

Elaine Sullivan

File With _____

SECTION 131 FORM

Appeal NO: ABP 318180

TO: SEO

Defer Re O/H

Having considered the contents of the submission ~~dated~~ received 4/6/24 from

John Callaghan I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s): NO new material issues

E.O.: Pat B

Date: 06/06/2024

To EO: _____

Section 131 not to be invoked at this stage.

Section 131 to be invoked – allow 2/4 weeks for reply.

S.E.O.: _____

Date: _____

S.A.O.: _____

Date: _____

M _____

Please prepare BP _____ - Section 131 notice enclosing a copy of the attached submission

to: _____

Allow 2/3/4 weeks – BP _____

EO: _____

Date: _____

AA: _____

Date: _____

File With _____

CORRESPONDENCE FORM

Appeal No: ABP 318180-23

M _____

Please treat correspondence received on 4/4 as follows:

- | | |
|---|---|
| 1. Update database with new agent for Applicant/Appellant _____ | 1. RETURN TO SENDER with BP _____ |
| 2. Acknowledge with BP <u>23</u> | 2. Keep Envelope: <input type="checkbox"/> |
| 3. Keep copy of Board's Letter <input type="checkbox"/> | 3. Keep Copy of Board's letter <input type="checkbox"/> |

Amendments/Comments

SIB) Resp from J. Colleyhan

L/D 4/6

4. Attach to file

- | | |
|---|---|
| (a) R/S <input type="checkbox"/> | (d) Screening <input type="checkbox"/> |
| (b) GIS Processing <input type="checkbox"/> | (e) Inspectorate <input type="checkbox"/> |
| (c) Processing <input type="checkbox"/> | |

RETURN TO EO

P.B

EO: <u>[Signature]</u>	Plans Date Stamped <input type="checkbox"/>
Date: <u>6/6/24</u>	Date Stamped Filled in <input type="checkbox"/>
	AA: <u>Faeline Khatjova</u>
	Date: <u>6/6/24</u>

J. Sweeney

Patrick Buckley

From: John Callaghan <joncallaghan@gmail.com>
Sent: Tuesday 4 June 2024 16:41
To: Bord; Appeals2
Subject: Submission on ABP-318180-23
Attachments: Submissions File ABP-318180-23.pdf

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

John Callaghan
10 The Cloisters
Oldcastle Road
Kells,
Co Meath.
A82 C9Y7

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1, D01 V902

June 4th, 2024

**Re: Submission at the invitation of the Board dated May 14th 2024 File ABP-318180-23
Planning Authority Case Reference: FW22A/0308**

Dear Secretary

Please see the attached submission

Regards

John Callaghan

John Callaghan
10 The Cloisters
Oldcastle Road
Kells,
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A82 C9Y7

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
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June 4th, 2024

**Re: Submission at the invitation of the Board dated May 14th 2024 File ABP-318180-23
Planning Authority Case Reference: FW22A/0308**

Dear Secretary,

I wish to thank the Board for the opportunity to comment on the appeal. The Submission is set out to follow the format of the applicant's response.

1.0 Request for an Oral Hearing

Digital Infrastructure is vital to achieving the 2050 Net Zero Targets. The EU's digital strategy aims to make this transformation work for people and businesses, while helping to achieve its target of a climate-neutral Europe by 2050. Digitisation is a key technology required to improve productivity. I ask the Board to consider the EU's Report **2030 Digital Decade Annex Ireland EN Report on the state of the Digital Decade 2023**.¹

Ireland and Europe has a lot of progress to make to secure the objectives of EU Policy on Digital Infrastructure.

