RENEWABLE ENERGY IN EUROPE

BRIDGING THE GAP BETWEEN MEMBER STATES' PROGRESS REPORTS OF 2013 AND 2015

EurObserv'ER

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Purpose of this report

Access to early information on RES growth in the EU 28 country members is the core aim of the EurObserv'ER barometers since their creation in 1999. Nowadays, among the indicators and information available and useful on the RES topic, the evolution of their share in gross final energy consumption is relevant for stakeholders, policymakers, industrialists, journalists or even simple European citizens.

On line with legal requirements under Directive 2009/28/EC on the promotion of the use of energy from renewable sources (known as the Renewable Energy Directive (RED)) (6), the European Commission (EC) formally assesses the EU's and Member States' progress in the promotion and use of renewable energy towards the 2020 RES targets. The EC publishes its assessments every two years, in the form of a Communication on 'Renewable energy progress report'.

Disseminated in 2015, the purpose of this report is to present the detailed 2013 situation of RES shares at EU and Member State level during a year scheduled without any country progress report.

Sources of the data

This report has been written based on figures published by Eurostat either in its database accessible through its website (http://ec.europa.eu/eurostat/fr): Supply, transformation and consumption of electricity, Supply, transformation and consumption of heat, supply, transformation and consumption of renewable energies, electricity, biofuel production capacities and solar collectors' surface; either in SHARES results 2013. The report also used data published in the EurObserv'ER Barometers published in 2014: Wind barometers, photovoltaic barometers, solar thermal and CSP barometers, biofuels barometers, biogas barometers,waste barometers, solid biomass barometers, heat pumps and Eurobserv'ER Overview 2015. This report also used information contained in the National Renewable Energy Actions Plans (NREAP) reported by countries published in 2014.

EU's current progress to interim and 2020 targets

1. European Renewable energy objectives

The 2009/28 European directive states that the Member States should reach a 20% renewable energy share in gross final energy consumption across Europe and has set binding individual country targets for 2020. To help the achievement of this goal, two indicative trajectories are developed to take stock of the progress of renewable sectors:

- The minimum indicative RED trajectories for each country. These trajectories concern only the total RES share. They run until 2018, ending in 2020 with the binding national RES share targets. They are provided in the RED to ensure that the national RES targets will be met.
- Expected trajectories adopted by Member States in their National Renewable Energy Action Plans (NREAP), under the RED. These NREAP trajectories concern not only the overall RES share, but also the shares of renewables in electricity, heating and cooling, and transport sectors until 2020.

The EU has recently adopted three new EU-wide commitments for climate and energy for the year 2030 (European Council, 2014):

- A binding minimum 40 % domestic reduction of GHG emissions compared to 1990 levels;
- A binding minimum 27 % share of gross final renewable energy consumption;
- An indicative minimum 27 % improvement in energy efficiency.

2. RES shares and observed evolutions in 2013

The latest figures put the renewable energy share of the European Union's gross final energy consumption at 15.0% in 2013 compared to 14.2% in 2012 **(see graph 1)**.

In 2013, the EU was above its two interim trajectories for the share of gross final RES consumption:

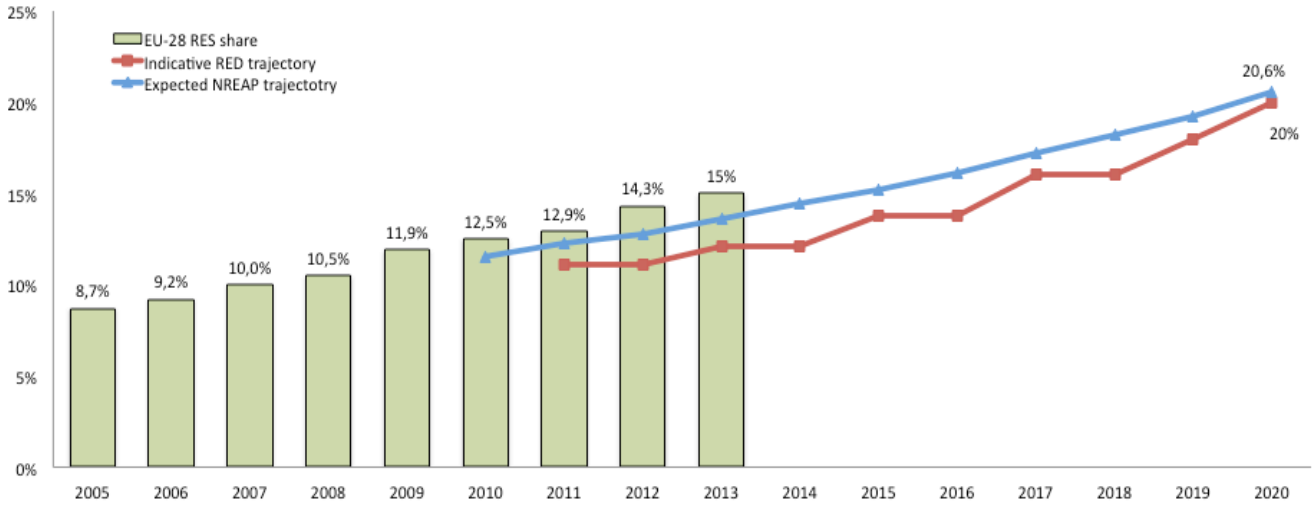
- The EU's average RES share was 15 %, i.e. 4 percentage points higher than the 11 % indicative target from the RED for 2013 ;
- Moreover, the EU's RES share in 2013 was higher than the 13 % target from Member States' NREAPs.

Final renewable energy use increased by 58 Mtoe over this period, with an average annual growth rate of 6.4 %. This positive development was stimulated by national targets under the RED, the introduction of specific national support framework for renewables, and substantial cost reductions recorded by some modern RES technologies, especially solar PV. As such, renewables (mostly solar PV and wind) accounted in 2012 for almost 70 % of new electrical capacity added in Europe.

Gross final renewable energy consumption increased by 9,2 Mtoe between 2012 and 2013 (from 165,2 to 174,4 Mtoe). This rise has mainly been driven by renewable electricity

production which increased by 7,5 Mtoe, followed by heating which increased by 2,9 Mtoe. Renewable energy consumption in transport decreased by 1,1 Mtoe. Nevertheless, heat is the leading energy vector of final renewable energy consumption with a total of 85,25 Mtoe in 2013.

Graph 1. EU current situation and progress to interim and 2020 targets



Sources: EurObserv'ER 2015

Another factor boosted the renewable energy share of total gross final energy consumption. Our estimates indicate that total gross final energy consumption (renewable or otherwise) continued to fall in 2013. We can attribute this to the economic crisis and also to energy efficiency efforts. We calculate this fall at 5.8 Mtoe across the European Union (from 1 146.2 Mtoe in 2012 to 1 140.4 Mtoe in 2013).

Incidentally we should mention that the quality of the renewable energy statistics presented by the ministries and statistics offices is constantly improving as the result of the ambitious studies conducted to refine appraisal of actual renewable energy consumption. Their main focus is households, which are harder to estimate. These insights may lead to major statistical consolidations for specific sectors and lead to reassessments of the renewable share in some countries. This applies to Germany and Italy in 2013, following new surveys of household wood-energy consumption. A similar survey is in progress in France and should shortly publish its findings, which could also lead to some adjustments.

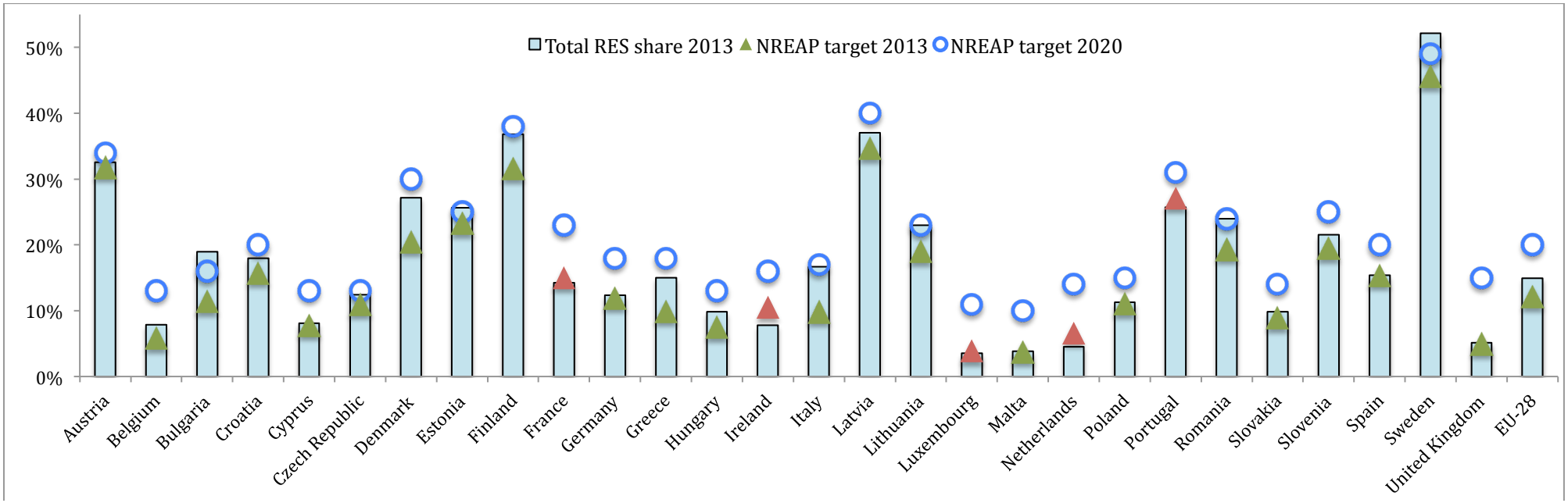
There could be a repeat of this phenomenon in 2014, relating to biofuel. In 2013, the biofuel sustainability certification system that endorses eligibility for admission into the national renewable energy target calculations, was still awaiting initiation in a few countries such as Spain, Portugal and Finland. Hence biofuel production in these countries has been excluded from the European Renewable Energy Directive target calculations, and affected their results.

3. Contributions by energy market sector and technology

Graph 2 presents the EU28 situation regarding the total RES share reach in 2013 and the target settled for that ear in each NREAP report.

Five countries did not reach their NREAP targets in 2013: France, Ireland, Luxembourg, Netherlands and Portugal (cf graph 2). This delay is of concern as the NREAP objectives progression is higher each year, i.e., the gap will be harder to close for these countries as time goes. The inability to reach the objectives is not due to economic barriers. The main cause is administrative delays and long permitting procedures, which can even be increased by technical difficulties.

Graph 2. 2013 Total RES share compared to NREAP 2013 target (%)



Moreover, three EU countries have already achieved their 2020 targets, namely Bulgaria, Estonia, and Sweden. Seven countries are almost on target with more than 90% achieved: Austria, Croatia, the Czech Republic, Denmark, Finland, Latvia and Italy.

Of the big energy users, France and Germany have achieved 62.5% and 67.8% of their respective 2020 targets, while the UK has achieved 34.5%. These results illustrate the variation of the efforts set by individual Member States to achieve their 2020 targets. Despite heavy investments already made in these three countries, their 2020 goals are still far from being met. Most of the remaining effort will thus have to be made by the high energy-consuming countries. This could be repeated for the objectives of the next climate-energy package.

3.1. Electricity sector

The current trend in growth of electricity produced from renewable sources shows that 2020's targets should be met.

