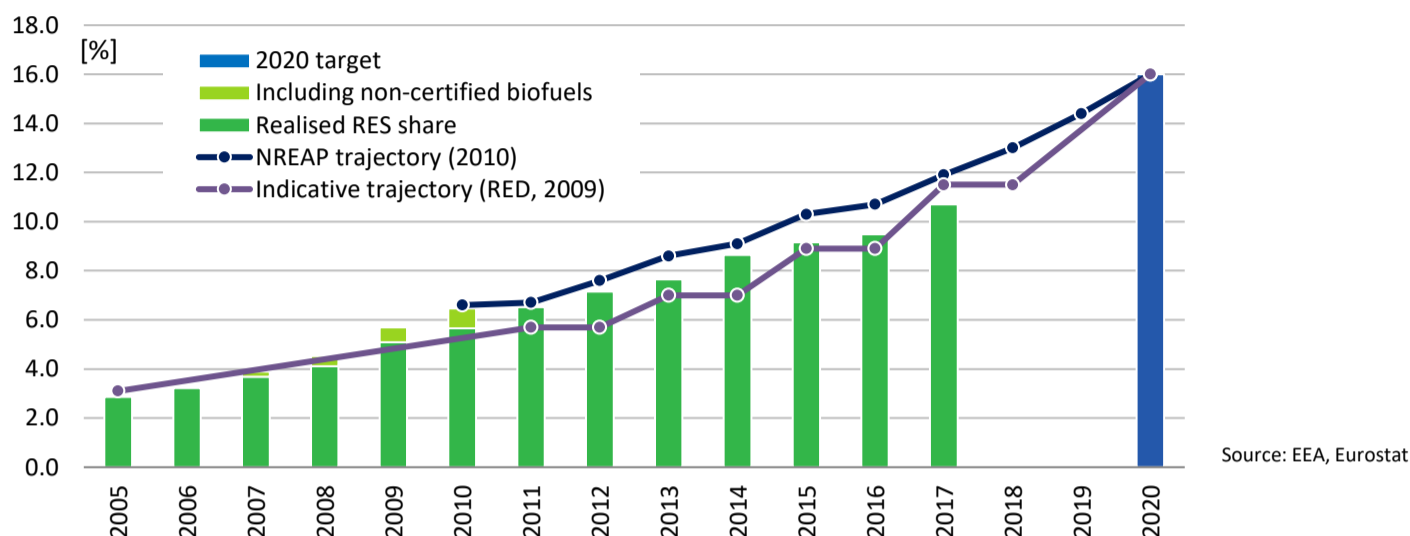


Summary

In Ireland, a feed-in-tariff scheme (REFIT) to promote the generation of renewable electricity was closed for new applications by 31 December 2015. A new support scheme, RESS, was announced in July 2018 to be implemented in 2019. So far, details and auction calls remain to be published. The only remaining renewable electricity support scheme, introduced in 2018, is a subsidy for the purchase and installation of PV and battery storage. Renewable energy sources for heating purposes are promoted through subsidies and an accelerated capital depreciation instrument. Renewable energy use in transport is supported by a biofuels quota system. Several benefits are available to promote the uptake of electric vehicles.