- The proposition that too much of Europe's Data capacity might be located in Ireland is ridiculous. Ireland has obvious advantages as a location for Data Centres.
- This Data centre is connected to the Grid and the applicant is investing in renewable generation. Grid connected Data centres have the higher opportunities to integrate renewable electricity use.
- The Renewable Energy Directives permits statistical transfers of renewable between States. These transfers are referred to as "fines" by the renewable energy generation lobby a public relations approach to lobby for the permitting of more renewables. The tactic portrays the payments as money flowing out of Ireland, as a lost opportunity. Transfers have traded for as little as €0.015 per kWh or €15/MWh. This is almost always cheaper than paying for renewable energy support payments.
- Obviously, there is a benefit seeking to match the profile of renewable energy generation to the profile of demand. Much of the regulatory framework and infrastructure to do that is yet to be put in place. The penetration of renewable heating

¹ <https://ec.europa.eu/newsroom/dae/redirection/document/98652>

is about 6% in Ireland. Storing excess electrical energy as heat energy is a viable option as demonstrated in Denmark. An example is Vogens district heating.



Heat can be stored inter-seasonally in heat pits and distributed in district heating systems such that losses are as low as 10%.

Excess electricity can be converted to thermal energy using CO₂ Cycle heat pumps at an efficiency of 400%.

- Excess electricity from renewable generation will provide market opportunities for heat production with inter-seasonal thermal storage and district heat system distribution.
- The Net Zero is a transition process over 26 years to 2050. A series of incremental steps are envisaged.
- If additional thermal power generation is required gas is the preferred fossil fuel by the revised Energy Efficiency Directive EU/2023/1791. Additional Gas Power Generation capacity above 1500 hours per year should either be connected to District Heating or to Carbon Capture. Ireland has little infrastructure to connect new gas plant to district heating or to carbon capture systems.
- The EU has a hydrogen strategy, but green hydrogen is a long way away in any quantity.
- The EU identified Ireland as being very suitable for biogas production. However no funding was applied for by Government under the EU's REPowerEU Plan.
- There are many ways renewable energy can be integrated into Ireland's Energy System. Ireland has the lowest penetration of renewable energy in its economy in the entire EU at just 13%.
- Ireland has a prohibition on the generation of Nuclear Power, and yet has some of the loudest voices on combating climate change.

2.0 Alleged Deficiency in Fingal County Council Decision

- The Board must determine the application on a de novo basis and in accordance with Section 143

F588[Board to have regard to certain policies and objectives.

143.—(1) F589[The Board shall, in the performance of its functions (other than functions conferred by Chapter III of Part XXI), have regard to]—

(a) the policies and objectives for the time being of the Government, a State authority, the Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural,

(b) the national interest and any effect the performance of the Board's functions may have on issues of strategic economic or social importance to the State, and

(c) the F590[National Planning Framework] and any F591[regional spatial and economic strategy] for the time being in force.

(2) In this section "public authority" means any body established by or under statute which is for the time being declared, by regulations made by the Minister, to be a public authority for the purposes of this section.]

Can the Board or a Minister frustrate the EU Digital Strategy?

- Substantial information has come to light since the appeal in relation to the Climate Action Plan 2024 and the EPA Report "Ireland's Greenhouse Gas Emissions Projections 2023-2050"²
- While the possibility of appeal was open it was not known that Ireland would not meet its 2030 targets per the EPA Report on Emissions Projections.
- The applicant must provide sufficient information for the Board to make an assessment under the EIA Directive per **Holohan V An Bord Pleanála C461/17**³.
- The EIA Directive provides for the forbearance of some adverse impact on the environment.
- Digital Infrastructure must be viewed as essential for meeting the 2050 targets. Market forces must be allowed to locate Data Centres.
- Digital Infrastructure and electricity are essential for high levels of Human Wellbeing.
- The Board should consider the adverse impact of not implementing the EU Digital Strategy.
- Digitisation and AI has huge capacity to facilitate remote working and collaboration and to reduce transport related emissions as well as demand for additional transport infrastructure.

