>6</sup> The SR1.5 is prepared by the IPCC on invitation by COP21 (decision UNFCCC/1/CP.21). Its full title is "IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty" (decision IPCC/XLIV-4). For more information about the SR1.5, see <http://ipcc.ch/report/sr15/>.