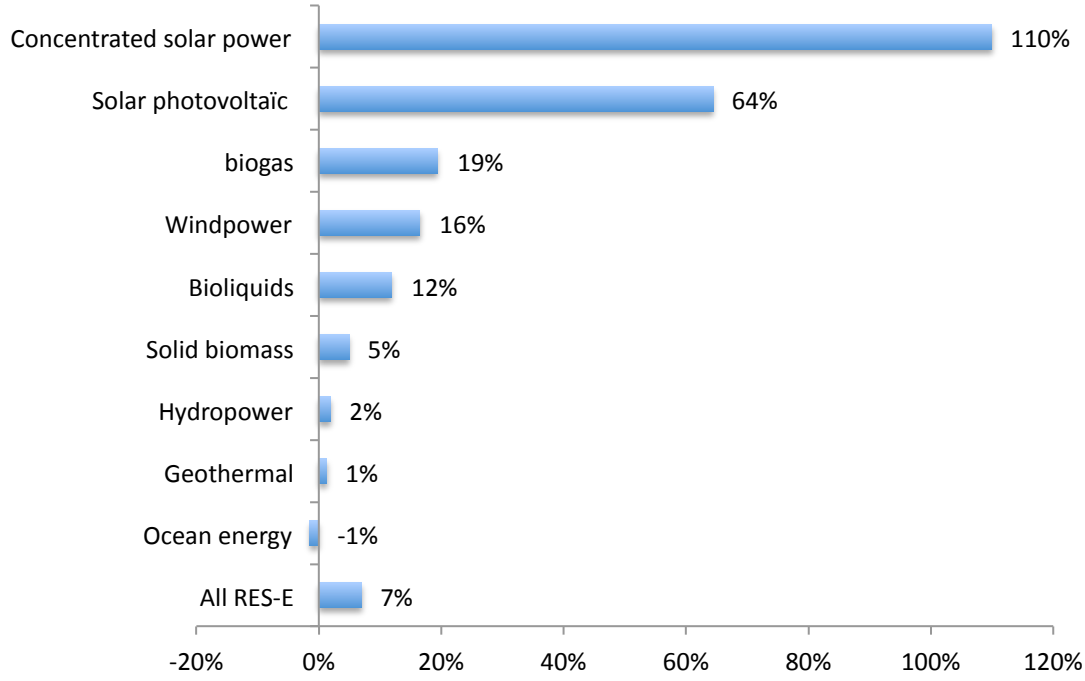
Table 1. Breakdown by technology of renewable electricity production and the EU28 targets

Electricity (Mtoe)	2005	2012	2013	NREAP targets 2020
Hydropower	29,58	31,51	34,59	31,22
Geothermal	0,46	0,50	0,51	0,94
Solar photovoltaic	0,13	5,80	6,95	7,06
Concentrated solar power	0,00	0,32	0,38	1,63
Tidal, wave and ocean energy	0,04	0,04	0,04	0,56
Wind power	5,95	17,72	20,16	42,04
Solid biomass	4,76	6,90	7,01	13,43
Biogas	1,10	3,99	4,54	5,49
Bio liquids	0,15	0,31	0,37	1,10
Total	**42,17**	**67,079**	**74,54**	**103,47**

Source: Eurostat 2014

In 2013, the main renewable sources for electricity in Europe were hydropower (35 Mtoe), and wind power (20 Mtoe). Hydropower already exceeded its NREAP 2020 target (35 Mtoe vs 31 Mtoe) while solar photovoltaic is only one toe away to its target.

Graph 3. 2005-2013 average annual growth rates for RES-E



Source: EurObserv'ER 2015

From 2005 to 2013, the share of renewable energy used in the electricity market progressed by 7% each year. This is mainly due to the development of solar photovoltaic (+ 64% annually). Although the progression of CSP looks impressive (+110% from 2005 to 2013), it only reflects an evolution from 0,00 Mtoe in 2005 to 0,38 Mtoe in 2013.

2013 was a good year for renewable electricity production. From 2012 to 2013, gross renewable electricity production, not normalized for hydro and wind power, increased by 11.1%. This rise, combined with a level of stability in the European Union's overall electricity consumption (3 315 TWh in 2012 as against 3 306 TWh in 2013), took the renewable share up to 25.8%, a 2.6 percent rise. Now, more than a quarter of the European Union's total electricity consumption is renewably sourced. In 2004, the renewable share was only 14.3%, which means that over the decade the share has increased by 11.5%.

Hydropower (with a 10.3% increase) contributed to the sharp growth in renewable electricity production by adding an extra 34.4 TWh to its total estimated at 369.6 TWh (excluding pumped-storage installation production). Wind energy is not to be left out, as it increased by 28.4 TWh to reach 234.4 TWh. Solar power at 85.2 TWh, is the third-ranked contributor and its production increased by 14.1 TWh of which 13.4 TWh was from PV alone. In 2013 the biomass sectors (solid biomass, biogas, renewable municipal waste and liquid biomass) were more subdued and only added 8.5 TWh for a total of 157.3 TWh. Biogas was the main contributor of the four with an additional 6.3 TWh (for a total of 52.7 TWh). Solid biomass added a further 1.4 TWh for a total of 81.6 TWh. The other renewable electricity sectors' contributions were marginal (+ 0.2 TWh more for geothermal power, for a total of 5.9 TWh) or even negative for marine energies (- 0.04 TWh less for a total of 0.4 TWh).

3.2. Heating and cooling sector

Many technologies are used to develop the use of renewable energy for heating and cooling which is driving the consumption of renewable energy.

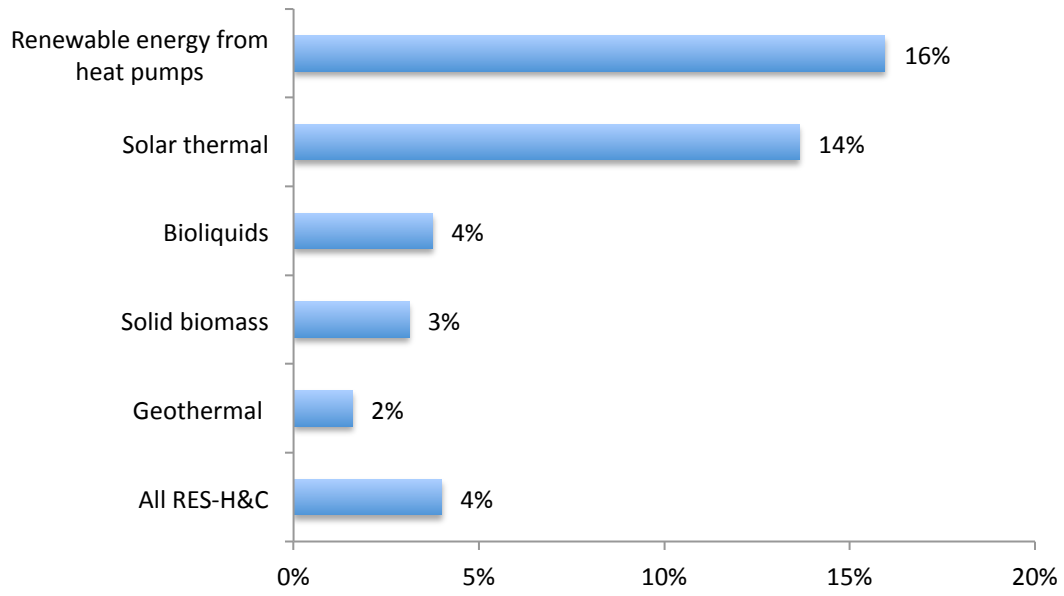
Table 2. Breakdown by technology of renewable H&C production and the EU28 targets

Heating & cooling (Mtoe)	2005	2012	2013	NREAP targets 2020
Geothermal	0,58	0,61	0,66	2,65
Solar thermal	0,70	1,83	1,95	6,46
Solid biomass	56,65	70,45	72,42	80,89
biogas	0,75	2,24	2,62	5,11
Bioliquids	0,17	0,24	0,23	4,42
Renewable energy from heat pumps	2,26	7,01	7,39	12,29
Total	**61,11**	**82,39**	**85,25**	**111,82**

Source : Eurostat 2014

The overall figure of heating and cooling from renewable sources (85 Mtoe) is mainly due to solid biomass (72 Mtoe). Biomass figures increased in the previous years partly because some countries, such as Italy and Germany, consolidated their data. In other words, former biomass production, not included in their past results, finally entered in their data collection methodology.

Graph 4. 2005-2013 average annual growth rates for RES-H&C



Source : EurObserv'ER 2015

As for the heating and cooling market, its RE share went up by 4% annually from 2005 to 2013, mainly driven by the progression of renewable energy from heat pumps (+16%) and solar thermal (+14%). In the UK, according to the DECC (Department of Energy & Climate Change), it was wood that made the highest contribution to the increase in UK renewable heat consumption in 2013. The reason proffered by the government is the increase in household consumption, due to a slight increase in heating requirements caused by the longer winter, the commissioning of new cogeneration plants in 2013 and the build-up of the RHI (non-domestic) incentive system. The Renewable Energy Association claims that this system has already financed 4 926 wood-fired boilers and brought capacity to date in excess of one gigawatt. Over the course of 2013, total solid biomass heat consumption thus increased by 20.8%, to 1.1 Mtoe (0.9 Mtoe in 2012).

As for France, the French Observation and Statistics Directorate (SOeS) explains that biomass heat requirements increased through the combined effect of colder than average winter temperatures and the continuing rise in the number of wood-fire heating appliances installed boosted by the tax credit mechanism. In 2013, 524 000 stoves were sold, compared to 489 000 in 2012 and 467 000 in 2011. Wood-energy consumption also benefitted from support mechanisms such as the Ademe heat fund (regional support mechanisms and calls for BCIAT [biomass heat industry agriculture and tertiary] projects). In September 2014, Ademe published an update on the heat fund mechanism. Out of the five calls for BCIAT projects filed between 2009 and 2013, 129 projects were successful, 39 projects are up and running, 71 are underway and 19 have been abandoned. The combined thermal output of the completed projects and projects in progress is 586.7 ktoe for 1 152 MWth of combined capacity. The sixth call for BCIAT projects 2014, launched in September 2013 has set an annual target of 125 ktoe. Regional support, another mechanism of this fund, financed 539 projects over the same period (investments worth 1 023 million euros), amounting to 426 ktoe of wood consumption.

3.3. Transport sector

Transport market is not the main leader of renewable energy consumption and the share of renewables in transport is still far rom its objective.

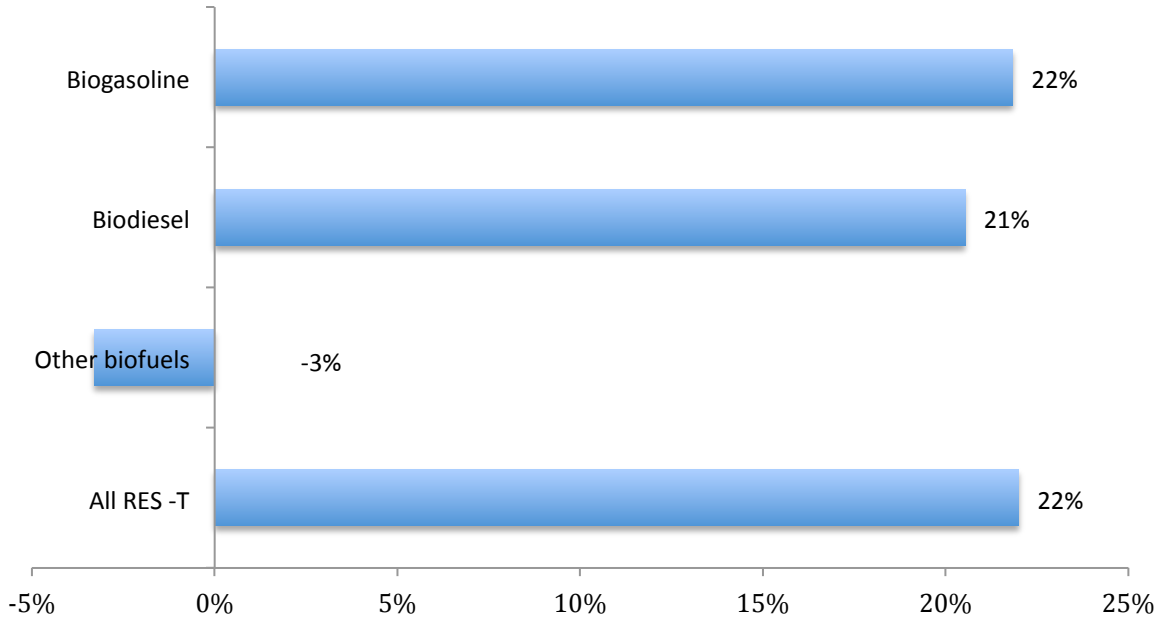
Table 3. Breakdown by technology of biofuels use and the EU28 targets

Transport (Mtoe)	2005	2012	2013	NREAP targets 2020
Biogasoline	0,56	2,87	2,72	7,32
Biodiesel	2,31	11,49	10,29	20,98
Other biofuels	0,17	0,012	0,13	0,57
Renewable electricity		1,35	1,49	
Total	**3,04**	**15,72**	**14,63**	**28,87**

Source: EurObserv'ER 2014

The share of renewable energy in the transport market went up greatly since 2005 with an annual progression of 22%, evenly spread between biogasoline (+22%/year) and biodiesel (+21%/year). But in the past years, the growth of biofuel consumption for use in transport has dwindled and finally dropped. The quantity of renewable energy used in the transportation market represents only 50% of the targeted quantity for 2020 (14,63 Mtoe vs 28,87 Mtoe)

Graph 5. 2005-2013 average annual growth rates for RES-T



Source : EurObserv'ER 2015

The fall of 2013 marks the first drop in consumption since the implementation of the biofuel directive 2003/30/EC adopted on 8 May 2003 ... the first to set quantified targets for biofuel consumption. It was followed six years later by the adoption on April 2009 of the 2009/28/EC Directive on the promotion of renewable energies, which replaced its predecessor and imposed a binding renewable energy target of 10% in transport by 2020.