² <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-GHG-Projections-Report-2022-2050-May24--v2.pdf>

³ <https://curia.europa.eu/juris/liste.jsf?language=en&num=C-461/17>

- Ireland is a very small portion of the area of Europe 70,273 / 10,530,000 km² = 0.00667 or 0.667%. More than 86% of Ireland's energy is provided by fossil fuels. It may not be environmentally possible to meet Ireland's energy needs from renewables generated in Ireland such that statistical transfers may be needed instead.
- The Irish Government has made no plans nor provision for carbon sequestration in Ireland, and has done nothing to avail of EU supports to develop bio digestion utilising animal manure.
- The Board should consider the trends in World Emissions.
- Our Energy Minister presides over the importation of coal for power generation while banning gas exploration. The extra emissions from coal offset considerable CO₂ saving from renewable generation. EVs are subsidised which run on coal powered electricity generation. Low efficiency OCGT Gas plant is used to back up intermittent renewable generation with massive quantities of waste heat dumped into the sky. Virtually no thermal generation plant is connected to district heating.
- The following page exhibits the Emissions Page 12 from the BP Statistical Review of World Energy 2022 | 71st edition⁴. A summary table is exhibited below.

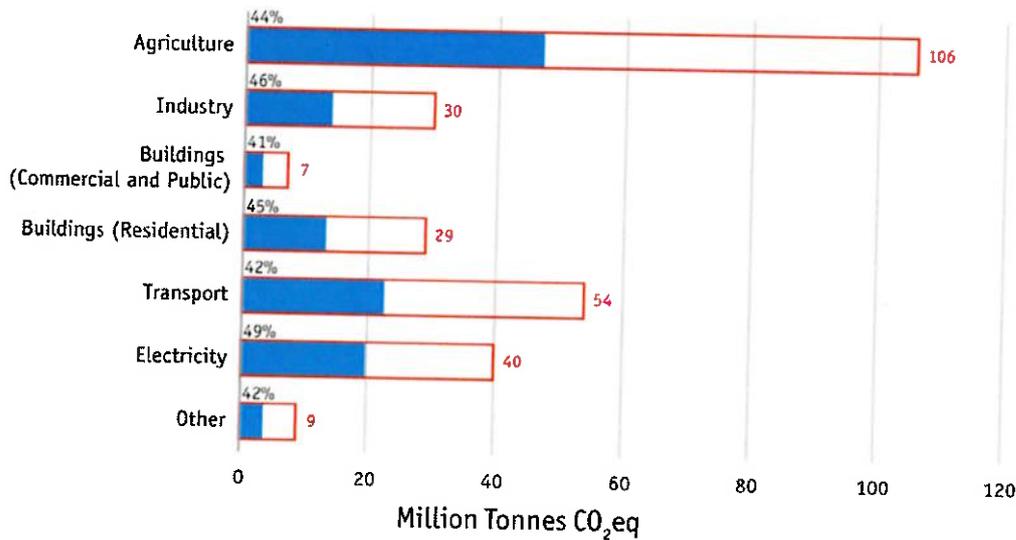
Carbon Emissions from Energy					
Millions of tonnes	2011	2021	Growth rate per annum %		
			2021	2011-2021	Share 2021 %
China	8793.1	10523	5.8	1.8	31.2
USA	5336.2	4701	6.6	-1.3	13.9
North America	6352.2	5602.2	6.1	-1.02	16.5
India	1728.4	2552.8	12.2	4.0	7.5
Europe	4599.1	3793.7	5.4	-1.9	11.2
Ireland	38.9	34.8	5.6	-1.1	0.1
Ecuador	32.8	35.5	24.2	0.8	0.1
UK	494	337.7	6.8	-3.7	1.0
EU	3300.8	2728.2	6.7	-1.9	8.1
Asia Pacific	14813.5	17734.6	5.7	1.8	52.3

- Ireland has a growing population with what is essentially a fixed quota of emissions.
- Sectoral Emissions Ceilings Sectoral Emissions Ceilings (SECs) for the two Carbon budget periods (2021-25 and 2026-30)⁵ have been approved by government to divide up the responsibility of carbon budget achievement across the key greenhouse gas emitting sectors. The sectors (Electricity, Transport, Built Environment (Residential and Commercial and Public), Industry, Agriculture and Other) do not correspond directly to the sectors defined in the Inventory as they take consideration of the division of Departmental responsibility. However, it has been possible to map the Inventory data onto the SEC sectors to assess usage of the budgets to date what is required to achieve ceiling compliance. Figure 4 below presents the Sectoral ceilings along with the amount used to date by sector.

