

Ireland

Renewable energy status

Share of energy from renewable sources in total gross final energy consumption



Source: Eurostat

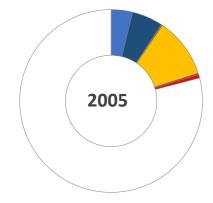
Abbreviations used:

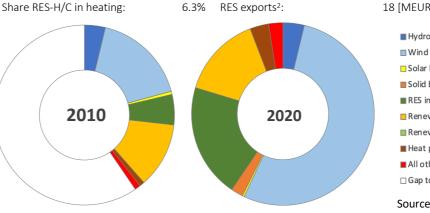
RES: renewable energy sources RES-E: renewable electricity RES-H/C: renewable heating/cooling

RES-T: renewable transport fuels

Data for 2020

Overall RES share:	16.2%	Avoided fossil fuels:	2.1 [Mtoe]
Overall RES 2020 target:	16.0%	Avoided fuel expenses:	393 [MEUR]
Overall RES 2030 target:	21.5%	RES Turnover:	880 [MEUR]
Share RES-E in electricity:	39.1%	RES Employment:	6 200 [jobs]
Share RES-T in transport:	10.2%	RES imports ² :	85 [MEUR]
Share RES-H/C in heating:	6.3%	RES exports ² :	18 [MEUR]





(,
■ Hydropower
■ Wind power
☐ Solar PV and CSP
■ Solid biofuels
■ RES in transport
Renewable heat consumed
Renewable heat derived
■ Heat pumps
All other renewables
☐ Gap towards 2020

Source: Eurostat

_	2005	2010		2020	
_	Energy in ktoe	Energy in ktoe	Energy in ktoe	Employment in FTE	Turnover in MEUR
Hydropower	65.4	64.8	65.4	100	10
Wind power	94.6	293.4	917.9	3 100	520
Solar PV, and CSP	0.0	0.0	5.5	200	20
Solid biomass	0.7	9.4	37.2	1 500	130
Ren. energy in transport ³	3.1	94.4	348.7	100	20
Renew. heat consumed	183.0	202.6	250.2		
Renew. heat derived	0.0	0.0	0.0		
Heat pumps	4.2	15.7	57.1	800	110
All other renewables	10.5	17.6	43.4	400	70
Gap towards 2020	1 363.9	1 027.5	Source: Eurostat, EurObserv'ER		

FTE = Full time equivalent, 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).

³ Employment and turnover are only referring to biofuels in transport.



¹ From Integrated National Energy Climate Plan

² Referring to the International Trade chapter from the publication: EurObserv'ER - The State of Renewable Energy in Europe, 2021 edition

CURRENT RENEWABLE ENERGY POLICY

RES-E

The Renewable Electricity Support Scheme (RESS) provides support to renewable electricity projects in Ireland. 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 Renewable Electricity Support Scheme round 1 (RESS1) is a multi-technology, renewable electricity auctions scheme with a guaranteed supply price for participants successfully submitting an offer price (€/MWh) and an offer quantity (MW capacity) in their auction bid. The first auction was held in July 2020. Furthermore, Investment grant of up to €2,400 can be applied by homeowners and landlords for the installation of solar PV panels under the Better Energy Homes scheme.

RES H&C

For domestic heat users, investment grants are provided for solar thermal and heat pump systems and a technical assessment before getting a heat pump under the Better Energy Homes scheme. The amount of grants has been increased in February 2022 to €3,500 − €6,500 for heat pump depending on the type of heat pump and dwelling, €200 for the technical assessment, up to €1,200 for solar water heating installation and up to €2,400 for solar PV panels. Heat users in non-domestic sector (commercial, industrial, agricultural, district heating, public sector and other non-domestic heat users) that are not participating in the EU ETS, an installation grant covering up to 30% of eligible costs can be applied for three different types of heat pumps and an ongoing operational support (the tariff) can be applied for boiler or high efficient (HE) combined heat and power (CHP) heating system using biomass or biogas.

RES-T

Transport fuels from renewable sources is promoted by a biofuels quota scheme with an obligation increased to 11% (by volume). 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, Electric Vehicle Grants provide grant aids for privately or commercially bought electric vehicles (EVs). EVs and Plugin Hybrid Electric Vehicles (PHEV) owners can claim a financial support of up to €600 towards the purchase and installation of an electric vehicle home charger unit. Beside investment support, tax incentives are in place to promote the development of EV development. Vehicle Registration Tax (VRT) and Motor Tax are reduced based on the direct CO2 emissions of the bought vehicles. For companies which own and bought EVs, the Accelerated Capital Allowance (ACA) can be applied to relief the tax bill and energy costs.

 $\label{thm:continuous} \textbf{Table 1: Brief description of key policy instruments aimed at promoting RES in the Ireland } \\$