Nowadays the accounting of RES share in the transport sector is getting complex due to the lack of validated legislative framework concerning biofuels' potential increase greenhouse gas emissions from increasing land use for producing first-generation biofuel, also called the ILUC effect (Indirect Land Use Change impacts of biofuels)[1]. Since 2012, the Commission and the European parliament have failed to agree on a text that would set objectives and a method to evaluate the ILUC effects. The process has dragged on for almost two years and is largely to blame for the slowdown and the 2013 drop in European Union biofuel consumption.

Among the EU28 member States, it is worth mentioning the particular situation of the following countries:

Despite a lower level of consumption, **Germany** was the top European Union biofuel consumer in 2013. AGEE-Stat, the Environment Ministry's statistical office, states that biodiesel consumption dropped by 10.8% to 2 212 000 tonnes, while bioethanol consumption dropped by 3.4% to 1 206 000 tonnes. Biodiesel consumption plummeted once the partial tax exemption that applied to biodiesel (levied at 21.40 euros for 1 000 litres in 2012) ended in 2013. The 100% taxation of methyl ester biodiesel from vegetable oil led to an increase in consumption of biodiesel produced from used frying oil (put at more than 200 000 tonnes), which offers distributors the advantages of being double-counted for the purposes of their incorporation obligation and at that in unlimited quantity. Implementation of a new system that will indirectly stimulate biofuel use is scheduled from 2015 onwards. It will be based on a greenhouse gas emissions reduction quota compared to regular diesel and petrol fuel.

According to the Ministry of the Ecology, Sustainable Development and Energy's Observation and Statistics Office, **France** is the top European biodiesel consumer, accounting for more than 20% of EU biodiesel consumption (21.4% in 2013). However, the country is now set to increase its biofuel incorporation rate and the 2014 Budget left the 7% incorporation targets for raw oil unchanged but added 0.35% of non-edible ester lipids. As this consumption counts double, the biodiesel incorporation target is 7.7% for 2014.

UK biofuel consumption surged in 2013 and that in volume terms, it increased by 13% to 1 585 million litres. Biodiesel consumption was the main beneficiary of this increase putting on 21%, to 766 million litres in 2013. The UK is in the sixth year of its Renewable Transport Fuel Obligation (RTFO) implementation, that provides for a 4.75% incorporation volume over the year from 15 April 2013 to 14 April 2014 (it was 4.5% over the previous period). The initial target was 5%, but the government decided to include non-road vehicles (including inland water vessels) and farming machinery from 13 April 2013 onwards.

[1] A complete description of the different phases of the negotiations along the passed years can be find in the 2014 EurObserv'ER biofuels barometer

4. Countries overview

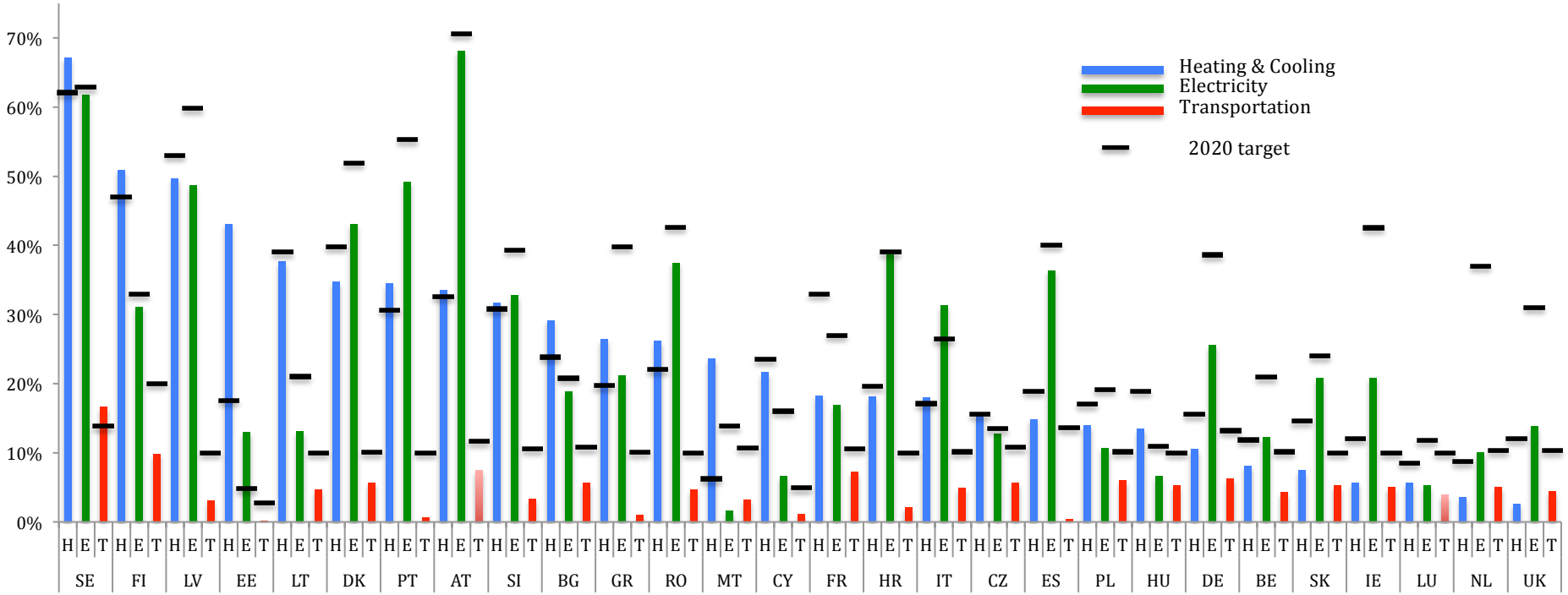
4.1. National share of energy sectors vs 2020 objectives

Graph. 5 presents for the 28 European country members the situation of the national share reached in 2013 for each energy sector (H&C, electricity and transport) and also recalls the 2020 objectives.

Graph 6. 2013 Countries share of renewable energy by sector and 2020 target

Source: EurObserv'ER 2015

See annex 1 for country acronyms

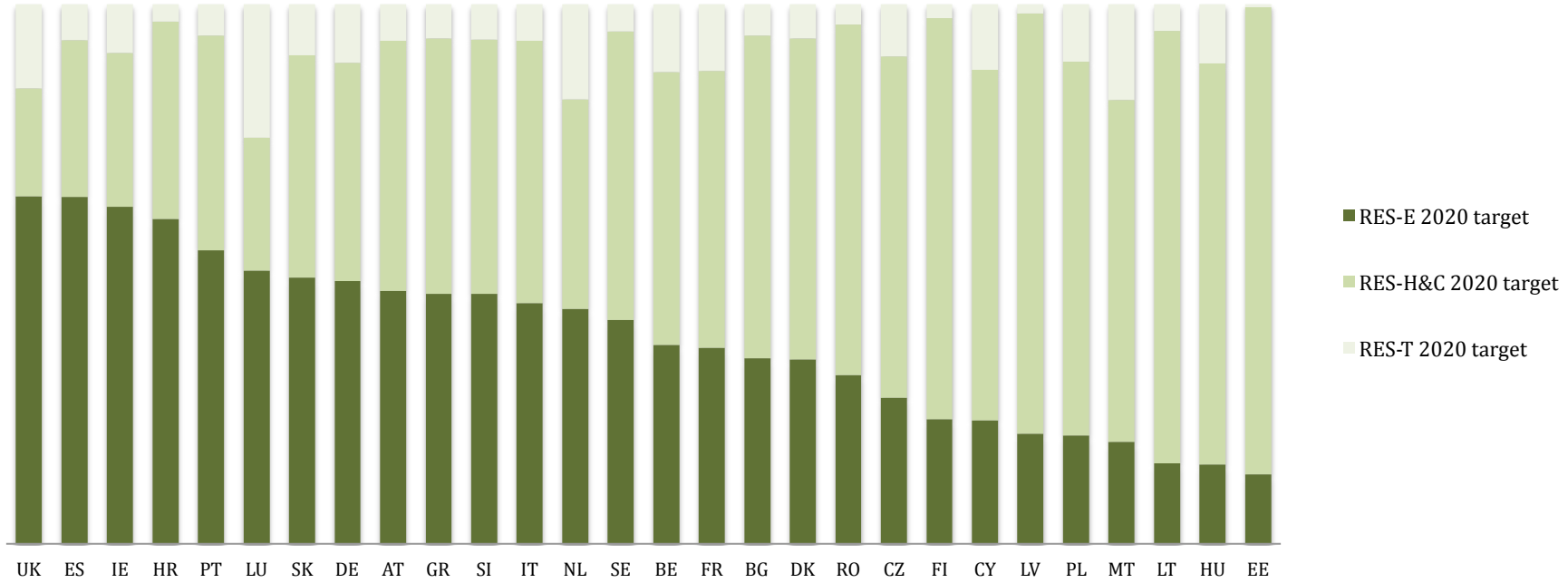


Looking at heating and cooling figures, we see that in many countries, the 2020 target has already been reached and even overpassed (Sweden, Finland, Estonia, Poland, Austria, Slovenia, Bulgaria, Greece, Romania, Malta, Italy and Czech Republic). We can also note that some others are close enough to their objectives.

As for electricity, Italy has been the first country to reach its target: 31,3% of the country-consumed electricity comes from renewables while the national target was 26,4%. Nevertheless, Croatia is close to it: 38,7% in 2013 with a target in 2020 of 39 %. Sweden is also close to its objective: the country currently produce 61,8% of its electricity thanks to renewable energy and its target is to reach 62,9%.

4.2. National strategies for 2020 target

Graph 7. Breakdown of the RES target per energy sector



Source : EurObserv'ER 2015

Graph 6 presents for the 28 European Members the relative weight of each energy sector in their own 2020 targets. This illustration shows that a majority of the countries based their 2020 overall target on the R&C sector. 11 countries (Austria, Croatia, Poland, Greece, Germany, U.K, Netherlands, Luxembourg, Ireland, Spain and Malta) have oriented their national RES strategy towards Electricity sector, In just 3 countries, the transport sector counts for more than 20 % in their overall 2020 target. The situation of Luxembourg can be noticed due to a particularly high share dedicated to transport (56%) far ahead from H&C (27%) or electricity (17%).

Overall synthesis

Renewable energies once again scored points in the European Union in 2013, both for electricity production and energy consumption in general. Future gains in the electricity generating sector will certainly be harder to come by because the political goalposts on renewable electricity generating sector development have moved over the last two years, both at European institution level and under the impetus of many member states. Market logic has finally caught up on environmental logic that had previously held way.

It follows that the growth pace of the renewable electricity producing sectors should slow down in 2014, as a result of lower production infrastructure investments in 2012 and 2013, as presented in this publication.

The 2009/28 European directive provides that the Member States should reach a 20% renewable energy share in gross final energy consumption across Europe and has set binding national targets for 2020. Among the EU28 country members, three States have already achieved their 2020 targets, namely Bulgaria, Estonia, and Sweden. Nevertheless, our study shows great variation of national efforts made to reach 2020 targets.

This could be repeated for the objectives of the next climate-energy package. In October 2014, the European Council presented its conclusions on the framework for action to be implemented on climate and energy by the 2030 timeline. A goal of at least 27% has been set for the renewable energy share of EU energy consumption by 2030. The target will only be binding across the European Union and will have to be negotiated between the Member States “guided by the need to deliver collectively the EU target”. This compromise leads to fears that most of the future growth of renewable energies in the European Union will only be carried by the countries where public opinion is ready to make efforts to combat global warming, thereby instituting a two-speed Europe. If this target (which observers describe as toothless) is approved by the European Parliament, a mean annual 0.7 point increase in the renewable energy share will be needed.

