

Submission from Ireland under Article 4 (3) of Directive 2009/28/EC on the promotion of the use of energy from renewable sources

Ireland currently forecasts that it will reach the renewable energy target of 16% addressed to it in Directive 2009/28/EC on a domestic basis as set out in the attached tables, which represent tables 1, 3, 4a and 4b from the template for National Renewable Energy Action Plans (C(2009)5174-1).

The analysis underpinning these tables has been carried out by the sustainable energy authority, Sustainable Energy Ireland. The reference scenario in Table 1 implicitly contains the effects of some of the measures from the National Energy Efficiency Action Plan that have already been taken. The trajectory demonstrates Ireland meeting the overall 16% target for the share of energy from renewable sources in gross final consumption of energy by 2020 with 44% RES-E, 11% RES-T and 12% RES-H.

Ireland notes that this document is a forecast document only based on preliminary modelling work and that the annual trajectories may differ significantly in Ireland's final National Renewable Energy Action Plan to be submitted by 30 June 2010 under Directive 2009/28/EC. In particular, Sustainable Energy Ireland will be working on detailed modelling in the intervening period to identify the least cost trajectory towards achieving the overall target, which will be achieved from indigenous resources. This exercise, together with ongoing policy developments, may influence the final National Renewable Energy Action Plan to be submitted.

As regards the co-operation mechanisms outlined in the Directive, Ireland is supportive of these in principle. Ireland would be open to participating in suitable joint projects. Ireland notes in particular its significant offshore resources [ocean and offshore wind] which hold electricity export potential; however constraints and costs relating to domestic deep reinforcement for grid infrastructure, electricity interconnectors and offshore grid development will have to be appropriately addressed in order for such export potential to be harnessed. The indicative trajectory illustrates that there may be possibilities for Ireland to engage in short term statistical transfer between 2011 and 2018, although not in the final two years.

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Table 1: Expected gross final energy consumption of Ireland in heating and cooling, electricity and transport up to 2020 taking into account the effects of energy efficiency and energy saving measures 2010-2020 (ktoe)

	2005	2010		2011		2012		2013		2014	
		Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency
Heating	Base Year	5184	5160	5233	5139	5216	5065	5248	5041	5307	5043
Gross Electricity	2341	2473	2435	2469	2412	2500	2426	1215	2447	2719	2477
Weighted Transport	4155	4606	4565	4431	4360	4578	4484	4740	4622	5042	4906
Gross Final Consumption	12806	13089	12985	12798	12576	12946	12626	13193	12775	13621	13110
Final Consumption in Aviation	857	833	833	673	673	659	659	671	672	692	692
Aviation prop of Final cons.	6.69%	6.36%	6.41%	5.25%	5.35%	5.09%	5.22%	5.09%	5.26%	5.08%	5.28%
Reduction for Aviation Limit	12741	13065	12955	12798	12576	12946	12625	13192	12774	13621	13109

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Table 1: Expected gross final energy consumption of Ireland in heating and cooling, electricity and transport up to 2020 taking into account the effects of energy efficiency and energy saving measures 2010-2020 (ktoe) (continued)

	2015		2016		2017		2018		2019		2020	
	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency	Reference Scenario	Additional Energy Efficiency
Heating	5388	5069	5477	5102	5546	5066	5613	5029	5668	4980	5724	4931
Gross Electricity	2636	2507	2677	2549	2713	2585	2746	2620	2779	2654	2813	2689
Weighted Transport	5310	5154	5464	5318	5589	5448	5705	5571	5824	5698	5912	5797
Gross Final Consumption	14052	13446	14341	13656	14580	13760	14813	13858	15041	13951	15243	14018
Final Consumption in Aviation	725	725	729	730	739	740	755	755	777	777	800	800
Aviation prop of Final cons.	5.16%	5.39%	5.09%	5.34%	5.07%	5.37%	5.10%	5.45%	5.16%	5.57%	5.25%	5.71%
Reduction for Aviation Limit	14052	13446	14341	136552	14579	137595	14812	13857	15040	13950	15243	14017

Table 3: National 2020 target and estimated trajectory of energy from renewable sources in heating and cooling, electricity and transport

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES-H&C	3%	5%	6%	5%	7%	8%	8%	9%	10%	10%	11%	12%
RES-E	8%	21%	24%	26%	29%	31%	34%	36%	38%	40%	42%	44%
RES-T	0%	3%	4%	5%	5%	6%	7%	7%	9%	9%	10%	11%
Overall RES	3%	7%	8%	9%	10%	11%	12%	12%	13%	14%	15%	16%
cooperation mechanism		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Surplus for cooperation		0%	2%	2%	2%	2%	3%	3%	1%	1%	0%	0%

	S2005+ 20%(S2020-S2005)	S2005+ 30%(S2020-S2005)	S2005+ 45%(S2020-S2005)	S2005+ 60%(S2020-S2005)	S2005+ 100%(S2020-S2005)
	2011-2012	2013-2014	2015-2016	2017-2018	2020
RES Min Trajectory	5.5%	6.8%	8.8%	11.4%	16.0%
RES min ktoe	746	932	1212	1585	2238

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Table 4a: Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gross Final Consumption Heating	193	252	286	320	354	387	421	455	489	523	557	591
Gross Final Consumption Electricity	180	504	572	640	708	776	844	912	980	1047	1115	1183
Gross Final Consumption Transport	1	135	168	201	234	266	299	332	365	398	431	464
Total RES consumption	373	891	1025	1160	1295	1430	1565	1699	1834	1969	2104	2239
transfer to other MS	0	0	0	0	0	0	0	0	0	0	0	0
Transfer from other Member States	0	0	0	0	0	0	0	0	0	0	0	0
Expect RES Consumption	373	891	1025	1160	1295	1430	1565	1699	1834	1969	2104	2239

Table 4b: Calculation table for the renewable energy in transport share (ktoe)

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES Consumption in Transport	1	136	169	202	235	268	301	341	381	422	464	506
RES electricity in road transport	0	1	1	1	1	1	2	8	16	24	32	42
Contribution from 2nd gen	0	0	0	0	0	0	0	0	0	0	0	0
RES Contribution to transport RES-T target	1	137	170	204	237	270	303	353	404	457	513	569