Instrument	Description			
Renewable Electricity Support Scheme (RESS)	The Renewable Electricity Support Scheme provides support to renewable electricity projects in Ireland. With a primary focus on cost effectiveness, the RESS delivers 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			
	 delivering an ambitious renewable electricity policy to 2030 increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy 			
	Renewable electricity is a central element of our action on climate disruption as set out in the Programme for Government, the Climate Action Plan 2019, and the National Energy and Climate Plan 2021-2030. The RESS Scheme ensures that we are on a pathway to meet our ambitious climate targets and lays the foundations of a thriving and cost effective renewable electricity market. This will support the growth of the green economy, create sustainable work opportunities, and ultimately benefit the consumer as renewables become more cost effective.			
	RESS auctions will be held at frequent intervals throughout the lifetime of the scheme. This will allow Ireland to take advantage of falling technology costs and avoid 'locking in' higher costs for consumers. Website: https://www.gov.ie/en/publication/36d8d2-renewable-electricity-support-scheme/			
Better Energy Homes Scheme	Homeowners and landlords of dwellings built before 2021 can apply for grants for the installation of a solar thermal installation, solar PV panels, heat pump systems and a technical assessment before getting a heat pump. The amount of grants has been increased in February 2022 to €3,500 − €6,500 for heat pump depending on the type of heat pump and dwelling, €200 for the technical assessment, up to €1,200 for solar water heating installation and up to €2,400 for solar PV panels. Website: https://www.seai.ie/grants/home-energy-grants/individual-grants/			
Support Scheme for Renewable Heat (non- domestic)	 The Support Scheme for Renewable Heat is a government funded initiative designed to increase the energy generated from renewable sources in the heat sector. The scheme is open to commercial, industrial, agricultural, district heating, public sector and other non-domestic heat users not covered by the emissions trading system. The scheme provides supports in form of an installation grant and an ongoing operational support (tariff). Installation grant can be applied for air source, ground source or water source heat pumps with funding of up to 30% of eligible costs. Ongoing operational support / the tariff provides a tariff based on useable heat output in renewable heating systems for a period of up to 15 years, in new installations or installations that currently use a fossil fuel heating system and convert to using biomass boiler or biomass high efficient (HE) combined heat and power (CHP) heating systems, or biogas (anaerobic digestion) boiler or biogas HE CHP heating systems. 			
Electric Vehicle Grant	scheme-renewable-heat/ For privately bought EVs, a grant is available for qualifying new battery electric vehicles (BEVs) with a List Price of over €14,000. As of 1st July 2021 there is a cap of €60,000 on the full price of all vehicles, including all optional extras, paint and delivery but excluding any incentives such as grants or rebates. The grant amount varies between €2,000 and €5,000 depending on the list price of the vehicle. For commercially bought EVs, grant supports are available for the purchase of new N1 category electric vehicles for business and public entities. N1 category vehicles are typically small goods carrying vans with a technically permissible maximum mass not exceeding 3500kg. Depending on the list price of the vehicle, a grant between €2,000 and €3,800 is available for qualifying N1 category BEVs with a list price of over €60,000 or less than €14,000. It should be noted that these grants apply to new vehicles only and cannot be claimed on second hand vehicles.			

The list price is the full non-discounted price in the absence of Vehicle Registration Tax (VRT) relief or grant support.

Additionally, direct CO2 emission values are used to calculate the VRT and annual Motor Tax bands for vehicles.

- Battery Electric Vehicles (BEV) have no tail pipe emissions of CO2
- Plugin Hybrid Electric Vehicles (PHEV) should have CO2 emissions circa 60g/km

VRT is paid whenever a car is registered for the first time in Ireland. Electric Vehicles receive VRT relief separately to SEAI grant support. VRT relief for BEVs is in place until the end of 2021. Find about more about VRT. VRT relief is up to €5,000 for Battery Electric Vehicles (BEV). This relief is in place until the end of 2021. VRT relief is applicable to BEVs with an OMSP up to €50,000. No VRT relief is available for vehicles with a value above this.

Motor Tax in January 2021 for a BEV is €120 per annum and typically €170 per annum for a PHEV.

Website: https://www.seai.ie/grants/electric-vehicle-grants/grant-amounts/

Electric Vehicle Charging Grant

For home charger (residents or homeowners), a grant up to €600 can be applied for the purchase and installation of an EV home charger unit. The eligible applicants are:

- any private owner of an eligible EV bought (new or second hand) after 01/01/2018, or
- employees with exclusive permission to use a Company Vehicle for at least 12 months from date of application.

Vehicles eligible for the Home Charger grant must be M1 Passenger Vehicles which are either Battery Electric Vehicles (BEV) or Plugin Hybrid Electric Vehicles (PHEV). The vehicles may be new vehicles, second hand vehicles, imported vehicles or company owned or leased passenger vehicles.

Website: https://www.seai.ie/grants/electric-vehicle-grants/electric-vehicle-home-charger-grant/

Accelerated Capital Allowance

The Accelerated Capital Allowance (ACA) is a tax incentive scheme that promotes investment in Triple E registered equipment. For cars coming under the category "Electric and Alternative Fuel Vehicles" the accelerated allowance is based on the lower of the actual cost of the vehicle or €24,000.

Biofuel quota scheme

The biofuels obligation scheme sets out an obligation that suppliers of road transport fuels must include a certain percentage of environmentally sustainable biofuels across their general fuel mix. The scheme works by ensuring that each supplier fulfils their requirement by having the necessary number of biofuel certificates required. This level of obligation has increased over time from an initial rate of 4%. Now, the rate is 8.695% which means that 8% of the motor fuels, typically diesel and petrol, placed on the Irish market are produced from renewable sources. A second public consultation was held at the end of 2019 on the proposed increase to the biofuel obligation to 11% (by volume).

Website: https://www.gov.ie/en/publication/91f03c-biofuels/

For further information:

Government of Ireland, https://www.gov.ie/en/

National Energy and Climate Plans (NECPs), https://www.gov.ie/en/publication/0015c-irelands-national-energy-climate-plan-2021-2030/

Sustainable Energy Authority of Ireland (SEAI), https://www.seai.ie/

What is meant by ...?

Auctions for granting

An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers.

renewable energy support

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 degression", 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-intariff 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 degression 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.



Disclaimer

This document was prepared by the EurObserv'ER consortium, which groups together Observ'ER (FR), TNO (NL), RENAC (DE), VITO (BE) and Fraunhofer ISI (DE). This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.