⁴ <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf>

⁵ Page 8, EPA: Ireland's Provisional Greenhouse Gas Emissions 2023 https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/2023-EPA-Provisional-GHG-Report_Final_v3.pdf

Figure 4. First Sectoral Ceilings 2021-2025 and usage



- Agriculture is the dominant factor in Emissions⁶.

Table 2. Sectoral Emissions reduction targets and progress

Sector	2018 (Mt CO ₂ eq)	2022 (Mt CO ₂ eq)	% change 2018-2022	Indicative % reduction by 2025	Indicative % reduction by 2030
Electricity	10.33	9.77	-5.4%	~40%	~75%
Transport	12.19	11.63	-4.5%	~20%	~50%
Buildings (Residential)	7.09	6.11	-13.9%	~20%	~40%
Buildings (Commercial and Public)	1.54	1.43	-7.5%	~20%	~45%
Industry	6.98	6.58	-5.8%	~20%	~35%
Agriculture	23.39	23.34	-0.2%	~10%	~25%
Other	2.14	1.92	-10.6%	~25%	~50%
LULUCF	6.26	7.31	16.6%	NA	NA
National Total (incl LULUCF)	69.93	68.07	-2.7%		51%

Fig above See Reference 5

- The EIAR might have provided more perspective on emissions. There is little point in the Board refusing permission for developments that will avail productivity, human wellbeing, science and technology, while highly polluting low GDP per tonne of emissions sector are indulged for political reasons.
- Agriculture accounts for 34.28% of Irish Emissions while contributing just 1.08% of GDP. Minister Eamon Ryan's ideas about rewilding and releasing wolves to displace emissions should be evaluated in any Energy related EIAR as reasonable alternatives.
- The Board is constrained by our legal system and can only grant permission where applicants follow the appropriate procedure.

