renewable and low-carbon energy. For example, coal consumption in China has decreased every year since 2013 and, since the 2007 Medium
would lead to 2030 emission levels of
12.0
. However, total GHG emissions are likely to continue increasing until 2030, as China has not yet implemented sufficient policies
Among measures to implement enhanced actions on climate change, it also lists the
some of the actions on non-CO2
emission reductions by 2020 and 2030 of roughly 100 MtCO2. These numbers have not yet been included in the current assessment, but will be
A report by the Energy Research Institute illustrates a scenario of a high penetration of renewable energy, reaching a share of more than 50% of
electricity generation in 2030. While the research is a scenario analysis and not linked to any policies, the report still shows that renewable
We obtain energy-related emissions from the IEA Statistics and Balances (IEA, 2016b), a time series from 1990 until 2014.

It has been claimed that overall coal consumption in China may already have peaked in 2013, as it dropped 2.9% in 2014, by 3.7
In February 2015, the Ministry of Industry and Information Technology (MIIT) and the Finance Ministry released the 2015–2020 action plan on
China's National Action Plan on Climate Change mentions—in the context of the "reasonable control of the total coal consumption"—a target to
we estimate that if such deployment is indeed achieved by 2020 for solar PV and wind power, this could lead to further
We also look at the target to increase the forest stock, under limited data availability: Assuming a wood stock density of arou
biomass per cubic metre with a 50% carbon content, the increase in forest stock by 4.5
4.7% in 2016. This appears to be mainly due to two factors: a decline in growth in the construction and manufacturing sector as a result of the
It was recently emerged that this quota may be pushed back or lowered under pressure from car manufacturers (Reuters, 2017), as sales of electric
A report by the Energy Research Institute illustrates a scenario of a high penetration of renewable energy, reaching a share of more than 50% of
electricity generation in 2030. While the research is a scenario analysis and not linked to any policies, the report still shows that renewable
primary energy demand as in the current policy scenario of the WEO 2016 (from coal towards gas and renewables, which helps achieve the NDC targets on share of gas and non-fossil fuels). The second option is to allow for some flexibility in the total primary energy demand and assume that the coal reduction is accompanied by increasing efficiency, additionally to the already expected development of renewable energy and gas.

To calculate the reductions of HFC23, we assume that a direct correlation exists between HCFC22 and HFC23 in China. This means that we apply the reduction targets for HCFC22 from the NDC to HFC23 emissions in 2010. We compare this against the reference case—the current policy projections—where we use a historic value from the EDGAR emissions base for HFC23 and growth rates from US EPA for HCFC22, again assuming a linear correlation to HFC23. As mentioned above, the resulting reductions are not included in the current policy projections, given the lack of clearly defined policies or actions in the area.

We use Global Warming Potentials from the Second Assessment Report of the IPCC.

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