Annex 1 - Country acronyms

AT	Austria
BE	Belgium
BG	Bulgaria
HR	Croatia
CY	Cyprus
CZ	Czech Republic
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
GR	Greece
HU	Hungary
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SK	Slovakia
SI	Slovenia
ES	Spain
SE	Sweden
UK	United Kingdom

Annex 2 – EU28 2013 situation

Situation for the RES share

EU28	Total RES share			
	2013	NREAP target 2013	2013 deviations	2020 target
Austria	32,6%	31,8%	0,7%	34%
Belgium	7,9%	5,8%	2,1%	13%
Bulgaria	19,0%	11,4%	7,6%	16%
Croatia	18,0%	15,8%	2,2%	20%
Cyprus	8,1%	7,8%	0,3%	13%
Czech Republic	12,4%	11,0%	1,4%	13%
Denmark	27,2%	20,5%	6,7%	30%
Estonia	25,6%	23,3%	2,3%	25%
Finland	36,8%	31,6%	5,2%	38%
France	14,2%	15,0%	-0,8%	23%
Germany	12,4%	12,0%	0,4%	18%
Greece	15,0%	9,9%	5,1%	18%
Hungary	9,8%	7,5%	2,3%	13%
Ireland	7,8%	10,5%	-2,7%	16%
Italy	16,7%	9,9%	6,9%	17%
Latvia	37,1%	34,7%	2,4%	40%
Lithuania	23,0%	19,0%	4,0%	23%
Luxembourg	3,6%	3,9%	-0,3%	11%
Malta	3,8%	3,8%	0,0%	10%
Netherlands	4,5%	6,6%	-2,1%	14%
Poland	11,3%	11,1%	0,2%	15%
Portugal	25,7%	27,1%	-1,4%	31%
Romania	23,9%	19,4%	4,6%	24%
Slovakia	9,8%	8,9%	0,9%	14%
Slovenia	21,5%	19,5%	2,0%	25%
Spain	15,4%	15,4%	0,0%	20%
Sweden	52,1%	45,6%	6,5%	49%
United Kingdom	5,1%	5,0%	0,1%	15%
EU-28	**15,0%**	**12,1%**[2]	**2,9%**	**20,0%**

[2] Interactive RED trajectory

Situation for the RES-H&C share

EU28	Total RES-H&C share		
	2013	NREAP target 2013	2013 deviations
Austria	33,5%	30,6%	2,9%
Belgium	8,1%	5,1%	3,0%
Bulgaria	29,2%	18,5%	10,7%
Croatia	18,1%	14,3%	3,8%
Cyprus	21,7%	18,5%	3,2%
Czech Republic	15,3%	12,7%	2,6%
Denmark	34,8%	35,2%	-0,4%
Estonia	43,1%	19,1%	24,0%
Finland	50,9%	41,0%	9,9%
France	18,3%	20,5%	-2,2%
Germany	10,6%	10,5%	0,1%
Greece	26,5%	16,8%	9,7%
Hungary	13,5%	8,5%	5,0%
Ireland	5,7%	6,9%	-1,2%
Italy	18,0%	8,4%	9,6%
Latvia	49,7%	48,0%	1,7%
Lithuania	37,7%	32,0%	5,7%
Luxembourg	5,7%	3,4%	2,3%
Malta	23,7%	8,5%	15,2%
Netherlands	3,6%	4,8%	-1,2%
Poland	13,9%	13,1%	0,9%
Portugal	34,6%	32,4%	2,2%
Romania	26,2%	17,6%	8,6%
Slovakia	7,5%	9,2%	-1,7%
Slovenia	31,7%	25,4%	6,3%
Spain	14,9%	12,5%	2,4%
Sweden	67,2%	58,7%	8,5%
United Kingdom	2,6%	2,0%	0,6%
EU-28	**16,5%**	**14,7%**	**1,8%**

Situation for the RES-E share

EU28	Total RES-E share		
	2013	NREAP target 2013	2013 deviations
Austria	68%	74%	-6,1%
Belgium	12%	10%	2,8%
Bulgaria	19%	15%	3,9%
Croatia	39%	37%	2,1%
Cyprus	7%	6%	0,6%
Czech Republic	13%	12%	0,8%
Denmark	43%	46%	-3,1%
Estonia	13%	3%	10,1%
Finland	31%	27%	4,1%
France	17%	18%	-1,1%
Germany	26%	23%	2,9%
Greece	21%	22%	-0,6%
Hungary	7%	8%	-0,9%
Ireland	21%	31%	-9,6%
Italy	31%	21%	10,3%
Latvia	49%	47%	1,6%
Lithuania	13%	13%	0,1%
Luxembourg	5%	7%	-1,2%
Malta	2%	4%	-2,1%
Netherlands	10%	15%	-5,2%
Poland	11%	11%	-0,4%
Portugal	49%	49%	-0,1%
Romania	38%	37%	0,9%
Slovakia	21%	21%	-0,2%
Slovenia	33%	34%	-0,9%
Spain	36%	32%	4,5%
Sweden	62%	57%	4,5%
United Kingdom	14%	13%	0,8%
EU-28	**25%**	**23,4%**	**2,0%**

Situation for the RES-T share

EU28	Total RES-T share		
	2013	NREAP target 2013	2013 deviations
Austria	7,5%	7,3%	0,2%
Belgium	4,3%	4,8%	-0,5%
Bulgaria	5,6%	3,3%	2,3%
Croatia	2,2%	3,0%	-0,9%
Cyprus	1,1%	2,8%	-1,7%
Czech Republic	5,7%	5,9%	-0,2%
Denmark	5,7%	6,0%	-0,3%
Estonia	0,2%	1,2%	-1,0%
Finland	9,9%	10,0%	-0,1%
France	7,2%	7,5%	-0,3%
Germany	6,3%	7,0%	-0,7%
Greece	1,1%	4,8%	-3,7%
Hungary	5,4%	5,0%	0,4%
Ireland	5,0%	5,1%	-0,1%
Italy	5,0%	5,4%	-0,4%
Latvia	3,1%	4,4%	-1,3%
Lithuania	4,7%	6,0%	-1,4%
Luxembourg	3,9%	2,4%	1,5%
Malta	3,3%	3,6%	-0,3%
Netherlands	5,1%	5,1%	-0,1%
Poland	6,0%	7,2%	-1,2%
Portugal	0,7%	5,7%	-5,0%
Romania	4,7%	7,3%	-2,7%
Slovakia	5,3%	4,4%	0,9%
Slovenia	3,4%	3,5%	-0,1%
Spain	0,4%	6,5%	-6,1%
Sweden	16,7%	9,4%	7,3%
United Kingdom	4,4%	4,5%	-0,1%
EU-28	**5,4%**	**6,1%**	-0,8%

Annex 3

Country details

Sources

EurObserv'ER wind barometers 2014

EurObserv'ER photovoltaïc barometers 2014

EurObserv'ER solar thermal and CSP barometers 2014

EurObserv'ER biofuels barometers 2014

EurObserv'ER biogas barometers 2014

EurObserv'ER waste barometers 2014

EurObserv'ER solid biomass barometers 2014

EurObserv'ER Heat pumps 2013

EurObserv'ER overview 2015

Eurostat database - Energy statistics - Supply, transformation and consumption of heat - annual dat

Eurostat database - Energy statistics - Supply, transformation and consumption of renewable energ

Eurostat database - Energy statistics - Infrastructure - electricity - annual data (nrg_113a)

Eurostat database - Energy statistics - Infrastructure - biofuel production capacities - annual data (n

Eurostat database - Energy statistics - Infrastructure - solar collectors' surface - annual data (nrg_11

Shares - 2013 detailed results

TOTAL EU-28

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	16,07	16,5
RES Electricity (%)	23,48	25,37
RES Transport (%)	5,06	5,35
Overall RES share (%)	**14,25**	**14,95**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	85 063,7	88 292,0
(B) Gross final consumption of electricity from RES	64 976,1	69 275,8
(C) Gross final consumption of energy from RES in transport	12 945,1	13 417,1
(D) Gross total RES consumption	**162 984,9**	**170 984,9**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro *	**148 934**	**366 389**	**150 145**	**402 160**
Non pumped	103 196	335 657	104 012	370 544
<1MW	3 270	10 827	3 348	12 091
1 MW - 10 MW	9 972	30 623	10 164	37 041
> 10 MW	89 954	294 207	90 500	321 412
Pumped	24 337	30 732	24 337	31 616
Mixed	21 401	n.a	21 796	n.a
Geothermal	**768**	**5 764**	**781**	**5 936**
Solar	**70 787**	**71 176**	**81 875**	**85 262**
photovoltaïc	68 785	67 401	79 623	80 867
concentrated solar power	2 002	3 775	2 252	4 395
Tide, wave, ocean	**243**	**458**	**243**	**414**
Wind*	**106 552**	**205 995**	**118 410**	**234 366**
onshore	101 376	n.a	111 417	n.a
offshore	5 176	n.a	6 993	n.a
Biomass	**10 121**	**130 211**	**10 524**	**138 622**
solid biomass	n.a	80 182	n.a	81 501
biogas	8 279	46 404	8 660	52 837
bioliquids	1 842	3 625	1 864	4 284
Total	**337 405**	**779 993**	**361 978**	**866 760**
of which in CHP	*0*	*85 448*	*0*	*86 548*

* Electricity production not normalised

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**608,7**	**658,1**
Solar	**1 833,5**	**1 946,8**
Biomass	**72 934,7**	**75 263,9**
solid biomass*	70 452,8	72 419,2
biogas*	2 243,1	2 616,4
bioliquids**	238,8	228,3
Renewable energy from heat pumps:	**7 013,7**	**7 385,4**
of which aerothermal	4 669,5	4 936,6
of which geothermal	1 761,6	1 828,3
of which hydrothermal	89,1	92,6
Total	**82 390,6**	**85 254,2**
of which DH		
of which biomass in household	41 262,0	41 548,9

Unclassified RE from heat pumps	*493,4*	*527,9*

** Figures are for uncertified biomass*

*** Figures are for certified biomass*

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	2013
Bioethanol bio ETBE	**2 873,5**	**2 716,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**11 491,8**	**10 292,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**1 350,9**	**1 485,9**
of which road transport	16,1	20,7
of which non-road transport	1 334,8	1 465,2
Others (as biogas, vegetable oils, etc.)	**117,1**	**126,5**
of which biofuels Article 21,2	n.a	n.a
Total	**15 833,3**	**14 621,7**

Austria

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	32,45	33,51
RES Electricity (%)	66,48	68,08
RES Transport (%)	7,81	7,45
Overall RES share (%)	**32,11**	**32,55**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	4 465,7	4 630,7
(B) Gross final consumption of electricity from RES	3 916,1	4 028,0
(C) Gross final consumption of energy from RES in transport	595,5	592,5
(D) Gross total RES consumption	**8 977,3**	**9 251,2**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**13 076**	**47 705**	**13 149**	**45 740**
Non pumped	7 968	43 814	8 038	41 978
<1MW	391	1 922	401	1 973
1 MW - 10 MW	793	3 854	808	3 747
> 10 MW	6 784	38 038	6 829	36 258
Pumped	0	3 891	0	3 762
Mixed	5 108	n.a	5 111	n.a
Geothermal	**1**	**1**	**1**	**0**
Solar	**363**	**337**	**626**	**582**
photovoltaïc	363	337	626	582
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**1 377**	**2 463**	**1 684**	**3 151**
onshore	1 377	2 463	1 684	3 151
offshore	0	0	0	0
Biomass	**390**	**4 368**	**199**	**4 391**
solid biomass	n.a	3 727	n.a	3 760
biogas	377	641	194	631
bioliquids	13	0	5	0
Total	**15 207**	**54 874**	**15 659**	**53 864**
of which in CHP		2 449		2 693

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**22,0**	**22,0**
Solar	**174,4**	**177,8**
Biomass	**4 065,9**	**4 217,7**
solid biomass	3 983,5	4 138,5
biogas	44,7	44,5
bioliquids	37,7	34,7
Renewable energy from heat pumps:	**#REF!**	**#REF!**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**#REF!**	**#REF!**
of which DH		
of which biomass in household	1 691,2	1 706,3

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**77,5**	**67,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**412,9**	**422,8**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**173,4**	**175,7**
of which road transport	1,1	1,1
of which non-road transport	172,3	174,7
Others (as biogas, vegetable oils, etc.)	**0,1**	**0,1**
of which biofuels Article 21,2	n.a	n.a
Total	**663,8**	**665,7**

Belgium

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	7,73	8,11
RES Electricity (%)	11,27	12,29
RES Transport (%)	4,45	4,34
Overall RES share (%)	**7,42**	**7,85**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 324,2	1 484,0
(B) Gross final consumption of electricity from RES	861,9	938,2
(C) Gross final consumption of energy from RES in transport	374,7	362,5
(D) Gross total RES consumption	**2 560,8**	**2 784,7**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**1 427**	**1 659**	**1 429**	**1 723**
Non pumped	120	357	119	380
<1MW	10	24	9	26
1 MW - 10 MW	55	182	55	207
> 10 MW	55	151	55	147
Pumped	1 307	1 302	1 310	1 343
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**2 581**	**2 148**	**2 912**	**2 640**
photovoltaïc	2 581	2 148	2 912	2 640
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**1 365**	**2 750**	**1 653**	**3 635**
onshore	986	2 750	1 028	3 635
offshore	380	0	625	0
Biomass	**184**	**4 497**	**189**	**4 255**
solid biomass	n.a	3 685	n.a	3 355
biogas	141	664	151	774
bioliquids	43	148	38	126
Total	**5 557**	**11 054**	**6 183**	**12 253**
of which in CHP		1 791		1 880