⁶ See page 9 reference No 4

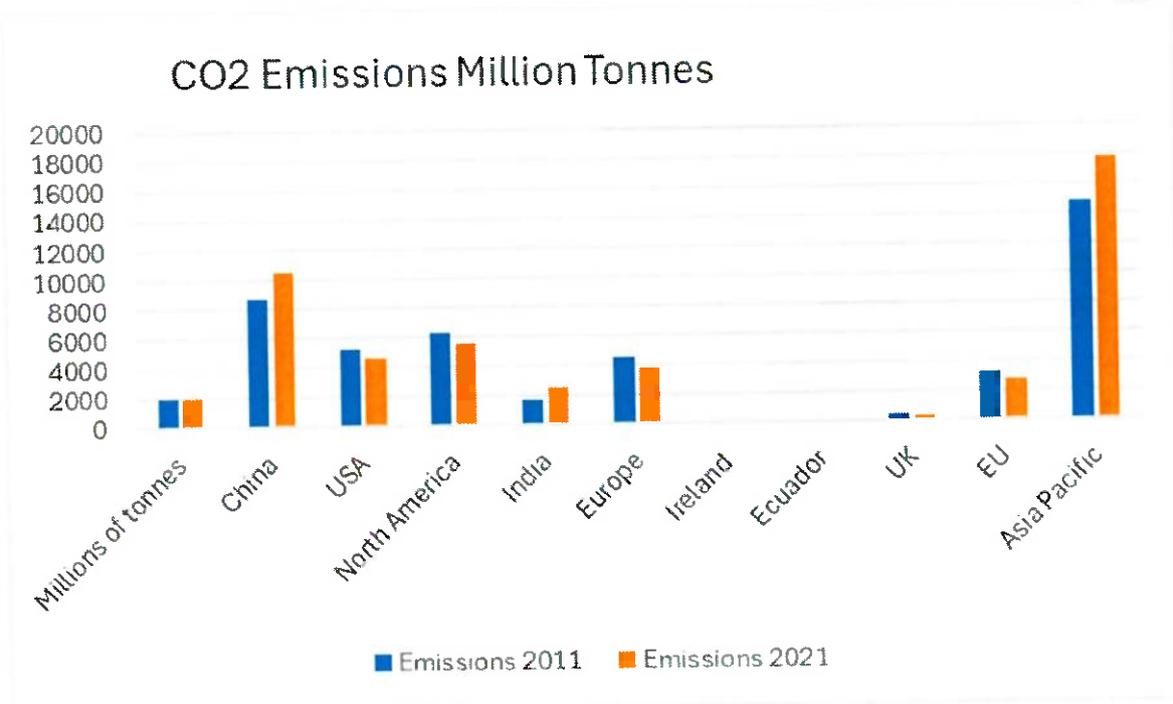


Fig above data from bp Statistical Review of World Energy 2022 | 71st edition

<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf>



Carbon dioxide emissions from energy

Million tonnes of carbon dioxide	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Growth rate per annum		Share 2021
												2021	2011-21	2021
Canada	550.2	546.5	560.7	566.4	566.2	547.7	563.7	573.5	571.3	517.1	627.4	2.2%	-0.4%	1.6%
Mexico	465.8	474.0	472.8	459.6	483.1	488.8	478.9	448.2	449.3	367.7	373.8	4.8%	2.2%	1.1%
US	5336.7	5089.1	5246.6	5251.7	5137.5	5038.0	4978.8	5137.7	4980.9	4420.6	4701.1	6.6%	-1.3%	13.9%
Total North America	6352.7	6101.6	6280.1	6277.7	6196.8	6074.5	6019.4	6174.5	6001.8	5298.3	5602.2	6.1%	-1.2%	10.5%
Argentina	173.1	181.9	187.8	187.8	191.2	190.1	189.5	185.9	175.5	164.8	181.7	10.5%	0.5%	0.5%
Brazil	424.2	442.5	483.0	505.2	478.6	442.8	446.4	427.6	425.1	390.5	436.6	12.1%	0.3%	1.3%
Chile	87.0	89.4	91.1	86.4	88.9	94.1	92.4	93.0	94.6	84.4	87.0	3.3%	0.3%	0.3%
Colombia	69.1	77.5	80.5	85.6	80.7	91.4	84.5	86.6	92.7	80.9	86.5	7.3%	2.3%	0.3%
Ecuador	32.8	34.2	36.5	38.4	37.6	35.4	34.3	37.1	35.7	28.7	35.5	24.2%	0.8%	0.1%
Peru	45.0	46.0	46.9	47.8	50.2	54.8	54.0	56.5	58.5	46.1	56.0	21.0%	2.2%	0.2%
Trinidad & Tobago	21.6	23.2	25.5	24.8	24.0	21.9	21.3	20.6	18.3	18.1	18.0	-0.4%	-4.2%	0.1%
Venezuela	187.3	177.9	180.3	173.3	172.2	149.3	146.3	121.1	100.1	82.8	89.2	8.0%	6.1%	0.3%
Central America	58.3	59.4	60.3	62.3	68.4	71.2	70.6	67.8	74.9	63.5	72.5	14.5%	2.2%	0.2%
Other Caribbean	110.2	107.4	104.8	103.9	107.1	110.7	107.0	110.2	113.9	100.2	112.3	12.4%	0.2%	0.3%
Other South America	33.5	34.0	34.7	35.0	35.5	37.4	38.1	39.5	39.4	36.2	39.8	10.3%	1.7%	0.1%
Total S. & Cent. America	1228.1	1276.8	1284.8	1282.6	1326.4	1297.1	1283.4	1286.0	1228.5	1094.6	1213.1	11.1%	-0.1%	3.6%
Austria	64.7	62.2	62.9	58.6	60.7	61.6	64.4	62.1	63.6	56.0	58.4	3.5%	-1.0%	0.2%
Belgium	120.6	118.3	117.3	109.0	115.2	116.9	118.8	125.4	121.7	105.5	114.7	9.0%	0.5%	0.3%
Bulgaria	50.5	45.8	40.7	43.0	45.8	43.0	45.7	42.5	41.3	35.9	41.7	16.7%	-1.9%	0.1%
Croatia	18.2	18.6	16.1	16.8	16.2	16.7	17.1	16.3	16.3	14.8	15.7	6.4%	-1.4%	0.1%
Cyprus	8.7	8.1	7.3	7.3	7.5	8.1	8.1	8.2	8.2	7.0	7.2	3.0%	-1.8%	0.1%
