

SUMMARY OF THE MEMBER STATE FORECAST DOCUMENTS

In accordance with Article 4(3) of Directive 2009/28/EC on the promotion of the use of energy from renewable energy sources, all Member States have submitted documents giving their forecast of the expected use they will make of the cooperation mechanisms contained in the Directive.

The cooperation mechanisms include "statistical transfers" where Member State governments can agree to exchange statistically a given quantity renewable energy produced. Another mechanism is the "joint project", where a specific new plant is identified and the output of the plant shared statistically between Member States. Joint projects concerning electricity production can also be established with third countries if a number of conditions are met, most importantly if the electricity is physically consumed in the EU. The intention behind the Directive's creation of these instruments is to allow Member States to achieve their targets in a cost effective manner, developing renewable energy sources wherever it is most efficient to do so.

The Commission has made the documents available to the public on its Transparency Platform, established in conformity with Article 24 of the Directive¹.

Key findings from the reports are:

- At least **ten Member States expect to have a surplus** in 2020 compared to their binding target for the share of renewable energy in their final energy consumption. This surplus could be available to transfer to another Member State. The quantity is estimated at around 5.5 Mtoe, or around 2% of the total renewables needed in 2020.
 - Spain and Germany forecast the largest surpluses in absolute terms, with 2.7 Mtoe and 1.4 Mtoe respectively.
- **Five Member States expect to have a deficit** in 2020 compared to their binding target for the share of renewable energy in their final energy consumption. These Member States thus require transfers from another Member State or third country, through the use of the Directive's cooperation mechanisms. The quantity amounts to around 2 Mtoe (<1% of the total renewable energy needed in 2020).
 - Italy forecasts the largest deficit in absolute terms, of 1.2 Mtoe.
- The net result of Member States' forecasts for 2020 renewable energy consumption is that **the EU should exceed its 20% target** by over 0.3 percentage points.
- The comparatively small quantity of energy expected to be subject to the cooperation mechanisms reflects most Member States' ability to develop domestic resources cost effectively and their desire to reap the **economic social and environmental benefits** of developing renewable energy sources nationally. However it remains the case that the

¹ http://ec.europa.eu/energy/renewables/transparency_platform/transparency_platform_en.htm

cooperation mechanisms created by the Directive are available should Member States wish to make further use of them and achieve their targets even more cost effectively.

- A total of 13 Member States also expect to exceed the *interim* targets that result from the trajectory contained in the Directive and thus have a surplus in the years before 2020. Three Member States anticipate a deficit during this period. Thus Member States may also use the cooperation mechanisms to meet their trajectory in the years before 2020. (It is worth recalling that the Directive requires Member States to *plan* to meet or exceed their trajectory).
- Many Member States point out that these trajectories and targets require strong, new national energy efficiency and infrastructure measures.

SUMMARY TABLE OF INTENDED USE OF COOPERATION MECHANISMS

ktoe	2011-2012	2013-2014	2015-2016	2017-2018	2020	2020 target
Austria	0	0	0	0	0	34%
Belgium	675	857	812	521	-279	deficit (12.3% Vs 13%)
Bulgaria	1-144	186-346	231-481	53-375	-140 to +289	surplus (18.7% Vs 16%)
Cyprus	0	0	0	0	0	13%
Czech Rep.	0	0	0	0	0	13%
Denmark	613-809	769-784	473-657	333-366	-337	deficit (28% Vs 30%)
Finland	0	0	0	0	0	38%
France	0	0	0	0	0	23%
Estonia	47-69	78-96	79-88	52-67	3	surplus (25.1% Vs 25%)
Germany	5930-7058	5866-6997	4657-5917	3842-5088	1387	surplus (18.7% Vs 18%)
Greece			70.9 ² (0.3%)	239.4 ² (1%)	488 ² (2%)	surplus (20% Vs 18%)
Hungary	0	0	0	0	0	13%
Ireland	251-259	255-272	403-430	138-148	0	16%
Italy		-86	-860	-1170	-1170	deficit (16% ² Vs 17%)
Latvia	0	0	0	0	0	40%
Lithuania	96.3 ² (1.8%)	93.9 ² (1.7%)	79.7 ² (1.4%)	52.9 ² (0.9%)	18.3	23.3% Vs 23%
Luxemburg					-43 to -300	deficit (5-10% ² Vs 11%)
Malta	2.8	6.2	7.1	14.1	-43,5	deficit (9.2% Vs 10%)
Netherlands	0	0	0	0	0	14%
Poland	519-866	705-1032	647-1162	613-1129	333	surplus (15.5% Vs 15%)
Portugal	0	0	0	0	>0	surplus (result still 31%)
Romania	0	0	0	0	0	24%
Slovenia	0	0	0	0	0	25%
Slovak rep.	56	112	134	167	143	surplus (15.2% Vs 14%)
Spain	4200		4791		2700	surplus (22.7% Vs 20%)
Sweden	1074	1273	1286	1105	486	surplus (50.2% Vs 49%)
UK	-119	-210	-254	40		15%
• surplus	13465-15309	10201-11869	13671-15916	7130-9272	5558-5847	
• deficit	-119	-296	-1114	-1170	-1873 to -2173	
net surplus	13346-15190	9905-11573	12557-14802	6270-8102	3546-3718	20.3%

