

Forecast by the Federal Republic of Germany on the use of flexible cooperation mechanisms for achieving national targets pursuant to Article 4 (3) of Directive 2009/28/EC

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1. Introduction

Pursuant to Article 4 (3) of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, Member States shall publish, six months before their national renewable energy action plans are due, a forecast on the use of the flexible cooperation mechanisms laid down in the Directive for achieving their targets.

Related to the date of publication of the national renewable energy action plan this forecast is to be published by the end of the year 2009 at the latest. This must be notified to the European Commission.

In their forecast pursuant to Article 4 (3) (a) Member States are to indicate their estimated excess production of energy from renewable sources compared to the indicative trajectory, which can be transferred to other Member States in accordance with Articles 6 to 11, and their estimated potential for joint projects until 2020. Moreover, pursuant to Article 4 (3) (b) information is to be provided on the estimated demand for energy from renewable sources to be satisfied by means other than domestic production until 2020. Member States are free to include supplementary information on cost, benefits and financing in accordance with Article 4 (3) (c).

2. Forecast on the use of flexible cooperation mechanisms for achieving national targets in Germany

2.1 Basic remarks

All information included in the present forecast is based on the Federal Government's current targets and instruments for renewable energies.

Germany welcomes the flexible cooperation mechanisms for target achievement laid down in Articles 6 to 12 of the Directive. They facilitate promotion of renewable energies in the European Union in line with the available potential, while at the same time retaining Member States' authority over their national support instruments.

Germany will reach its national target of an 18% share of energy from renewable sources in gross final energy consumption by 2020 by using its own potential and measures. Germany therefore does not have to rely on flexible cooperation mechanisms for target achievement.

Nevertheless, Germany is very interested in ensuring that the flexible cooperation mechanisms successfully help Member States to tap transboundary potential through joint activities.

According to current estimates for the development of renewables between 2010 and 2020 Germany will **probably exceed** its 18% target for 2020 and **reach a share of 18.7%** (see table under 3).

There is thus no **need for Germany to import renewable energies** up to 2020 to ensure target achievement pursuant to Article 4 (3) (b).

2.2 Estimated potential for the use of flexible cooperation mechanisms between 2011 and 2020 pursuant to Article 4 (3) (a)

According to current estimates for 2011 to 2020 Germany is likely to **achieve an excess production of renewable energy throughout this period compared to the indicative trajectory and reach a share of 18.7% in 2020, exceeding its target by 0.7 percentage points**. Excess production is expected to peak in 2012 and 2014 with about 7,000 ktoe and then decrease to about 1,400 ktoe by 2020. Estimates of the individual excess volumes from 2011 to 2020 have been included in the table under 3.

It would be possible for Germany pursuant to Article 4 (3) (a) to transfer the volumes exceeding the indicative trajectory for the years 2011 to 2019, as listed in the table, to other Member States through the various flexible cooperation mechanisms.

According to the forecast, Germany could thus probably transfer 0.7%, or about 1,400 ktoe, in 2020, which is the decisive year for target achievement, through the different flexible cooperation mechanisms.

One possible option for joint projects could be offshore wind parks in Germany. Two offshore wind parks with a capacity of 400 MW each could produce about 270 ktoe/a or about 0.13% of the expected gross final energy consumption in Germany in 2020.

How exactly such a transfer through the use of cooperation mechanisms could be carried out needs to be further reviewed, especially from a legal perspective.

It should be noted that this document only contains a preliminary forecast. To what extent excess volumes produced can be used for cooperation measures depends on a number of factors in addition to legal implementation. These include the actual development in the expansion of renewable energies in Germany compared to the national trajectory as to be indicated in the national action plan, and the concrete arrangements for counting cooperation measures towards national targets (in the short term for complying with the indicative trajectory, or in the long term with a view to reaching the 2020 target). Each specific case must therefore be evaluated and decided on individually.

2.3 Optional information on cost, benefits and financing in accordance with Article 4 (3) (c)

At present Germany does not include any information on cost and benefits and on financing for the use of the flexible cooperation mechanisms.

3. Overview of the expected development of renewable energies in Germany from 2010 to 2020 and potential for the use of flexible cooperation mechanisms

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
a) total gross final energy consumption, [ktoe/a]	224,638	227,218	225,054	222,890	220,726	218,562	216,398	213,747	211,096	208,444	205,793	203,142
b) gross final energy consumption from renewable energies, [ktoe/a]	12,981	23,254	24,385	25,513	26,644	27,775	28,939	30,199	32,643	33,889	35,134	37,953
c) share of renewable energies, [%]	5.8	10.2	10.8	11.4	12.1	12.7	13.4	14.1	15.5	16.3	17.1	18.7
d) minimum value for the indicative trajectory pursuant to Annex I B of the Directive, [%]	5.8		8.24	8.24	9.46	9.46	11.29	11.29	13.73	13.73		18.00
e) minimum value for the indicative trajectory, [ktoe/a]	12,981		18,455	18,455	20,778	20,778	24,282	24,282	28,801	28,801		36,566
f) excess volume of renewable energies compared to indicative trajectory [ktoe/a]			5,930	7,058	5,866	6,997	4,657	5,917	3,842	5,088		1,387

All figures given in the table are based on the latest estimates available. These are continuously reviewed and updated if necessary. All figures included in the table are therefore subject to change in the framework of upcoming reports on Directive 2009/28/EC or other reports, publications or decisions by Germany.

4. Annex

Methodological notes

Conversion factor used: 1 PJ= 23.885 ktoe or 1 ktoe= 41.868 TJ

In its estimates for the development of renewable energies between 2010 and 2020 Germany currently assumes that the “aviation clause” included in Article 5 (6) of the Directive will not apply to Germany.