As described in the INDC, we calculate the emission reduction target on the basis of the emission levels for 2030 and 2013 as described in the National Communication to the UNFCCC. We calculated the 2020 pledge: In November 2013 Japan revised its earlier 2020 pledge, aiming to reduce its emissions by 3.8% below fiscal year 2005 levels of 2013.

Japan's Kyoto target (2008-2012) was at -6% relative to base year (1990) emission levels. This means that the Kyoto target restriction of the amount of greenhouse gases to be emitted was not very binding for Japan. The Kyoto target included a counterbalancing of the greenhouse gas emission via the Kyoto Protocol’s flexible mechanisms: joint implementation (JI) and the clean development mechanism (CDM). These mechanisms were designed to let Annex B countries (e.g. Japan) exceed their Kyoto Protocol emissions commitment as long as they provided international credits for lower-emitting countries. The Kyoto Protocol’s flexible mechanisms have not been used by Japan.

The Government of Japan (2011) reported that Japan’s annual average emissions in the period 2008-2012 were 1,150 MtCO2e, which is 5.6 MtCO2e (0.5%) above the target level. The share of low carbon options in the energy supply sector will increase only slightly from 37.5% before the Fukushima crisis (2009; IEA). With the policies it already has in place, Japan can almost reach its proposed INDC target without taking any further action. A 20% Reduction Against 2013 Levels Approximately a 10% Reduction Against 1990 Levels.

Before the recently initiated transformation of the electricity supply sector, Japan had already introduced effective policies in the area of energy efficiency. The apparent absence of consideration of a 2025 target by Japan is a significant issue. The Japans INDC for the post 2020 period includes an emissions reduction target of 26% below 2013 in 2020 pledge.

The Japan’s INDC’s 2016 pledges have been developed by using accounting rules “in line with approaches equivalent to those under the Kyoto Protocol”. However, it is important to note that the INDC target cannot be directly compared with the policy pathways shown: Whereas the calculations for the INDC target were conducted using IPCC 1996 guidelines, the pathways were mostly developed on the basis of IPCC 2006 guidelines. The upper end of the range of the scenarios reflects the increased complexity of the systems that are structured and managed and will increase their complexity. Such shifts take time and are uncertain.
The Japanese INDC submission contains a table with detailed a bottom–up calculation of the 2030 GHG emission reduction target. A total reduction of 26% below 2013 can only be obtained if we interpret the total projected removals from LULUCF activities as credits to be added to the overall allowances in 2030. Further clarity on accounting rules assumed to obtain these credits and on projected emissions from LULUCF activities is needed for the proper assessment of the uncertainties related to these numbers.

Japan's 2013 (revised 2014) First Biennial Report refers to an estimated 38 MtCO2e credit from forest management in 2020, equivalent to about 3.1% of 1990 industrial GHG emissions.

In its 2013 BUR Japan states: "In accordance with "Basic Plan for Forest and Forestry" and "Act on Special Measures concerning Advancement of Implementation of Forest Thinning, etc."(2013), the Government will aim to secure the upper forest absorption level agreed in COP17, 3.5% (average of the period from 2013 to 2020) and contribute to the forest sector in the future. In order to achieve these objectives, the Government will work on the following through a variety of policy approaches: appropriate forest development such as thinning and afforestation, the proper management and preservation of protected and other forests, promoting the use of timber and woody biomass, promoting forest development programs where people participate in, accelerated implementation of initiatives to establish sustainable forest management practices, and promoting measures to diffuse seeds and seedlings that grow well."

We explicitly do not mention a number here, please see the methodology section for an explanation.

Although Japan's electricity grid is different from Germany in that it is an isolated system, experience has shown that low levels of renewable energy penetration do not require large modifications to the system...