Czech Republic	113.1	109.3	105.0	107.0	107.8	104.8	102.9	101.9	98.2	87.9	82.4	5.3%	-2.0%	0.3%
Denmark	46.1	50.0	51.4	40.0	36.7	37.9	35.3	35.6	32.5	26.8	28.1	5.0%	-4.9%	0.1%
Estonia	23.5	22.8	24.5	23.5	21.4	22.1	24.6	24.1	18.3	15.9	18.0	13.8%	-2.6%	0.1%
Finland	57.1	51.0	52.0	50.5	44.9	47.7	45.0	46.5	43.1	36.7	37.2	1.5%	-4.2%	0.1%
France	331.1	335.6	334.9	301.5	307.5	313.1	317.8	306.7	299.3	251.6	273.6	9.0%	-2.0%	0.8%
Germany	782.7	773.0	797.6	751.1	755.6	770.5	786.9	733.1	680.1	600.8	628.9	5.0%	-1.9%	1.9%
Greece	94.5	88.2	79.1	75.6	73.2	69.8	54.5	72.7	68.6	56.0	56.5	1.2%	5.0%	0.1%
Hungary	48.7	43.6	42.0	41.3	43.8	44.7	46.9	47.3	47.1	43.6	45.7	2.8%	0.8%	0.1%
Iceland	2.5	2.5	2.7	2.7	2.9	2.8	3.1	3.3	2.8	1.8	1.8	2.2%	-3.0%	0.1%
Ireland	38.9	38.8	37.1	37.1	38.9	40.5	38.3	39.1	37.5	33.0	34.8	9.6%	-1.1%	0.1%
Italy	388.5	371.0	341.4	318.8	331.1	331.4	335.5	336.1	329.6	283.8	311.2	5.0%	-2.2%	0.9%
Latvia	8.3	8.0	8.0	7.7	7.8	8.2	8.0	7.8	8.4	7.1	7.4	4.2%	-1.2%	0.1%
Lithuania	12.4	12.1	11.1	11.0	11.3	11.7	11.9	12.5	12.3	11.8	12.1	3.9%	0.2%	0.1%
Luxembourg	11.7	11.1	10.9	10.5	10.1	10.0	10.3	10.8	10.9	9.0	9.1	7.6%	2.3%	0.1%
Netherlands	219.4	212.2	208.2	197.6	205.7	209.8	202.7	198.8	194.8	173.6	178.2	2.1%	-2.1%	0.5%
North Macedonia	9.3	8.9	7.9	7.5	7.2	7.1	7.5	7.1	8.1	6.6	6.9	3.7%	-3.0%	0.1%
Norway	37.1	36.8	37.0	38.1	36.0	35.1	35.1	35.3	34.3	32.9	33.4	1.5%	-1.1%	0.1%
Poland	323.0	308.7	310.4	293.3	293.3	308.0	315.4	320.1	302.0	264.2	309.1	9.1%	-0.5%	0.9%
Portugal	57.4	50.7	49.3	49.6	53.1	52.4	57.3	54.3	50.3	40.7	39.7	2.2%	-2.6%	0.1%
Romania	85.1	81.7	83.8	71.1	71.9	69.6	72.9	73.4	71.7	64.6	70.3	9.7%	-1.9%	0.2%
Slovakia	33.9	32.4	32.5	30.0	30.3	30.7	32.8	32.3	30.3	27.8	31.7	12.1%	-0.7%	0.1%
Slovenia	15.2	14.7	14.1	12.6	12.7	13.6	13.9	13.9	13.3	11.9	11.6	-1.8%	-2.7%	0.1%
Spain	308.5	306.3	274.5	271.9	287.7	280.6	298.3	293.0	278.2	223.6	245.7	10.2%	-2.3%	0.7%
Sweden	52.0	49.1	45.1	46.1	46.1	46.5	46.5	44.7	47.3	31.1	40.1	-0.8%	-2.6%	0.1%
Switzerland	40.1	41.1	41.6	38.7	39.5	38.0	38.8	37.2	38.1	32.7	33.4	2.4%	-1.8%	0.1%
Turkey	298.8	314.4	303.3	325.1	340.6	350.0	392.1	390.8	386.7	373.9	403.3	8.1%	3.0%	1.2%
Ukraine	203.2	209.1	216.9	246.8	195.1	215.6	187.9	188.7	185.5	172.9	167.9	-2.7%	-6.7%	0.5%
United Kingdom	494.0	510.2	498.0	456.1	437.8	413.6	401.3	380.5	377.5	316.9	337.7	4.8%	-3.7%	1.0%