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**1,4**	**1,6**
Solar	**15,3**	**18,8**
Biomass	**1 254,5**	**1 401,3**
solid biomass	1 182,7	1 311,4
biogas	64,5	83,2
bioliquids	7,3	6,7
Renewable energy from heat pumps:	**22,6**	**26,1**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**1 293,8**	**1 447,8**
of which DH		
of which biomass in household	566,7	611,0

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**48,0**	**48,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**298,0**	**281,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**26,8**	**31,4**
of which road transport	0,0	0,0
of which non-road transport	26,8	31,4
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**372,8**	**360,7**

Bulgaria

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	27,53	29,2
RES Electricity (%)	15,83	18,91
RES Transport (%)	0,27	5,63
Overall RES share (%)	**15,97**	**18,99**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 122,0	1 142,5
(B) Gross final consumption of electricity from RES	515,8	594,5
(C) Gross final consumption of energy from RES in transport	5,1	109,4
(D) Gross total RES consumption	**1 642,9**	**1 846,4**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**3 129**	**3 975**	**3 202**	**4 796**
Non pumped	2 116	3 225	2 189	4 081
<1MW	51	132	60	174
1 MW - 10 MW	234	599	223	542
> 10 MW	1 831	2 494	1 906	3 365
Pumped	864	750	864	715
Mixed	149	n.a	149	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**1 013**	**814**	**1 036**	**1 361**
photovoltaïc	1 013	814	1 036	1 361
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**670**	**1 221**	**677**	**1 240**
onshore	670	1 221	677	1 240
offshore	0	0	0	0
Biomass	**0**	**66**	**4**	**110**
solid biomass	n.a	65	n.a	94
biogas	0	1	4	16
bioliquids	n.a	n.a	n.a	n.a
Total	**4 812**	**6 076**	**4 919**	**7 507**
of which in CHP		66		109

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**33,4**	**33,4**
Solar	**15,4**	**19,1**
Biomass	**1 004,0**	**1 007,3**
solid biomass	1 004,0	1 007,3
biogas	0,0	0,0
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**47,0**	**64,5**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**1 099,8**	**1 124,3**
of which DH		
of which biomass in household	758,7	749,6

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**0,0**	**8,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**85,9**	**95,9**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**5,1**	**5,2**
of which road transport	0,7	1,0
of which non-road transport	4,4	4,2
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**91,0**	**109,5**

Croatia

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	18,26	18,12
RES Electricity (%)	35,46	38,68
RES Transport (%)	0,4	2,15
Overall RES share (%)	**16,85**	**17,96**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	484,3	461,6
(B) Gross final consumption of electricity from RES	542,2	585,5
(C) Gross final consumption of energy from RES in transport	7,3	39,3
(D) Gross total RES consumption	**1 033,9**	**1 086,4**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**2 141**	**4 800**	**2 190**	**8 106**
Non pumped	1 848	4 638	1 897	8 001
<1MW	1	1	1	2
1 MW - 10 MW	27	80	27	120
> 10 MW	1 820	4 557	1 869	7 879
Pumped	0	162	0	105
Mixed	293	n.a	293	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**4**	**2**	**19**	**11**
photovoltaïc	4	2	19	11
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**180**	**329**	**255**	**517**
onshore	180	329	255	517
offshore	0	0	0	0
Biomass	**11**	**94**	**16**	**125**
solid biomass	n.a	37	n.a	48
biogas	11	57	16	77
bioliquids	n.a	n.a	n.a	n.a
Total	**2 336**	**5 225**	**2 480**	**8 759**
of which in CHP		92		106

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**7,0**	**6,8**
Solar	**7,1**	**8,1**
Biomass	**468,3**	**443,3**
solid biomass	465,6	440,6
biogas	2,7	2,7
bioliquids	n.a	n.a
Renewable energy from heat pumps:	**0,0**	**0,0**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**482,4**	**458,2**
of which DH		
of which biomass in household	410,6	389,5

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**1,3**	**1,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**35,7**	**31,5**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**7,3**	**7,0**
of which road transport	0,0	0,0
of which non-road transport	7,3	7,0
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**44,3**	**39,8**

Cyprus

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	20,75	21,66
RES Electricity (%)	4,91	6,64
RES Transport (%)	0	1,13
Overall RES share (%)	**6,77**	**8,12**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	86,7	88,6
(B) Gross final consumption of electricity from RES	19,9	24,5
(C) Gross final consumption of energy from RES in transport	0,0	5,1
(D) Gross total RES consumption	**106,6**	**118,2**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**0**	**0**	**0**	**0**
Non pumped	0	0	0	0
<1MW	0	0	0	0
1 MW - 10 MW	0	0	0	0
> 10 MW	0	0	0	0
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**17**	**22**	**35**	**47**
photovoltaïc	17	22	35	47
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**147**	**185**	**147**	**231**
onshore	147	185	147	231
offshore	0	0	0	0
Biomass	**9**	**50**	**10**	**49**
solid biomass	n.a	0	n.a	0
biogas	9	50	10	49
bioliquids	n.a	n.a	n.a	n.a
Total	**173**	**257**	**192**	**327**
of which in CHP		50		49

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**1,5**	**1,5**
Solar	**64,5**	**65,7**
Biomass	**11,9**	**12,5**
solid biomass	6,6	7,3
biogas	5,3	5,2
bioliquids	n.a	n.a
Renewable energy from heat pumps:	**0,0**	**0,0**
of which aerothermal	0,0	0,0
of which geothermal	0,0	0,0
of which hydrothermal	0,0	0,0
Total	**77,9**	**79,7**
of which DH		
of which biomass in household	7,8	7,1

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**15,9**	**15,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**0,0**	**0,0**
of which road transport	0,0	0,0
of which non-road transport	0,0	0,0
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**15,9**	**15,0**

Czech Republic

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	14,1	15,33
RES Electricity (%)	11,64	12,75
RES Transport (%)	5,59	5,69
Overall RES share (%)	**11,42**	**12,41**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 890,8	2 094,1
(B) Gross final consumption of electricity from RES	660,3	722,2
(C) Gross final consumption of energy from RES in transport	312,8	314,5
(D) Gross total RES consumption	**2 863,9**	**3 130,8**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**2 212**	**2 859**	**2 252**	**3 640**
Non pumped	1 065	2 128	1 080	2 735
<1MW	149	391	155	479
1 MW - 10 MW	163	525	172	615
> 10 MW	753	1 212	753	1 641
Pumped	697	731	697	905
Mixed	450	n.a	475	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**2 022**	**2 149**	**2 064**	**2 033**
photovoltaïc	2 022	2 149	2 064	2 033
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**258**	**416**	**262**	**478**
onshore	258	416	262	478
offshore	0	0	0	0
Biomass	**300**	**3 285**	**361**	**3 977**
solid biomass	n.a	1 817	n.a	1 683
biogas	300	1 468	361	2 294
bioliquids	0	0	0	0
Total	**4 792**	**8 709**	**4 939**	**10 128**
of which in CHP		2 761		3 907

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**13,4**	**14,3**
Biomass	**1 749,3**	**1 939,7**
solid biomass	1 641,6	1 793,6
biogas	107,7	146,1
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**71,7**	**81,9**
of which aerothermal	30,9	37,0
of which geothermal	35,3	39,3
of which hydrothermal	5,4	5,6
Total	**1 834,4**	**2 035,9**
of which DH		
of which biomass in household	1 140,1	1 210,1

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**56,1**	**53,5**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**219,2**	**223,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**37,5**	**37,4**
of which road transport	1,2	1,3
of which non-road transport	36,4	36,1
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**312,8**	**314,5**

Denmark

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	33,48	34,78
RES Electricity (%)	38,68	43,12
RES Transport (%)	5,54	5,7
Overall RES share (%)	**25,61**	**27,19**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	2 553,1	2 613,3
(B) Gross final consumption of electricity from RES	1 184,5	1 316,5
(C) Gross final consumption of energy from RES in transport	217,2	219,9
(D) Gross total RES consumption	**3 954,8**	**4 149,7**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**9**	**17**	**9**	**14**
Non pumped	9	17	9	14
<1MW	6	5	5	3
1 MW - 10 MW	3	12	4	11
> 10 MW	0	0	0	0
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal				
Solar	**402**	**104**	**571**	**518**
photovoltaïc	402	104	571	518
concentrated solar power	0	0	0	0
Tide, wave, ocean	0	0	0	0
Wind	**4 163**	**10 270**	**4 810**	**11 123**
onshore	3 241	n.a	3 539	n.a
offshore	922	n.a	1 271	n.a
Biomass	**80**	**3 551**	**91**	**3 461**
solid biomass	n.a	3 176	n.a	3 072
biogas	80	375	84	389
bioliquids	0	n.a	7	n.a
Total	**4 654**	**13 942**	**5 481**	**15 116**
of which in CHP		3 548		3 460

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**3,4**	**2,7**
Solar	**21,0**	**24,5**
Biomass	**2 068,3**	**2 122,2**
solid biomass	2 017,2	2 058,9
biogas	51,1	53,2
bioliquids	0,0	10,1
Renewable energy from heat pumps:	**116,6**	**118,1**
of which aerothermal	60,7	61,2
of which geothermal	55,9	57,0
of which hydrothermal	0,0	0,0
Total	**2 209,3**	**2 267,5**
of which DH		
of which biomass in household	825,9	814,1

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**226,6**	**226,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**10,8**	**11,9**
of which road transport	0,0	0,0
of which non-road transport	10,8	11,9
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**237,4**	**238,5**

Estonia

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	43,12	43,14
RES Electricity (%)	15,78	13,03
RES Transport (%)	0,25	0,24
Overall RES share (%)	**25,81**	**25,62**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	691,2	709,1
(B) Gross final consumption of electricity from RES	130,6	107,4
(C) Gross final consumption of energy from RES in transport	1,3	1,2
(D) Gross total RES consumption	**823,1**	**817,7**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**8**	**42**	**8**	**26**
Non pumped	8	42	8	26
<1MW	8	42	8	26
1 MW - 10 MW	0	0	0	0
> 10 MW	0	0	0	0
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**0**	**0**	**0**	**0**
photovoltaïc	0	0	0	0
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**266**	**434**	**248**	**529**
onshore	266	434	248	529
offshore	0	0	0	0
Biomass	**4**	**1 001**	**6**	**665**
solid biomass	n.a	985	n.a	645
biogas	4	16	6	20
bioliquids	n.a	n.a	n.a	n.a
Total	**278**	**1 477**	**262**	**1 220**
of which in CHP		627		635

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**0,0**	**0,0**
Biomass	**657,7**	**668,9**
solid biomass	656,9	665,2
biogas	0,8	3,7
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**33,5**	**40,2**
of which aerothermal	18,3	22,2
of which geothermal	15,2	17,9
of which hydrothermal	0,0	0,0
Total	**691,2**	**709,1**
of which DH		
of which biomass in household	389,2	373,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**3,8**	**3,2**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**1,3**	**1,2**
of which road transport	0,4	0,4
of which non-road transport	1,0	0,8
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**5,1**	**4,4**

Finland

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	48,43	50,87
RES Electricity (%)	29,48	31,11
RES Transport (%)	0,43	9,87
Overall RES share (%)	**34,45**	**36,81**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	6 827,0	6 943,3
(B) Gross final consumption of electricity from RES	2 209,5	2 307,6
(C) Gross final consumption of energy from RES in transport	17,5	240,0
(D) Gross total RES consumption	**9 054,0**	**9 490,9**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**3 198**	**16 859**	**3 276**	**12 838**
Non pumped	3 198	16 859	3 276	12 838
<1MW	32	315	33	117
1 MW - 10 MW	283	1 418	285	960
> 10 MW	2 883	15 126	2 958	11 761
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**9**	**5**	**10**	**6**
photovoltaïc	9	5	10	6
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**257**	**494**	**449**	**774**
onshore	231	n.a	423	n.a
offshore	26	n.a	26	n.a
Biomass	**0**	**10 846**	**0**	**11 597**
solid biomass	n.a	10 707	n.a	11 458
biogas	0	139	0	139
bioliquids	n.a	n.a	n.a	n.a
Total	**3 464**	**28 204**	**3 735**	**25 215**
of which in CHP		9 568		10 024

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**1,1**	**1,2**
Biomass	**6 383,7**	**6 443,6**
solid biomass	6 347,1	6 412,0
biogas	36,6	31,6
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**315,3**	**352,6**
of which aerothermal	212,0	233,2
of which geothermal	103,3	119,4
of which hydrothermal	0,0	0,0
Total	**6 700,1**	**6 797,4**
of which DH		
of which biomass in household	1 366,2	1 246,8