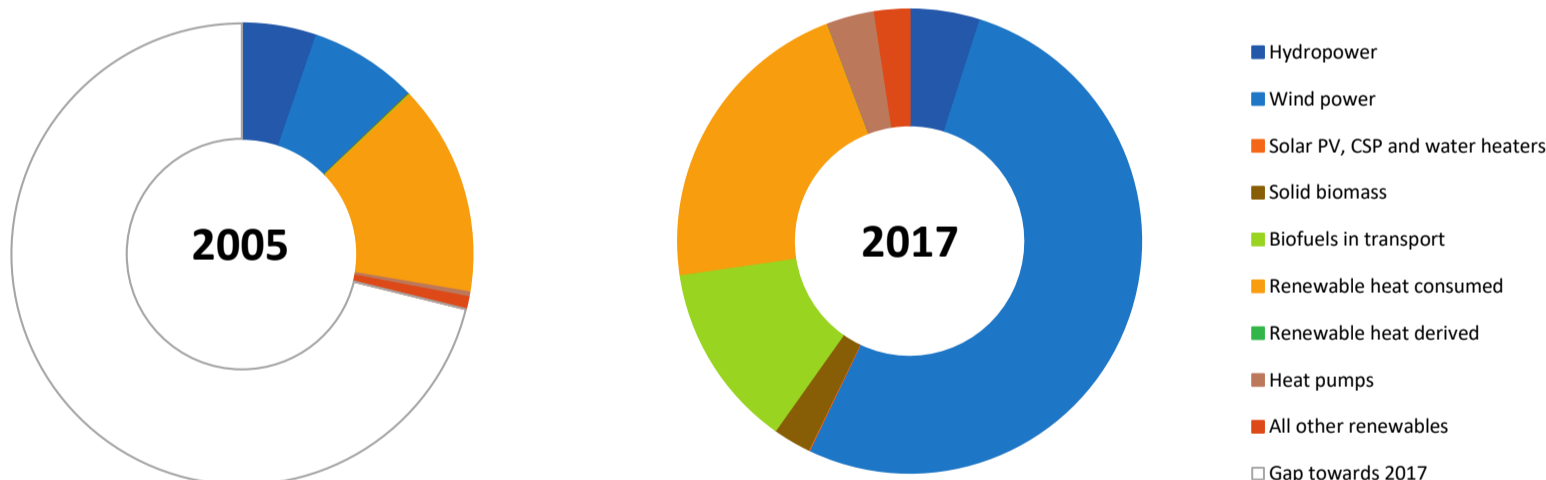


Abbreviations used:

RES: renewable energy sources
 RES-E: renewable electricity
 RES-H/C: renewable heating/cooling
 RES-T: renewable transport fuels

Data for 2017

Overall RES share:	10.7%	Avoided fossil fuels:	2.0 [Mtoe]
Overall RES 2020 target:	16.0%	Avoided fuel expenses:	0.6 [billion euro]
Share RES-E in electricity:	30.1%	RES Turnover:	1070 [MEUR]
Share RES-T in transport:	7.4%	RES Employment:	9700 [jobs]
Share RES-H/C in heating:	6.9%		



	2005		2017		
	Energy		Energy	Employment	Turnover
Hydropower	65.4 ktoe		61.6 ktoe	300 Jobs	30 MEUR
Wind power	94.6 ktoe		650.6 ktoe	6500 Jobs	700 MEUR
Solar PV, CSP and water heaters	0.0 ktoe		0.9 ktoe	200 Jobs	20 MEUR
Solid biomass	0.7 ktoe		32.8 ktoe	1200 Jobs	160 MEUR
Biofuels in transport	1.1 ktoe		160.6 ktoe	200 Jobs	20 MEUR
Renewable heat consumed	183.0 ktoe		268.9 ktoe		
Renewable heat derived	0.0 ktoe		0.0 ktoe		
Heat pumps	4.2 ktoe		41.3 ktoe	300 Jobs	40 MEUR
All other renewables	10.5 ktoe		30.0 ktoe		
Gap towards 2017	887.2 ktoe				

Source: Eurostat, EurObserv'ER, 2019.

Hydropower jobs & turnover only covers 'small hydropower'. PV=Photovoltaics, CSP=Concentrated Solar Power. Biofuels in transport only covers compliant fuels (employment and turnover additionally cover the non-compliant biofuels). Derived heat includes heat produced in main activity producer plants and heat sold produced in autoproducer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).



CURRENT RENEWABLE ENERGY POLICY

The Irish government published in May 2012 a Renewable Energy Strategy which reinforces the commitment to renewable energy in line with the 2009 Renewable Energy Directive, and which sets out concrete actions to develop renewable energy in the domestic market and for export. Additionally, the Offshore Renewable Energy Development Plan (OREDPA), adopted in 2014, identifies opportunities for the sustainable development of Ireland's abundant offshore renewable energy resources for increasing indigenous production of renewable electricity. The OREDPA sets out key principles, policy actions and enablers for delivery of Ireland's significant potential in this area. In this way, the OREDPA provides a framework for the sustainable development of Ireland's offshore renewable energy resources. Among others, the OREDPA sets to create capital grants for development and demonstration ocean projects, which are foreseen to be available until end of 2017.

