

'Climate Hack'



The challenge; Co. Cork's energy & GHG emissions

Co. Cork's energy demand closely matches the national share, and accounts for the majority of the energy demand in the South West region (Kerry and Cork), which accounted for 15% of Ireland's energy in 2018.



*Aviation, fuel tourism, rail and navigation excluded

The two largest sources of energy related CO₂ emissions are private car travel and home heating.

ktonne CO ₂ emissions Co. Cork in 2018	Oil	Natural Gas	Solid Fuel	Electricity	Energy Related Emissions	% Share	Agriculture* (non-energy)	Total Emissions	% Share
Agriculture and Fishing									
Agriculture	78			29	107	3%	2,785	2,892	42%
Fishing	14				14	0.3%		14	0.2%
Subtotal					121	3%		2,906	43%
Industry									
Heat	236	289			525	13%		525	8%
Electricity				558	558	14%		558	8%
Subtotal					1,082	27%		1,082	16%
Residentital									
Heating and hot water	372	170	169	74	785	19%		785	12%
Lighting, appliances, etc.				286	286	7%		286	4%
Subtotal					1,072	27%		1,072	16%
Serives									
Commercial	49	52		187	288	7%		288	4%
Public	24	62		69	155	4%		155	2%
Subtotal					443	11%		443	7%
Transport**									
Private Car	741				741	18%		741	11%
Freight	367				367	9%		367	5%
Public service and other vehicles	204				204	5%		204	3%
Subtotal					1,312	33%		1,312	19%
					4,030			6,815	

*CO2 equivalent emissions from livestock and land management, ** Aviation, fuel tourism, rail and navigation excluded

Including livestock and land management GHG emissions, agriculture is by far the largest contributor, estimated to be 43% of all emissions compared to 34% nationally due to the significant amount of farming activity in Cork.

8-15 Nov 2020







The solution; is up to you!

Students may choose from the following three energy topics;

<u>*Transport*</u> – Transport is the single largest emitter after agriculture, with private cars accounted for 20% of Cork's energy demand in 2018, emitting 719 ktonne of $CO_2(11\%)$

- How might Cork reduce its reliance on petrol / diesel cars?
- What can be done to encourage people to try new or different forms of transport?

<u>**Residential heating**</u> - Heating homes accounted for 19% of Cork's energy demand in 2018, emitting 785 ktonne of $CO_2(12\%)$

- How can we ensure all our homes are warm and comfortable?
- Should all houses be treated the same?

<u>**Renewable energy**</u> – In 2018, Co. Cork residents and businesses spent around \notin 1 billion on imported fossil fuels, with \notin 845 million on oil (heating oil, LPG, petrol, diesel) and \notin 140 million on natural gas.

- What renewable energy technologies would be most suitable for your area?
- What fossil fuels could this replace?

Or - You may propose your own project

Using the information provided and research of your own, fill in the poster template or create your own to address some or all of the following points;

- ➢ A drawing/picture of your idea
- Details on the challenge address
- > The benefits of your proposed solution and potential difficulties in implementing it
- > Potential CO₂ emissions savings, and estimates of cost or associated savings

Before the event; 'get informed'

What is the government's plan to address climate change? What will this mean for people in Co. Cork? Do you agree with what has been proposed? Are there other solutions worth considering?

All of Government Climate Action Plan 2019

MaREI Centre analysis of the recent Programme for Government proposal to reduce emissions by 7% a year

What options are available for people looking to reduce their carbon footprint?

Useful infographic on the CO2 emissions associated with different lifestyle choices

SEAI Overview of Renewable Technologies

Project Drawdown - Top 10 solutions for addressing Climate Change

How old are the houses in your area? What fuel do they use for heating?

http://census.cso.ie/sapmap/

Results from the 2016 Census for Co. Cork

How many cars are there in your area? Do people in Co. Cork drive more than the national average?

http://census.cso.ie/sapmap/

Results from 2016 Census for Co. Cork

Transport Omnibus 2018 - Road Traffic Volumes