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**91,4**	**65,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**103,8**	**154,8**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**17,5**	**18,5**
of which road transport	0,0	0,0
of which non-road transport	17,5	18,5
Others (as biogas, vegetable oils, etc.)	**0,3**	**1,0**
of which biofuels Article 21,2	n.a	n.a
Total	**213,1**	**239,9**

France

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	17,31	18,32
RES Electricity (%)	16,39	16,87
RES Transport (%)	7,08	7,22
Overall RES share (%)	**13,58**	**14,24**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	11 138,0	12 418,6
(B) Gross final consumption of electricity from RES	7 067,0	7 287,8
(C) Gross final consumption of energy from RES in transport	2 888,2	2 925,9
(D) Gross total RES consumption	**21 093,2**	**22 632,3**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**25 366**	**63 595**	**25 443**	**75 641**
Non pumped	18 121	58 717	18 198	70 490
<1MW	429	1 276	417	1 585
1 MW - 10 MW	1 596	4 480	1 604	5 611
> 10 MW	16 096	52 961	16 177	63 294
Pumped	1 808	4 878	1 808	5 151
Mixed	5 437	n.a	5 437	n.a
Geothermal	**2**	**51**	**2**	**81**
Solar	**3 953**	**4 017**	**4 625**	**4 661**
photovoltaïc	3 953	4 017	4 625	4 661
concentrated solar power	0	0	0	0
Tide, wave, ocean	**240**	**458**	**240**	**414**
Wind	**7 622**	**15 048**	**8 243**	**16 034**
onshore	7 622	15 048	8 243	16 034
offshore	0	0	0	0
Biomass	**247**	**2 910**	**273**	**3 104**
solid biomass	n.a	1 625	n.a	1 598
biogas	247	1 285	273	1 506
bioliquids	n.a	n.a	n.a	n.a
Total	**37 430**	**86 079**	**38 826**	**99 935**
of which in CHP		2 116		2 261

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**112,5**	**129,2**
Solar	**79,3**	**86,7**
Biomass	**9 184,4**	**10 295,7**
solid biomass	9 087,0	10 186,0
biogas	97,4	109,7
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**1 492,1**	**1 642,3**
of which aerothermal	1 241,8	1 382,8
of which geothermal	250,3	259,5
of which hydrothermal	0,0	0,0
Total	**10 868,3**	**12 153,9**
of which DH		
of which biomass in household	7 224,5	7 958,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**400,1**	**391,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**2 255,4**	**2 298,5**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**210,1**	**238,7**
of which road transport	0,0	0,0
of which non-road transport	210,1	238,7
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**2 865,6**	**2 928,9**

Germany

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	10,38	10,57
RES Electricity (%)	23,57	25,59
RES Transport (%)	6,88	6,33
Overall RES share (%)	**12,05**	**12,37**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	11 283,8	11 957,7
(B) Gross final consumption of electricity from RES	12 034,7	12 878,9
(C) Gross final consumption of energy from RES in transport	3 136,4	2 917,4
(D) Gross total RES consumption	**26 454,9**	**27 754,0**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**11 257**	**27 849**	**11 240**	**28 782**
Non pumped	4 451	21 755	4 434	22 998
<1MW	635	2 107	646	2 388
1 MW - 10 MW	656	2 904	640	4 769
> 10 MW	3 160	16 744	3 148	15 841
Pumped	5 650	6 094	5 650	5 784
Mixed	1 156	n.a	1 156	n.a
Geothermal	**12**	**25**	**24**	**80**
Solar	**32 643**	**26 380**	**36 337**	**31 010**
photovoltaïc	32 641	26 380	36 335	31 010
concentrated solar power	2	n.a	2	n.a
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**31 304**	**50 670**	**34 660**	**51 700**
onshore	30 869	n.a	33 757	n.a
offshore	435	n.a	903	n.a
Biomass	**4 018**	**39 678**	**4 350**	**41 154**
solid biomass	n.a	12 091	n.a	11 642
biogas	3 764	27 238	4 100	29 234
bioliquids	254	349	250	278
Total	**79 234**	**144 602**	**86 611**	**152 726**
of which in CHP		28 467		27 134

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**66,1**	**73,1**
Solar	**576,1**	**583,0**
Biomass	**9 152,3**	**9 521,8**
solid biomass	7 862,2	8 022,3
biogas	1 120,1	1 343,8
bioliquids	170,0	155,7
Renewable energy from heat pumps:	**680,2**	**745,8**
of which aerothermal	307,7	354,7
of which geothermal	295,8	311,8
of which hydrothermal	75,7	78,2
Total	**10 474,7**	**10 923,7**
of which DH		
of which biomass in household	5 517,3	5 634,4

** Other renewable heat captured by heat pumps*	*#REF!*	*#REF!*

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**791,8**	**765,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**2 113,8**	**1 892,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**188,1**	**215,0**
of which road transport	1,4	1,8
of which non-road transport	186,7	213,3
Others (as biogas, vegetable oils, etc.)	**42,8**	**46,4**
of which biofuels Article 21,2	n.a	n.a
Total	**3 136,4**	**2 919,2**

Greece

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	23,37	26,48
RES Electricity (%)	16,36	21,24
RES Transport (%)	1,03	1,06
Overall RES share (%)	**13,42**	**14,99**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 492,7	1 311,8
(B) Gross final consumption of electricity from RES	877,0	1 072,6
(C) Gross final consumption of energy from RES in transport	27,2	28,4
(D) Gross total RES consumption	**2 396,9**	**2 412,8**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**3 236**	**4 590**	**3 238**	**6 385**
Non pumped	2 537	4 402	2 539	6 347
<1MW	34	120	33	122
1 MW - 10 MW	184	549	187	650
> 10 MW	2 319	3 733	2 319	5 575
Pumped	0	188	0	38
Mixed	699	n.a	699	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**1 536**	**1 694**	**2 579**	**3 648**
photovoltaïc	1 536	1 694	2 579	3 648
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**1 753**	**3 850**	**1 809**	**4 139**
onshore	1 753	3 850	1 809	4 139
offshore	0	0	0	0
Biomass	**45**	**204**	**46**	**216**
solid biomass	n.a	0	n.a	0
biogas	45	204	46	216
bioliquids	n.a	n.a	n.a	n.a
Total	**6 570**	**10 338**	**7 672**	**14 388**
of which in CHP		164		177

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**13,1**	**11,5**
Solar	**184,4**	**187,0**
Biomass	**1 148,5**	**939,8**
solid biomass	1 132,9	922,4
biogas	15,2	17,0
bioliquids	0,4	0,4
Renewable energy from heat pumps:	**101,5**	**126,8**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**1 447,5**	**1 265,1**
of which DH		
of which biomass in household	954,0	821,4

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**102,8**	**121,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**3,2**	**5,0**
of which road transport	0,0	0,4
of which non-road transport	3,2	4,6
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**106,0**	**126,3**

Hungary

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	13,45	13,46
RES Electricity (%)	6,06	6,6
RES Transport (%)	4,56	5,35
Overall RES share (%)	**9,5**	**9,81**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 105,9	1 149,2
(B) Gross final consumption of electricity from RES	205,2	216,4
(C) Gross final consumption of energy from RES in transport	153,9	166,1
(D) Gross total RES consumption	**1 465,0**	**1 531,7**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**56**	**212**	**57**	**213**
Non pumped	56	212	57	213
<1MW	4	14	4	16
1 MW - 10 MW	11	25	12	46
> 10 MW	41	173	41	151
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**12**	**8**	**35**	**25**
photovoltaïc	12	8	35	25
concentrated solar power	0	0	0	0
Tide, wave, ocean	0	0	0	0
Wind	**331**	**770**	**329**	**717**
onshore	331	770	329	717
offshore	0	0	0	0
Biomass	**53**	**1 544**	**63**	**1 696**
solid biomass	n.a	1 333	n.a	1 429
biogas	53	211	63	267
bioliquids	n.a	n.a	n.a	n.a
Total	**452**	**2 534**	**484**	**2 651**
of which in CHP		268		336

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**106,7**	**111,7**
Solar	**5,9**	**6,0**
Biomass	**985,1**	**1 039,1**
solid biomass	976,4	1 026,3
biogas	8,7	12,8
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**2,0**	**0,0**
of which aerothermal	1,0	n.a
of which geothermal	1,0	n.a
of which hydrothermal	0,0	n.a
Total	**1 099,7**	**1 156,8**
of which DH		
of which biomass in household	724,3	738,8

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**52,1**	**37,5**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**103,0**	**105,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**16,6**	**22,9**
of which road transport	0,0	0,3
of which non-road transport	16,6	22,6
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**171,7**	**166,1**

Ireland

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	5,44	5,7
RES Electricity (%)	19,49	20,89
RES Transport (%)	4,07	5,02
Overall RES share (%)	**7,29**	**7,8**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	244,4	255,4
(B) Gross final consumption of electricity from RES	465,2	500,2
(C) Gross final consumption of energy from RES in transport	85,6	103,0
(D) Gross total RES consumption	**795,2**	**858,6**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**529**	**1 015**	**529**	**923**
Non pumped	237	803	237	578
<1MW	20	34	20	21
1 MW - 10 MW	21	75	21	54
> 10 MW	196	694	196	503
Pumped	292	212	292	345
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**0**	**0**	**0**	**0**
photovoltaïc	0	0	0	0
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**1 764**	**4 010**	**2 049**	**4 542**
onshore	1 739	n.a	2 024	n.a
offshore	25	n.a	25	n.a
Biomass	**44**	**383**	**52**	**416**
solid biomass	n.a	184	n.a	229
biogas	44	199	52	187
bioliquids	n.a	n.a	n.a	n.a
Total	**2 337**	**5 408**	**2 630**	**5 881**
of which in CHP		44		43

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**10,2**	**11,3**
Biomass	**180,8**	**186,0**
solid biomass	172,0	178,9
biogas	8,8	7,1
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**30,4**	**33,2**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**221,4**	**230,5**
of which DH		
of which biomass in household	27,6	28,4

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**28,5**	**27,8**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**31,2**	**44,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**0,8**	**0,8**
of which road transport	0,0	0,0
of which non-road transport	0,8	0,8
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**60,5**	**73,2**

Italy

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	16,88	18,03
RES Electricity (%)	27,42	31,3
RES Transport (%)	5,76	4,97
Overall RES share (%)	**15,4**	**16,71**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	10 226,5	10 603,2
(B) Gross final consumption of electricity from RES	7 839,8	8 665,1
(C) Gross final consumption of energy from RES in transport	1 551,6	1 468,3
(D) Gross total RES consumption	**19 617,9**	**20 736,6**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**21 880**	**43 854**	**22 009**	**54 671**
Non pumped	14 325	41 875	14 454	52 773
<1MW	569	2 085	621	2 636
1 MW - 10 MW	2 335	7 325	2 413	9 350
> 10 MW	11 421	32 465	11 420	40 787
Pumped	3 957	1 979	3 957	1 898
Mixed	3 598	n.a	3 598	n.a
Geothermal	**728**	**5 592**	**729**	**5 659**
Solar	**16 420**	**18 862**	**18 420**	**21 589**
photovoltaïc	16 420	18 862	18 420	21 589
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**8 102**	**13 407**	**8 557**	**14 897**
onshore	8 102	13 407	8 557	14 897
offshore	0	0	0	0
Biomass	**2 261**	**10 324**	**2 316**	**14 886**
solid biomass	n.a	2 582	n.a	3 679
biogas	1 274	4 620	1 317	7 448
bioliquids	987	3 122	999	3 759
Total	**49 391**	**92 039**	**52 031**	**111 702**
of which in CHP		4 232		6 495

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**133,8**	**134,6**
Solar	**155,3**	**168,2**
Biomass	**7 400,5**	**7 649,3**
solid biomass	7 196,2	7 383,0
biogas	183,2	245,6
bioliquids	21,1	20,7
Renewable energy from heat pumps:	**2 415,1**	**2 519,4**
of which aerothermal	2 351,3	2 447,2
of which geothermal	57,4	64,9
of which hydrothermal	6,4	7,2
Total	**10 104,7**	**10 471,5**
of which DH		
of which biomass in household	6 637,4	6 632,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**105,1**	**74,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**1 262,8**	**1 176,2**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**185,9**	**218,2**
of which road transport	4,7	6,3
of which non-road transport	181,2	211,9
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**1 553,8**	**1 468,7**