Electricity from renewable sources was mainly promoted through a feed-in-tariff scheme until 31 December 2015. Currently there is no main support scheme available for developers of projects concerning production of electricity from renewable energy sources. A new support scheme has been announced in March 2017 but, as per July 2019, it has not been implemented yet nor elaborated beyond high level design.

The proposed new Renewable Electricity Support Scheme (Government of Ireland, 2018a) sets out to provide support to renewable electricity projects in Ireland. With a primary focus on cost effectiveness, the RESS is to deliver a broader range of policy objectives, including:

- An Enabling Framework for Community Participation through the provision of pathways and supports for communities to participate in renewable energy projects
- Increasing Technology Diversity by broadening the renewable electricity technology mix (the diversity of technologies)
- Delivering an ambitious renewable electricity policy to 2030
- increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy

RESS auctions are announced to be held at frequent intervals throughout the lifetime of the scheme. This is to allow Ireland to take advantage of falling technology costs and by not auctioning all the required capacity at once, higher costs for consumers would not be 'locking in' for the entirety of the scheme.

The Scheme will provide for a renewable electricity (RES-E) ambition of up to a maximum of 55% by 2030, subject to determining the cost effective level which will be set out in the draft National Energy and Climate Plan (NECP).

Ireland has submitted its draft NECP (Government of Ireland, 2018b). As gross final energy consumption is in the denominator of the share of renewables indicator, both the ambitions on energy efficiency and the ambitions on renewables as such in this document are interesting to highlight. The Irish final and primary energy consumption in 2017 reached levels of 11.8 Mtoe and 14.4 Mtoe respectively. The corresponding projected levels for 2030 are 13.0 Mtoe and 15.9 Mtoe respectively. In the perspectives of the climate change problem and the agreed EU energy efficiency targets these (high) projections, if realised, would make a negative contribution to compliance with the agreed EU targets for final and primary energy consumption in 2030. Moreover, these projected high energy consumption levels would render realising a given ambitious renewables share in

Ireland's gross energy consumption mix difficult. Based on the formula contained in Annex II of the Governance Regulation, Ireland's renewables share would have to reach the level of 31% in 2030 (European Commission, 2019) against the historical rate of 10.7% in 2017. Based on four scenarios the draft NECP of Ireland projects a rate in the range 15.8% - 27.7%. hence, even the upper limit of this range would, if attained, be a poor contribution to achieving the overall EU goal of a renewables share \geq 32%. As for the announced RESS initiative, no further details have been presented in Ireland's draft NECP.

Electricity from renewable sources is currently being promoted by the following instruments:

- A feed-in tariff scheme, REFIT, launched three successive calls for proposals within the period 2006-2015 and was closed for new applicants as per ultimo 2015. Supported technologies encompass onshore wind power, biogas (landfill gas, anaerobic digestion), biomass, and hydropower (\leq 5 MW). Offered guaranteed rates are technology-specific with sub-categories for distinct capacity ranges. The support contract period was determined on an individual PPA basis up to a maximum of 15 years.
- The "Solar PV Pilot Scheme" was launched in July 2018. The investment subsidy scheme targeting homeowners of houses built and occupied before 2011 is expected to be open to applications for a 2-year period with reviews every half year. It envisages to provide subsidies of €700/kW_p for PV systems up to 2 kW_p and €1000 battery storage subsidy for up to 4 kW_p systems.

Heating from renewable sources is promoted by the following instruments:

- Through the Better Energy Homes Scheme-Solar Water Heating Grant, homeowners of dwellings built before 2011 can apply for a € 1,200 grant aid for the installation of a solar thermal installation. Eligible technology: solar thermal.
- The "Support Scheme Renewable Heat" (SSRH) foresees a subsidy for RES H&C plants or an on-going operational support. Currently, only the subsidy scheme is open for applications. The subsidy amounts to up to 30% of the eligible investment costs. The scheme targets non-household heat users that are not participating in the EU ETS. Eligible technologies: heat pumps with a seasonal coefficient of performance of at least 2.5.
- The "Accelerated Capital Allowance scheme" targetting companies paying corporation tax in Ireland is applicable among others to heat pumps, solar thermal collectors and company electric vehicles.