BLUE - Member State expecting to **need a transfer** in its favour

GREEN - Member State expecting to have a **surplus** available to transfer to another Member State

WHITE - Member State not expecting to produce a surplus or require a transfer to meet its target.

² Commission calculations, based on applying the % provided in the report to a linear extrapolation of the Commission's forecast of national gross final energy consumption in 2020 as reported in SEC(2008)85 vol. II

A variety of different further information is contained in the different forecast documents. Unlike the National Renewable Energy Action Plans due in June 2010, there was no specific format provided for the forecast documents. Some Member States³ followed the relevant part of the National Renewable Energy Action Plan Template Document and provided forecasts of the **sectoral breakdown** of the renewable energy development up to 2020. Of these, Portugal and Sweden expect to have the highest shares of renewable *electricity* in 2020, of 58% and 62% respectively. Ireland and Sweden also expect to exceed the 10% target for renewable energy in the *transport* sector, with 11% and 13.8% respectively. Other Member States⁴ provided a technology breakdown, but most concentrated on the net use of cooperation mechanisms. All these data are available in the national forecast documents themselves, on the Commission's Transparency Platform¹.

From the information provided on the cooperation mechanisms, some interesting details emerge. Whilst eleven Member States, if they consider using cooperation mechanisms, focus on *joint projects*, seven also express an interest in using the *statistical transfers* instrument. These are of course preliminary views, as Member States continue to determine the simplest administrative and legal instruments for undertaking such transfers. In some cases, Member States indicate they may use statistical transfers within the EU and Joint Projects with third countries.

Four Member States (France, Greece, Italy, and Spain) note specifically that they may use cooperation mechanisms to develop renewable energy in third countries (either in the context of the Mediterranean Solar Plan or in the western Balkan countries). Italy is a particularly interesting case as it is the only country anticipating a relatively large deficit in reaching its 2020 target and intending to meet the deficit through joint projects with third countries. It mentions developing plants and connections with Switzerland, Albania, Montenegro and Tunisia.

Some Member States identify particular technologies where cooperation mechanisms might be used, either as part of their forecast development, or in addition. These include offshore wind (Germany, Estonia and Ireland), hydro (Romania and Bulgaria) and biomass (Latvia).

A final point worth noting as made by several Member States is that the development of their renewable energy sources, either to meet their targets or to take part in the use of cooperation mechanisms under the Directive, requires *new infrastructure*. This highlights that interconnector needs and the general need to reinforce the capacity of the grid in many countries of the Union is a necessary precursor, also for achieving the targets. For the EU overall, the share of electricity from renewable energy sources is expected to reach 33%-35%⁵, accentuating the need to improve the electricity grid's ability to manage and balance electricity flows and to improve the interconnections of the European grid to improve stability. These issues were flagged up in the forecast documents, but as clear action to address these issues is required under the Directive, it is anticipated that the National Renewable Energy Action Plans due in June 2010 will contain significantly more information on this matter.

³ Bulgaria, Cyprus, Ireland, Latvia, Malta, Romania, Slovakia, Spain and Sweden

⁴ Bulgaria, Hungary, Romania.

⁵ PRIMES and Green X 2008 modelling result.