EU-MORE

EUropean MOtor
REnovation initiative

Ireland

Review of past and existing policy options for the acceleration of electric motor renovation

EU-MORE

Authors:

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List of Acronyms

Acronym	Text
DECC	Deparment of the Environment, Climate and Communications
EXEED	Excellence in Energy Efficient Design

EU-MORE is an acronym for
EUropean MOtor
REnovation initiative

1. Ireland

Introduction and description of the national policy framework and important related national programmes, measures and/or developments:

Ireland's NECP plan updated in 2023 is the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emissions ceilings. NECP is developed by Department of the Environment, Climate and Communications. (DECC).

The plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to reduce 50% of Ireland's emissions by 2030 and reach net zero no later than 2050. This national plan sets out a total public investment of €165 billion over the period 2021 to 2030.

Main targets:
The Irish Government committed to reduce Ireland's greenhouse gas (GHG) emissions by 51% by 2030 relative to 2018 levels as legislated for in the Climate Action and Low Carbon Development (Amendment) Act 2021, and become carbon neutral by 2050.

Carbon Budget targets:

Budget Period	2021 – 2025	2026 – 2030	2031 – 2035 (provisional)
$MtCO_2eq.$	295	200	151
Average annual reduction	4.8%	8.3%	3.5%

Specific sectoral targets for industry:

- Carbon Budget 1: 30 MtCO2eq.
- Carbon Budget 2: 24 MtCO2eq.
- Emissions Abatement (on 2018): -35% (4 MtCO2eq. per annum by 2030)
- Emissions up to 2021: 7.1 MtCO2eq.

Focus is more on reducing fossil fuel and increase efficiency in industrial heating, plus on reducing embodied carbon in construction materials. Energy Efficiency measures directly linked to electrical industrial/ tertiary consumption is not a major focus in this plan.

Required Level of Decarbonisation for Industry

2018 Emissions $MtCO_2eq.$	Indicative Target for 2025 Emissions $MtCO_2eq.$	Indicative Target % Reduction for 2025	2021 Emissions MtCO2eq.	% Increase (+) / Reduction (-) to date
7	6	20%	7.1	+1.4%

Thereof indirectly related also to motor replacement:

Theme	2025 KPI	2025 abatement (vs 2018) $MtCO_2eq.$	2030 KPI	2030 abatement (vs 2018) $MtCO_2$ eq.	2031-2035 measures
Fossil Fuel Demand Reduction through Energy Efficiency Measures	Reduce industry fossil fuel demand through energy efficient measures in manufacturing process by 7%	0.2	Reduce industry fossil fuel demand through energy efficient measures in manufacturing process by 10%	0.2	Further reductions in industry energy demand

Energy Efficiency measures are defined under the Energy Efficiency Obligation Scheme (EEOS). The scheme started in 2014. SEAI (Sustainable Energy Authority of Ireland), see: Sustainable Energy Authority of Ireland | SEAI is the administrator of the EEOS and continued to operate in 2021 in line with previous years. Following a consultation process, the Irish Minister decided in 2020 that the scheme for 2021 would be reported in final energy. See: https://www.gov.ie/en/consultation/ac175-public-consultation-on-the-implementation-of-the-clean-energy-package/

Main changes:

- Ireland will use a combination of an Energy Efficiency Obligation Scheme and Alternative Measures to meet EED Article 7 targets.
- Set the metric for the obligation scheme in final energy (with a transition period to be agreed during the design phase of the scheme)

The design of the updated scheme for 2022-2030, outlining who should be obligated, the size of the target and how these targets will be delivered, will be decided following a public consultation process – at this time, the final design has not yet been published. All calculations and tools used until 2021 are under evaluation.

To this effort, SEAI have hosted numerous workshops with obligated parties, the supply chain and other interested parties, to discuss and seek feedback on the operational aspects of the EEOS redesign. The decision papers are not yet published.

The following actions are adopted to accelerate the energy efficiency measures in industry:

- Energy management systems will be mandatory for organisations who use more than 100TJ of energy per annum;
- The SEAI's Large Industry Energy Network will support organisations on adopting energy
  management systems, developing emissions management systems, improving energy
  Industry performance metrics, and adopting best practice in energy efficiency and emissions reductions;
- The SEAI's Excellence in Energy Efficient Design (EXEED) programme will support large
  energy users with developing exemplar energy efficiency approaches to new and existing
  assets, including energy efficiency design and capital support;
- Energy audits will be mandatory for organisations who use more than 10TJ of energy;

- Measures within mandatory energy audits with payback periods of less than 5 years should be implemented within 2 years of the energy audit;
- The top 15 energy users in Ireland will report energy performance and emissions data via
  the SEAI's Large Industry Energy Network annually, and energy performance metrics will be published;
- DECC will assess whether mandated caps on any increase in fossil fuel demand by large
  energy users could be put in place from 2026.

Energy Efficiency policies under EED are monitored and flanked with support (e.g. grants, training & education programmes, technical studies, etc) by the SEAI.

Under EEOS eligible measures, also replacement of old equipment like motors with new higher efficient can be supported by grants in the EEXD scheme for companies planning a major investment and planning in an energy efficient design project. It includes both the public and private sector, regardless of the project scale.