Latvia

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	47,39	49,71
RES Electricity (%)	44,88	48,75
RES Transport (%)	3,1	3,08
Overall RES share (%)	**35,78**	**37,07**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 187,5	1 165,1
(B) Gross final consumption of electricity from RES	298,6	312,3
(C) Gross final consumption of energy from RES in transport	23,9	23,5
(D) Gross total RES consumption	**1 510,0**	**1 500,9**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**1 576**	**3 707**	**1 589**	**2 912**
Non pumped	1 576	3 707	1 589	2 912
<1MW	25	74	28	53
1 MW - 10 MW	1	6	1	5
> 10 MW	1 550	3 627	1 560	2 854
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**0**	**0**	**0**	**0**
photovoltaïc	0	0	0	0
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**59**	**114**	**67**	**120**
onshore	59	114	67	120
offshore	0	0	0	0
Biomass	**43**	**289**	**53**	**502**
solid biomass	n.a	65	n.a	215
biogas	43	223	53	287
bioliquids	0	1	0	0
Total	**1 678**	**4 110**	**1 709**	**3 534**
of which in CHP		283		495

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**0,0**	**0,0**
Biomass	**1 186,0**	**1 162,9**
solid biomass	1 166,0	1 140,8
biogas	17,7	22,1
bioliquids	2,3	0,0
Renewable energy from heat pumps:	**0,0**	**0,0**
of which aerothermal		
of which geothermal		
of which hydrothermal		
Total	**1 186,0**	**1 162,9**
of which DH		
of which biomass in household	664,6	577,9

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**6,4**	**6,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**15,1**	**15,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**4,7**	**4,8**
of which road transport	2,4	2,5
of which non-road transport	2,3	2,3
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**26,2**	**26,3**

Lithuania

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	35,45	37,72
RES Electricity (%)	10,87	13,14
RES Transport (%)	4,79	4,65
Overall RES share (%)	**21,73**	**22,95**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	937,3	951,8
(B) Gross final consumption of electricity from RES	103,0	124,7
(C) Gross final consumption of energy from RES in transport	61,8	60,1
(D) Gross total RES consumption	**1 102,1**	**1 136,6**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**876**	**937**	**876**	**1 069**
Non pumped	116	423	116	521
<1MW	18	68	18	66
1 MW - 10 MW	8	29	8	26
> 10 MW	90	326	90	429
Pumped	760	514	760	548
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**7**	**2**	**68**	**45**
photovoltaïc	7	2	68	45
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**225**	**540**	**279**	**600**
onshore	225	540	279	600
offshore	0	0	0	0
Biomass	**15**	**218**	**16**	**338**
solid biomass	n.a	176	n.a	279
biogas	15	42	16	59
bioliquids	n.a	n.a	n.a	n.a
Total	**1 123**	**1 697**	**1 239**	**2 052**
of which in CHP		218		338

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**1,9**	**0,8**
Solar	**0,0**	**0,0**
Biomass	**934,7**	**944,7**
solid biomass	930,4	938,2
biogas	4,3	6,5
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**3,0**	**0,0**
of which aerothermal	1,0	n.a
of which geothermal	2,0	n.a
of which hydrothermal	0,0	0,0
Total	**939,6**	**945,5**
of which DH		
of which biomass in household	560,5	539,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**8,4**	**6,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**52,1**	**51,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**1,3**	**1,4**
of which road transport	0,7	0,8
of which non-road transport	0,6	0,6
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**61,8**	**59,1**

Luxembourg

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	5,02	5,65
RES Electricity (%)	4,65	5,31
RES Transport (%)	2,22	3,88
Overall RES share (%)	**3,14**	**3,57**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	53,9	60,2
(B) Gross final consumption of electricity from RES	25,3	28,6
(C) Gross final consumption of energy from RES in transport	49,4	55,8
(D) Gross total RES consumption	**128,6**	**144,6**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**1 134**	**1 158**	**1 134**	**1 158**
Non pumped	34	97	34	119
<1MW	2	5	2	6
1 MW - 10 MW	32	92	32	113
> 10 MW	0	0	0	0
Pumped	1 100	1 061	1 100	1 039
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**74**	**38**	**95**	**74**
photovoltaïc	74	38	95	74
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**58**	**75**	**58**	**81**
onshore	58	75	58	81
offshore	0	0	0	0
Biomass	**10**	**58**	**10**	**58**
solid biomass	n.a	0	n.a	2
biogas	10	58	10	56
bioliquids	n.a	n.a	n.a	n.a
Total	**1 276**	**1 329**	**1 297**	**1 371**
of which in CHP		58		58

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**1,7**	**2,5**
Biomass	**48,4**	**53,4**
solid biomass	42,6	48,2
biogas	5,8	5,2
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**1,4**	**1,5**
of which aerothermal	1,0	1,0
of which geothermal	0,4	0,5
of which hydrothermal	0,0	0,0
Total	**51,5**	**57,4**
of which DH		
of which biomass in household	17,3	21,4

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**1,3**	**0,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**47,4**	**54,6**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**2,2**	**2,4**
of which road transport	0,0	0,0
of which non-road transport	2,2	2,4
Others (as biogas, vegetable oils, etc.)	**0,2**	**0,2**
of which biofuels Article 21,2	n.a	n.a
Total	**51,1**	**57,8**

Malta

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	16,7	23,67
RES Electricity (%)	0,98	1,62
RES Transport (%)	3,1	3,26
Overall RES share (%)	**2,66**	**3,83**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	7,1	11,0
(B) Gross final consumption of electricity from RES	1,9	3,1
(C) Gross final consumption of energy from RES in transport	2,9	3,0
(D) Gross total RES consumption	**11,9**	**17,1**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**0**	**0**	**0**	**0**
Non pumped	0	0	0	0
<1MW	0	0	0	0
1 MW - 10 MW	0	0	0	0
> 10 MW	0	0	0	0
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**14**	**14**	**31**	**31**
photovoltaïc	14	14	31	31
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**0**	**0**	**0**	**0**
onshore	0	0	0	0
offshore	0	0	0	0
Biomass	**0**	**9**	**0**	**6**
solid biomass	n.a	0	n.a	0
biogas	0	9	0	6
bioliquids	n.a	n.a	n.a	n.a
Total	**14**	**23**	**31**	**37**
of which in CHP		9		6

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**3,9**	**4,1**
Biomass	**1,5**	**1,1**
solid biomass	0,9	0,6
biogas	0,6	0,5
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**1,8**	**5,5**
of which aerothermal	n.a	n.a
of which geothermal	n.a	n.a
of which hydrothermal	n.a	n.a
Total	**7,2**	**10,7**
of which DH		
of which biomass in household	0,9	0,9

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**2,6**	**3,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**0,0**	**0,0**
of which road transport	0,0	0,0
of which non-road transport	0,0	0,0
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**2,6**	**3,0**

Netherlands

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	3,36	3,61
RES Electricity (%)	10,48	10,07
RES Transport (%)	4,96	5,05
Overall RES share (%)	**4,47**	**4,52**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	939,4	1 019,0
(B) Gross final consumption of electricity from RES	1 047,3	999,0
(C) Gross final consumption of energy from RES in transport	349,3	341,3
(D) Gross total RES consumption	**2 336,0**	**2 359,3**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**37**	**104**	**37**	**114**
Non pumped	37	104	37	114
<1MW	0	0	0	0
1 MW - 10 MW	0	0	0	0
> 10 MW	37	104	37	114
Pumped	0	0	0	0
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**365**	**253**	**739**	**515**
photovoltaïc	365	253	739	515
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**2 433**	**4 999**	**2 713**	**5 603**
onshore	2 205	n.a	2 485	n.a
offshore	228	n.a	228	n.a
Biomass	**236**	**4 968**	**247**	**3 879**
solid biomass	n.a	3 960	n.a	2 899
biogas	219	1 008	230	980
bioliquids	17	n.a	17	n.a
Total	**3 071**	**10 324**	**3 736**	**10 111**
of which in CHP		2 517		2 155

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**11,8**	**23,7**
Solar	**25,5**	**26,0**
Biomass	**567,8**	**578,5**
solid biomass	452,2	453,6
biogas	115,6	124,9
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**131,5**	**146,8**
of which aerothermal	63,4	71,4
of which geothermal	68,1	75,4
of which hydrothermal	0,0	0,0
Total	**736,6**	**775,0**
of which DH		
of which biomass in household	308,9	312,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**124,5**	**125,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**210,3**	**194,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**30,4**	**32,6**
of which road transport	0,3	0,6
of which non-road transport	30,1	32,0
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**365,2**	**352,2**

Poland

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	13,28	13,94
RES Electricity (%)	10,68	10,73
RES Transport (%)	6,09	6,03
Overall RES share (%)	**10,87**	**11,28**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	5 051,9	5 259,9
(B) Gross final consumption of electricity from RES	1 404,7	1 412,8
(C) Gross final consumption of energy from RES in transport	877,1	806,5
(D) Gross total RES consumption	**7 333,7**	**7 479,2**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**2 351**	**2 466**	**2 355**	**2 997**
Non pumped	569	2 038	573	2 439
<1MW	88	321	88	352
1 MW - 10 MW	185	620	189	645
> 10 MW	296	1 097	296	1 442
Pumped	1 406	428	1 406	558
Mixed	376	n.a	376	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**1**	**1**	**2**	**1**
photovoltaïc	1	1	2	1
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**2 564**	**4 747**	**3 390**	**6 004**
onshore	2 564	4 747	3 390	6 004
offshore	0	0	0	0
Biomass	**128**	**10 094**	**153**	**8 615**
solid biomass	n.a	9 529	n.a	7 924
biogas	128	565	153	690
bioliquids	n.a	n.a	n.a	1
Total	**5 044**	**17 308**	**5 900**	**17 617**
of which in CHP		10 094		8 615

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**15,8**	**18,6**
Solar	**13,0**	**15,3**
Biomass	**4 984,2**	**5 184,7**
solid biomass	4 912,0	5 111,2
biogas	72,2	73,5
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**6,4**	**7,0**
of which aerothermal	0,5	0,7
of which geothermal	4,2	4,7
of which hydrothermal	1,6	1,6
Total	**5 019,4**	**5 225,6**
of which DH		
of which biomass in household	2 790,9	2 790,9

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**153,9**	**144,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**669,0**	**603,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**54,2**	**59,0**
of which road transport	0,3	0,3
of which non-road transport	53,9	58,6
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**877,1**	**806,5**

Portugal

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	34	34,55
RES Electricity (%)	47,59	49,16
RES Transport (%)	0,42	0,66
Overall RES share (%)	**24,99**	**25,69**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 985,3	1 935,7
(B) Gross final consumption of electricity from RES	2 174,2	2 237,9
(C) Gross final consumption of energy from RES in transport	18,2	24,8
(D) Gross total RES consumption	**4 177,7**	**4 198,4**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**5 717**	**6 660**	**5 666**	**14 869**
Non pumped	4 374	5 622	4 299	13 731
<1MW	32	74	32	100
1 MW - 10 MW	348	553	341	1 095
> 10 MW	3 994	4 995	3 926	12 536
Pumped	0	1 038	0	1 138
Mixed	1 343	n.a	1 367	n.a
Geothermal	**25**	**146**	**25**	**197**
Solar	**238**	**393**	**296**	**479**
photovoltaïc	238	393	296	479
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**4 531**	**10 259**	**4 731**	**12 015**
onshore	4 529	n.a	4 729	n.a
offshore	2	n.a	2	n.a
Biomass	**51**	**2 705**	**55**	**2 765**
solid biomass	n.a	2 496	n.a	2 516
biogas	51	209	55	249
bioliquids	n.a	n.a	n.a	n.a
Total	**10 562**	**20 163**	**10 773**	**30 325**
of which in CHP		1 720		1 790

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**1,6**	**1,6**
Solar	**67,4**	**72,8**
Biomass	**1 881,2**	**1 829,3**
solid biomass	1 881,2	1 829,3
biogas	0,0	0,0
bioliquids	n.a	n.a
Renewable energy from heat pumps:	**23,0**	**0,0**
of which aerothermal	22,0	n.a
of which geothermal	1,0	n.a
of which hydrothermal	0	n.a
Total	**1 973,2**	**1 903,7**
of which DH		
of which biomass in household	767,0	770,4

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**2,7**	**4,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**267,8**	**255,4**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**14,0**	**15,4**
of which road transport	0,0	0,0
of which non-road transport	14,0	15,4
Others (as biogas, vegetable oils, etc.)	**4,2**	**4,0**
of which biofuels Article 21,2	n.a	n.a
Total	**288,7**	**279,5**