Transport fuels from renewable sources is promoted by a biofuels quota scheme. This scheme obliges suppliers of fuels to ensure that biofuels make up to a defined percentage of the company's total annual sale of fuel. Furthermore, buyers of battery electric vehicles can get a purchase subsidy c.q. a purchase tax relief of up to € 5,000, a reduction of annual ownership tax, accelerated capital depreciation for company electric vehicles, free parking in certain municipalities and free charging at normal and high power public recharging points. Furthermore there is free installation of domestic chargers for up to charging points.

OVERVIEW OF MAIN SUPPORTING POLICIES

Tables 1 and 2 provide an overview of support instruments used to promote the deployment of renewable energy in Ireland.

Table 1: Overview of support schemes to promote renewable energy in Ireland

	NON-FISCAL SUPPORT SCHEMES					FISCAL AND OTHER STATE FUNDED INCENTIVES			
	Feed-in premium ¹	tendering	Quota obligation without certificates system	Tendering	Net-metering/ net-billing	Investment subsidy	Accelerated capital depreciation (corporation tax)	Other	Loans
RES-E									
- Offshore wind									
- Onshore wind	x								
- Solar						x			
- Hydro	x								
- Geothermal									
- Solid biomass	x								
- Biogas	x								
RES-H/C									
- Solar thermal						x	x		
- Geothermal						x	x		
- Biomass									
- Biogas									
- Large ambient heat application						x	x		
- Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves						x	x		
- Others, i.e. aerothermal, hydrothermal						x	x		
RES-T									
- Biofuels			x						

1) Closed for new applicants as per 1 January 2016.

Sources: RES Legal, EurObserv'ER

¹ The Renewable Energy Feed-in Tariff (REFIT) schemes supported various renewable electricity generation technologies until 31 December 2015, and is currently not open for new projects.

Table 2: Brief description of key policy instruments aimed at promoting renewables in Ireland

<i>Instrument</i>	<i>Description</i>
Renewable Energy Feed-in Tariff (REFIT) for implemented project that were approved until 2015	The REFIT scheme in Ireland is split into three programmes: REFIT 1, REFIT 2 and REFIT 3. The REFIT 2 programme was opened in March 2012 and covers small and large scale onshore wind, biomass landfill gas and small hydropower ($\leq 5\text{MW}$). REFIT 3 programme opened in February 2012 and supports anaerobic digestion, biomass with CHP and biomass combustion and co-firing. The REFIT 2 and REFIT 3 competitions are separate schemes with separate terms and conditions in respect to each scheme. Both schemes were closed to <u>new</u> applications on 31st December 2015. REFIT capacity cap is 4,000MW and REFIT 3 has an overall limit of 310 MW, differentiated by technology (anaerobic digestion, biomass CHP and biomass CHP and biomass combustion (including co-firing with peat)). Projects benefiting from REFIT programmes must be operational by 2017.
Better Energy Homes Scheme	Homeowners of dwellings built before 2006 can apply for a € 1,200 grant aid for the installation of a solar thermal installation
Biofuels quota scheme	<p>This scheme obliges suppliers of fuels to ensure that biofuels make up to a defined percentage of the company's total annual sale of fuel. Fuel suppliers receive one certificate for each litre of biofuel placed on the market. Two certificates are issued if the biofuel is produced from materials such as biodegradable waste, residue, non-food cellulosic material, ligno-cellulosic material or algae.</p> <p>Certificates are issued for biofuels that have been demonstrated to have complied with the sustainability criteria of the Directive. Biofuels must not be made from feedstocks sourced from certain categories of land, and must achieve certain greenhouse gas emissions reductions.</p>
Benefits for electrical vehicles	SEAI offers grants up to €5,000 (€3,800 for commercial purpose) for the purchase of a Battery Electric Vehicle (BEV) or a Plug-in Hybrid Electric Vehicle (PHEV) purchased and registered in Ireland. The grants are accessed directly by the car dealer. Additionally, both types of cars are eligible for Vehicle Registration Tax relief. Company electric vehicles are eligible for accelerated capital depreciation.