Other Europe	121.0	112.8	113.0	102.3	111.6	114.8	120.5	119.3	119.3	115.6	89.9	22.0%	-2.9%	0.3%
Total Europe	8199.5	8027.5	8431.0	8198.1	8097.9	8266.7	8272.5	8344.4	8071.7	7608.3	7793.7	5.3%	-1.1%	11.2%
Azerbaijan	28.6	29.6	30.3	31.0	33.6	33.1	32.0	33.5	34.4	33.7	35.3	5.2%	2.2%	0.1%
Bahrain	50.3	60.8	60.2	54.2	54.2	56.7	60.8	60.9	56.1	57.2	57.2	2.2%	-0.4%	0.2%
Kazakhstan	202.0	212.0	211.9	214.7	207.2	204.0	214.2	238.5	235.0	221.2	219.4	6.5%	0.8%	0.6%
Russian Federation	1538.8	1572.4	1538.8	1538.8	1507.0	1520.5	1507.8	1564.7	1548.8	1126.2	1581.3	8.9%	0.1%	4.7%
Turkmenistan	59.7	65.2	68.3	60.5	71.5	70.9	70.2	77.6	84.1	79.2	94.3	19.3%	4.6%	0.3%
Uzbekistan	113.1	109.8	111.1	114.4	108.8	104.1	106.9	109.7	109.5	108.3	112.3	4.0%	0.1%	0.3%
Other CIS	24.6	26.6	25.5	27.4	28.6	29.1	29.3	33.2	31.2	29.9	32.7	9.8%	-2.9%	0.1%
Total CIS	2048.9	2095.3	2086.8	2047.9	2096.6	2076.7	2076.2	2117.7	2103.9	1964.5	2132.5	7.7%	0.9%	6.1%
Iran	517.0	522.7	545.2	567.2	551.0	590.8	581.1	606.1	628.1	655.4	660.5	2.8%	2.5%	1.9%
Iraq	94.2	103.5	115.2	110.8	110.0	120.0	129.0	156.2	145.4	130.0	141.0	8.7%	1.1%	0.4%
Israel	68.6	71.2	66.9	61.1	66.8	66.1	66.8	67.0	69.2	63.0	63.3	0.7%	-0.8%	0.2%
Jordan	89.9	92.2	94.6	96.3	99.6	97.8	99.8	101.9	103.7	95.9	103.1	7.9%	0.5%	0.3%
Oman	52.7	57.6	65.1	65.2	68.7	60.1	74.3	76.2	76.1	73.1	82.1	12.6%	4.6%	0.2%
Qatar	74.2	89.2	99.6	109.6	123.3	123.1	115.9	119.9	121.8	107.6	115.3	7.4%	4.5%	0.3%
Saudi Arabia	479.8	525.0	534.1	573.3	591.2	618.6	608.1	601.5	582.2	589.2	575.3	1.1%	1.4%	1.7%
United Arab Emirates	220.8	231.9	247.1	243.9	288.2	275.9	277.7	272.2	270.3	211.4	260.1	5.1%	1.7%	0.8%
Other Middle East	148.8	131.2	135.4	135.0	124.5	129.8	125.9	121.2	121.3	112.3	116.6	4.1%	-2.4%	0.3%
Total Middle East	1768.9	1817.3	1862.9	1864.3	1897.3	2063.1	2076.5	2183.2	2121.1	2044.0	2112.7	3.9%	1.8%	3.2%
Algeria	100.6	108.9	115.1	129.6	129.0	127.7	130.7	137.7	142.5	133.3	139.7	5.1%	3.3%	0.4%
Egypt	192.5	199.6	201.3	200.0	203.0	215.4	220.3	217.7	223.8	203.3	219.6	8.4%	1.3%	0.6%
Morocco	52.9	53.9	54.3	56.5	56.7	57.1	60.1	61.7	67.8	62.1	68.9	11.4%	2.7%	0.2%
South Africa	466.3	462.1	462.8	467.2	455.1	473.9	489.9	451.7	473.7	437.2	438.9	0.7%	-0.6%	1.3%
East Africa	80.2	81.0	89.3	100.7	104.7	103.3	111.9	117.5	115.1	102.9	110.5			