Romania

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	25,74	26,2
RES Electricity (%)	33,57	37,52
RES Transport (%)	4,04	4,65
Overall RES share (%)	**22,79**	**23,94**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	3 687,7	3 551,2
(B) Gross final consumption of electricity from RES	1 671,6	1 793,1
(C) Gross final consumption of energy from RES in transport	210,4	233,8
(D) Gross total RES consumption	**5 569,7**	**5 578,1**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**6 548**	**12 337**	**6 610**	**15 307**
Non pumped	6 456	12 066	6 249	14 956
<1MW	90	114	88	157
1 MW - 10 MW	333	426	390	702
> 10 MW	6 033	11 526	5 771	14 097
Pumped	92	271	92	351
Mixed	0	n.a	269	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**41**	**8**	**761**	**420**
photovoltaïc	41	8	761	420
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**1 822**	**2 640**	**2 783**	**4 047**
onshore	1 822	2 783	2 783	4 047
offshore	0	0	0	0
Biomass	**5**	**212**	**11**	**252**
solid biomass	n.a	193	n.a	202
biogas	5	19	11	50
bioliquids	n.a	n.a	n.a	n.a
Total	**8 416**	**15 197**	**10 165**	**20 026**
of which in CHP		159		151

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**21,6**	**25,3**
Solar	**0,1**	**0,2**
Biomass	**3 621,0**	**3 554,6**
solid biomass	3 612,8	3 541,7
biogas	8,2	12,9
bioliquids		
Renewable energy from heat pumps:	**0,0**	**0,0**
of which aerothermal	0,0	n.a
of which geothermal	1,0	n.a
of which hydrothermal	0,0	n.a
Total	**3 642,7**	**3 580,1**
of which DH		
of which biomass in household	3 283,7	3 109,0

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**59,3**	**56,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**128,3**	**122,0**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**32,1**	**30,1**
of which road transport	1,6	1,2
of which non-road transport	30,5	28,9
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**219,7**	**208,2**

Slovakia

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	8,72	7,49
RES Electricity (%)	20,05	20,8
RES Transport (%)	4,83	5,3
Overall RES share (%)	**10,37**	**9,82**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	528,3	483,5
(B) Gross final consumption of electricity from RES	485,8	501,0
(C) Gross final consumption of energy from RES in transport	100,4	109,6
(D) Gross total RES consumption	**1 114,5**	**1 094,1**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**2 522**	**4 439**	**2 523**	**5 166**
Non pumped	1 606	4 103	1 607	4 848
<1MW	26	36	24	39
1 MW - 10 MW	45	73	48	98
> 10 MW	1 535	3 994	1 535	4 711
Pumped	916	336	916	318
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**513**	**424**	**588**	**588**
photovoltaïc	513	424	588	588
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**3**	**6**	**5**	**6**
onshore	3	6	5	6
offshore	0	0	0	0
Biomass	**41**	**914**	**35**	**890**
solid biomass	n.a	724	n.a	677
biogas	41	190	35	213
bioliquids	n.a	n.a	n.a	n.a
Total	**3 079**	**5 783**	**3 151**	**6 650**
of which in CHP		818		766

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**3,6**	**4,1**
Solar	**5,4**	**5,6**
Biomass	**515,1**	**468,9**
solid biomass	493,0	460,7
biogas	22,1	8,2
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**19,0**	**0,0**
of which aerothermal	13,0	n.a
of which geothermal	6,0	n.a
of which hydrothermal	0,0	n.a
Total	**543,1**	**478,6**
of which DH		
of which biomass in household	37,0	38,6

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	2013
Bioethanol bio ETBE	**17,8**	**17,8**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**73,1**	**81,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**9,5**	**10,6**
of which road transport	0,0	0,5
of which non-road transport	9,5	10,1
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**100,4**	**109,7**

Slovenia

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	30,24	31,74
RES Electricity (%)	31,36	32,82
RES Transport (%)	2,93	3,4
Overall RES share (%)	**20,23**	**21,52**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	582,5	604,6
(B) Gross final consumption of electricity from RES	390,1	408,8
(C) Gross final consumption of energy from RES in transport	55,4	62,1
(D) Gross total RES consumption	**1 028,0**	**1 075,5**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**1 254**	**4 080**	**1 299**	**4 906**
Non pumped	1 074	3 892	1 119	4 612
<1MW	119	135	120	169
1 MW - 10 MW	41	161	41	193
> 10 MW	914	3 596	958	4 250
Pumped	180	188	180	294
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**142**	**163**	**187**	**215**
photovoltaïc	142	163	187	215
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**2**	**0**	**2**	**4**
onshore	2	0	2	4
offshore	0	0	0	0
Biomass	**29**	**267**	**29**	**262**
solid biomass	n.a	114	n.a	120
biogas	29	153	29	141
bioliquids	n.a	n.a	n.a	1
Total	**1 427**	**4 510**	**1 517**	**5 387**
of which in CHP		262		258

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**33,1**	**37,0**
Solar	**9,4**	**9,6**
Biomass	**548,6**	**557,9**
solid biomass	536,9	546,8
biogas	11,7	11,1
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**30,0**	**0,0**
of which aerothermal	5,0	n.a
of which geothermal	25,0	n.a
of which hydrothermal	0,0	n.a
Total	**621,1**	**604,5**
of which DH		
of which biomass in household	462,8	472,0

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**5,1**	**5,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**45,8**	**55,8**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**4,4**	**4,1**
of which road transport	0,0	0,0
of which non-road transport	4,4	4,1
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**55,3**	**65,6**

Spain

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	14,13	14,89
RES Electricity (%)	33,47	36,39
RES Transport (%)	0,42	0,44
Overall RES share (%)	**14,3**	**15,42**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	4 169,3	4 384,1
(B) Gross final consumption of electricity from RES	8 022,0	8 410,2
(C) Gross final consumption of energy from RES in transport	114,1	116,8
(D) Gross total RES consumption	**12 305,4**	**12 911,1**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**18 550**	**24 162**	**19 094**	**41 072**
Non pumped	13 293	20 545	13 766	36 781
<1MW	279	448	280	797
1 MW - 10 MW	1 663	2 486	1 668	4 445
> 10 MW	11 351	17 611	11 818	31 539
Pumped	2 465	3 617	2 462	4 291
Mixed	2 792	n.a	2 866	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**6 646**	**11 968**	**7 016**	**12 692**
photovoltaïc	4 646	8 193	4 766	8 297
concentrated solar power	2 000	3 775	2 250	4 395
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**22 795**	**49 472**	**22 959**	**53 903**
onshore	22 795	49 472	22 954	n.a
offshore	0	0	5	n.a
Biomass	**218**	**4 262**	**220**	**4 697**
solid biomass	n.a	3 396	n.a	3 789
biogas	218	866	220	908
bioliquids	n.a	n.a	n.a	n.a
Total	**48 209**	**89 864**	**49 289**	**112 364**
of which in CHP		1 910		2 194

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**17,6**	**18,1**
Solar	**220,3**	**238,3**
Biomass	**3 904,9**	**4 101,1**
solid biomass	3 849,5	4 054,1
biogas	55,4	47,0
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**40,0**	**0,0**
of which aerothermal	39,0	n.a
of which geothermal	1,0	n.a
of which hydrothermal	0,0	n.a
Total	**4 182,8**	**4 357,5**
of which DH		
of which biomass in household	2 511,1	2 519,7

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**198,4**	**167,1**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**1 888,9**	**716,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**114,1**	**116,7**
of which road transport	0,0	0,0
of which non-road transport	114,1	116,7
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**2 201,4**	**1 000,1**

Sweden

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	65,66	67,15
RES Electricity (%)	59,96	61,81
RES Transport (%)	12,91	16,65
Overall RES share (%)	**51,07**	**52,13**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	9 701,7	9 449,8
(B) Gross final consumption of electricity from RES	7 442,7	7 460,5
(C) Gross final consumption of energy from RES in transport	758,3	968,7
(D) Gross total RES consumption	**17 902,7**	**17 879,0**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**16 414**	**79 058**	**16 494**	**61 496**
Non pumped	16 315	78 932	16 395	61 361
<1MW	186	803	189	563
1 MW - 10 MW	767	3 563	803	2 457
> 10 MW	15 362	74 566	15 403	58 341
Pumped	99	126	99	135
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**24**	**19**	**43**	**35**
photovoltaïc	24	19	43	35
concentrated solar power	0	0	0	0
Tide, wave, ocean	**0**	**0**	**0**	**0**
Wind	**3 607**	**7 165**	**4 382**	**9 842**
onshore	3 443	n.a	4 170	n.a
offshore	164	n.a	212	n.a
Biomass	**533**	**10 532**	**553**	**9 748**
solid biomass	n.a	10 507	n.a	9 609
biogas	5	20	5	20
bioliquids	528	5	548	119
Total	**20 578**	**96 774**	**21 472**	**81 121**
of which in CHP		10 532		9 748

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,0**	**0,0**
Solar	**11,1**	**11,2**
Biomass	**8 033,2**	**7 749,8**
solid biomass	7 920,5	7 625,6
biogas	112,7	124,2
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**1 217,6**	**1 225,0**
of which aerothermal	262,6	268,0
of which geothermal	809,6	844,6
of which hydrothermal	0,0	0,0
Total	**9 261,9**	**8 986,0**
of which DH		
of which biomass in household	1 189,3	968,8

Other renewable heat captured by heat pumps	*#REF!*	*#REF!*

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**205,5**	**179,9**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**328,7**	**450,9**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**129,3**	**141,6**
of which road transport	0,0	0,0
of which non-road transport	129,3	141,6
Others (as biogas, vegetable oils, etc.)	**69,5**	**75,0**
of which biofuels Article 21,2	n.a	n.a
Total	**733,0**	**847,4**

United Kingdom

Table 1 : The sectoral (electricity, heating and cooling and transport) and overall shares of energy from renewable sources

	2012	2013
RES H&C (%)	2,27	2,63
RES Electricity (%)	10,77	13,85
RES Transport (%)	3,66	4,42
Overall RES share (%)	**4,16**	**5,13**
Of which from cooperation mechanism (%)	-	-
Surplus for cooperation mechanism (%)	-	-

Table 1a : Calculation table for the renewable energy contribution of each sector to final energy consumption(ktoe)

	2012	2013
(A) Gross final consumption of RES for H&C	1 295,5	1 553,0
(B) Gross final consumption of electricity from RES	3 379,2	4 338,4
(C) Gross final consumption of energy from RES in transport	949,6	1 117,6
(D) Gross total RES consumption	**5 624,3**	**7 009,0**
(E) Transfer of RES to other Member States	-	-
(F) Transfer of RES from other Member States and 3rd countries	-	-
(G) RES consumption adjusted for target (D) = (E) + (F)	-	-

Table 1b : Total actual contribution (installed capacity, gross electricity generation) from each renewable technology in Member State to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	2012		2013	
	MW	GWh	MW	GWh
Hydro	**4 431**	**8 250**	**4 437**	**7 596**
Non pumped	1 687	5 284	1 693	4 698
<1MW	66	281	66	221
1 MW - 10 MW	188	586	192	580
> 10 MW	1 433	4 417	1 435	3 897
Pumped	2 744	2 966	2 744	2 898
Mixed	0	n.a	0	n.a
Geothermal	**0**	**0**	**0**	**0**
Solar	**1 747**	**1 351**	**2 780**	**2 036**
photovoltaïc	1 747	1 351	2 780	2 036
concentrated solar power	0	0	0	0
Tide, wave, ocean	3	n.a	3	n.a
Wind	**8 895**	**19 661**	**11 209**	**28 434**
onshore	5 900	n.a	7 513	n.a
offshore	2 995	n.a	3 696	n.a
Biomass	**1 166**	**12 882**	**1 166**	**16 508**
solid biomass	n.a	7 008	n.a	10 577
biogas	1 166	5 874	1 166	5 931
bioliquids	n.a	n.a	n.a	n.a
Total	**16 242**	**42 144**	**19 595**	**54 574**
of which in CHP		625		665

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in Member State to meet the binding 2020 targets and the indicativeinterim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2012	2013
Geothermal (excluding low temperature geothermal heat in heat pump applications)	**0,8**	**0,8**
Solar	**152,3**	**189,5**
Biomass	**992,9**	**1 188,8**
solid biomass	922,9	1 114,7
biogas	70,0	74,1
bioliquids	0,0	0,0
Renewable energy from heat pumps:	**67,3**	**90,4**
of which aerothermal	38,3	57,0
of which geothermal	29,0	33,4
of which hydrothermal	0,0	0,0
Total	**1 213,3**	**1 469,5**
of which DH		
of which biomass in household	426,5	504,3

Table 1d: Total actual contribution from each renewable energy technology in Member States to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2012	**2013**
Bioethanol bio ETBE	**434,5**	**459,3**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Biodiesel	**495,7**	**598,7**
of which biofuels Article 21,2	n.a	n.a
of which importated	n.a	n.a
Hydrogen from renewables	**0,0**	**0,0**
Renewable electricity	**70,5**	**78,4**
of which road transport	1,5	2,2
of which non-road transport	69,0	76,1
Others (as biogas, vegetable oils, etc.)	**0,0**	**0,0**
of which biofuels Article 21,2	n.a	n.a
Total	**1 000,7**	**1 136,4**