For further information:

Government of Ireland, 2018. Draft National Energy & Climate Plan (NECP), 2021-2030. Department of Communications, Climate Action and Environment Dublin, December, 2018, <https://www.dccae.gov.ie/en-ie/energy/consultations/Pages/Ireland%E2%80%99s-Draft-National-Energy-and-Climate-Plan-2021-2030.aspx>

Government of Ireland, 2018. Renewable Electricity Support (RESS); High Level Design. Department of Communications, Climate Action and Environment. Dublin, July 2018, <https://www.dccae.gov.ie/en-ie/energy/topics/Renewable-Energy/electricity/renewable-electricity-supports/ress/Pages/default.aspx>

European Commission, 2019. IRELAND, Summary of the Commission assessment of the draft National Energy and Climate Plan 2021-2030. https://ec.europa.eu/energy/sites/ener/files/documents/necp_factsheet_ie_final.pdf

Daly, Phillip and Jamie Ritchie, 2019. RESS one year on: Energy suppliers still in the dark on the details of the renewables support scheme. LK Shields, Ireland, 27 June, <https://www.lexology.com/library/detail.aspx?g=e5ce7b88-660f-478f-9489-fbec9dd2bf40>

Member State Progress Report, available at the Renewable Energy pages of the European Commission, <https://ec.europa.eu/energy/en/topics/renewable-energy/progress-reports>

EurObserv'ER annual overview barometer, <https://www.eurobserv-er.org/category/all-annual-overview-barometers>

International Energy Agency (IEA) database on policies and measures , <https://www.iea.org/policiesandmeasures/renewableenergy/?country=Ireland>

RES Legal database: <http://www.res-legal.eu/search-by-country/ireland>

Global Status Report by REN21, https://www.ren21.net/wp-content/uploads/2019/05/gsr_2019_full_report_en.pdf

https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-ireland_en.pdf
(European Commission/ DG ENER, Energy Union Factsheet Ireland, November 2017)

European Alternative Fuels Observatory, <http://www.eafo.eu/content/ireland> ;
<http://www.eafo.eu/eu>

What is meant by ...?

Auctions for granting renewable energy support	An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.
Feed-in tariff (FiT)	A support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers. A proper, periodic review of FiT rates is often undertaken with the aim to prevent both too high FiTs so as to minimise regulatory rents, i.e. supra-normal returns and too low FiTs to preclude below-target market uptake because of FiT levels that are perceived by market participants to be less attractive. In addition, feed-in tariffs often include "tariff depression", a mechanism according to which the price (or tariff) ratchets down over time.
Feed-in premium (FiP)	A scheme which provides for a support level per unit of renewable energy to eligible renewable energy producers, typically for a period of 10-20 years, at a pre-set fixed or floating rate. The premium is typically adjusted periodically to exactly offset change in the average energy wholesale market price, based on a pre-specified benchmark market price. A floating FiP may move freely or may only be allowed to move within a pre-set interval.
Grants	Grants are non-repayable funds disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a non-profit entity, educational institution, business or an individual. (Source: Wikipedia.org)
Green public procurement	In Green public procurement contracting authorities take environmental issues into account when tendering for goods or services. The goal is to reduce the impact of the procurement on human health and the environment. (Source: Wikipedia.org)
Renewable quota scheme (RQS)	A RQS mandates certain market actors (typically retail suppliers or large energy end-users) to respect a pre-set minimum share or amount of their total energy procurements from renewable sources of energy. Typically a tradable green certificate (TGC) scheme is operated to enable the obligated parties to prove their compliance with the prevailing renewable quota target by means of TGCs.
Sliding feed-in-tariff	A FiT scheme which pre-sets technology-specific declining feed-in tariffs for certain prospective vintages in line with the technology-specific learning curve, as projected by the National Regulatory Agency (NRA). Often a depression rate is used indicating the %/annum decrease in the rate level.
Soft loans	Loans at concessional (below market-based) terms, for example at sub-market-conform interest rates, made available in several Member States to stimulate certain renewable energy technologies.
Tax credits	These are amounts a tax paying entity is allowed to deduct when declaring payable taxes, for example company tax or income tax, to the tax authorities, for example the producer tax credits (PTCs) used in the United States to stimulate among others wind energy deployment.



This project is funded
by the European Union under
contract n° ENER/C2/2016-487/SI2.742173

Disclaimer

This document was prepared by the EurObserv'ER consortium, which groups together Observ'ER (FR), the Energy research Centre of the Netherlands (ECN, NL), the Renewables Academy (RENAC, DE), Frankfurt School of Finance and Management (DE), Fraunhofer-ISI (DE) and Statistics Netherlands (CBS, NL). The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.