3.0 A Note on the Climate Action Plan 2024⁷

- The 2024 Climate Action Plan details the strategies and sets the course towards a sustainable, low-carbon, and climate-resilient future. (p12)
- **Electricity** (Chapter 12, p148) - 75% reduction in emissions by 2030 (over 2018) through an extensive deployment of renewable sources of energy, in particular onshore wind and solar.
- **Built Environment** (Chapter 14, p195) - 45% reduction in commercial/public buildings emissions and 40% reduction in residential buildings emissions through retrofitting (500,000 by 2030), new building standards ('zero emission' by 2030) and 680,000 heat-pumps by 2030.
- **Transport** (Chapter 15, p227) - 50% reduction in emissions by 2030 "will require transformational change and accelerated action across the transport sector" and "a significant behavioural shift" (p15) and 50% reduction in fuel use by 2030. A 130% increase in public transport journeys and 23% reduction in daily car journeys by the same date.
- **Agriculture** (Chapter 16, p269) - 25% by 2030 primarily through reduced input of nitrogen. "Agriculture is Ireland's highest-emitting sector and reductions will have to speed up to comply with the carbon budget." (p15) In 2022, Agriculture accounted for 34.3% of Ireland's GHG emissions (p270).
- **Industry** (Chapter 13, p174) - 35% by 2030 "by breaking the link between fossil fuels and economic progress" (Government Press Release) (eg by increasing carbon neutral heating and reducing embodied carbon in construction materials).
- **Land Use and Forestry** (Chapter 17, p294) - The "forestry sector is currently a carbon source rather than a carbon sink" (p16) Afforestation at 8,000kha/yr with 50% being native/broadleaf, rehabilitate 63,000ha of exploited peatlands and plant 2,000km of new hedgerow, all by 2030.
- **Local Authorities and Climate Action** "Local authorities have a key role to play in implementing the measures needed to meet Ireland's national climate targets." (p340)

4.0 Conclusion

- Data Centres are vital to implementing Irish and European Data policies and strategies.
- Data Centres connected to the Grid are best placed to utilise renewable energy from wind and solar generation. Connected Data Centres should be preferred over on site gas powered data centres.
- The potential to use renewable power is limited to availability and the capacity factors of solar and wind power. Capacity factor for solar will range between 7 to 11% over a 8,766 hour year. The wind fleet may have a capacity factor as low as 27% in some years.
- The heating sector can absorb a lot of renewable power and utilise thermal storage. The residential sector has huge potential to deploy Solar PV and usefully store renewable power as renewable heat.
- It is obvious that additional thermal power plant will be required to provide power over the full 8766 hours in an average year. Where is that power to be generated as it is additional demand with additional emissions? Under Directive EU/2023/1791 that plan must be either connected to district heating or to carbon capture.

⁷ <https://assets.gov.ie/293730/00ee6688-fc2a-4897-8077-de73280ec7fc.pdf>

- Data centres should use renewable rich grid power when it is available rather than reject grid power and run on cheaper onsite generated gas power.

Yours sincerely

John Callaghan for Sustainability 2050