Brief evaluation of the overall size and scope of national actions in relation to the replacement of electric motors and the EU-MORE project as a whole

The general comments on overall GHG reduction targets per year were that these seem rather moderate and not very ambitious. As for industry the main focus of measures is on heating and reducing fossil fuel, there is no explicit programme dedicated to electric motors, hence all objectives can only be estimated as a (little) contribution to cross-cutting technologies and overall energy efficiency gains in industrial processes.

Ireland seems more of a slow mover and lagging other advanced economies and looking for more prominent issues as evidenced by other prioritised improvement targets in this country.

Likely in the following years with the increased mandatory energy audits in industry (incl training programmes & support of SMEs here), and the implementation of actions with short payback time <5 years, replacement of electric motors in processes will become more prominent and show more concrete impact beyond 2025.

1.1 Measure 1: EXEED Certified Programme

	Overview
Short Description	EXEED Certified Programme The EXEED programme provides grant support for energy projects that follow the EXEED certified standard for Excellence in Energy Efficient Design, which encourages innovation in design projects.
Responsible Authority	SEAI
Status	Ongoing
Issue Date	2014
Start Date	2021
Ending Date	2023
Duration	3 years, ending end of 2023, following a review process the support model for 2024 and beyond still tbd
Reference:	https://www.seai.ie/business-and-public-sector/business-grants-and-supports/exeed-certified-grant/

1.1.1 Main Description

A detailed description of the policy measure – including references to (if applicable) anchoring national law, EU directives, other schemes

EXEED Certified grant
SEAI provide grant support for projects which are following the EXEED Certified standard for Excellence in Energy Efficient Design.

The EXEED standard encourages innovation in design projects to help future-proof the investment, by optimising energy performance, reducing operational energy costs and carbon emissions.
Grant support of up to €3,000,000 per project is available.

Eligibility for EXEED

a) Projects eligible

EXEED is applicable to any sector, any organisation and any project. Projects can be of any scale or complexity, for example:

- Greenfield design - a new asset separate from any prior work
- Brownfield design - repurposing of an existing asset
- Major energy upgrade to existing asset
- Major renovation of existing assets

b) Assets eligible

EXEED applies a standardised process in energy efficient design management. Assets eligible for EXEED Certification must:

- Have a physical boundary that fully incorporates the system(s)
- Have an energy balance which includes all energy sources, energy use and energy demand
- Encompass all energy services (i.e. desired outcomes requiring energy consumption)

Grant amounts available

The scheme provides funding towards implementing the EXEED Certified process. This includes professional services and additional capital required.

Expenditure type	Large company	Medium-sized company	Small company
Pre-investment professional services to implement EXEED processes • Design-stage processes set out in the EXEED Certified standard • Strategic input from an independent Energy Efficient Design Expert • To identify the investment opportunities which will deliver optimum energy performance	Up to 50% grant	Up to 60% grant	Up to 70% grant
Eligible expenditure to implement EXEED processes • Incremental capital costs compared to counterfactual investment (Baseline design) • Professional services associated with implementation	Up to 30% grant	Up to 40% grant	Up to 50% grant

New equipment installed, i.e. also new efficient electric motors, under EXEED should ideally be listed under the Irish "Triple E" product register:

The Triple E Products Register is a searchable list of energy efficient products. Products on this register all meet a minimum set of stringent energy efficiency criteria and typically will be of a best-in-class efficiency standard. As such, procuring against this register will provide you with the assurance that you are purchasing a product of very high efficiency.

Triple E sets minimum criteria that products are required to meet to be listed. For products, these criteria are regularly updated, and aim to ensure that only the top 10 - 15% most energy efficient products in any technology are listed.
See: Triple E Register for Products | Business & Public Sector | SEAI

<table>
<tr><th></th><th>Characteristics</th></tr>
<tr><td>Budget</td><td>There is no itemised budget for specific opportunities such as Motor renovation available publically. Related to the EXEED program specifically:
<table>
<tr><th>EXEED Spend</th><th>2021</th><th>2022</th><th>2023 (YTD)
[Up to 19/07/2023]</th></tr>
<tr><td>Budgeted (Planned) expenditure (€m):</td><td>13.4
(re-profiled to €4.7m in May and €3.27m in Aug 2021)</td><td>9.0
(re-profiled to €3m in July 2022)</td><td>7.0
(re-profiled to €3m in July?)</td></tr>
<tr><td>Capital spend (€m)</td><td>3.394</td><td>1.243</td><td>0.470</td></tr>
</table></td></tr>
<tr><td>Financing of the measure</td><td>national funds</td></tr>
<tr><td>Policy focusses</td><td>Product</td></tr>
<tr><td>Intervention Type</td><td>Equipment upgrade</td></tr>
<tr><td>Main Barriers Addressed</td><td>Good % of high initial cost, allows faster return on investment</td></tr>
<tr><td>Key Driver(s)</td><td>Initiative and certification standard developed by SEAI to standardise the adoption of Energy Efficient Design principles at the design stage of large energy projects.</td></tr>
<tr><td>Replicability</td><td>High</td></tr>
<tr><td>EU Inclusion</td><td>Yes, included in NECP; linked to ESCOs when getting energy credits under EEOS</td></tr>
<tr><td>Related Characteristics</td><td>Not very technology specific, not explicit for electric motors</td></tr>
</table>

1.1.2 Impacts

A detailed description of the final (expected) results of the measure implementation and any achievements related to the measure implementation.

On overview on the achieved impact and expenses for the EXEED program is provided below:

Grant impact	TOTAL 2021	AVERAGE 2021	TOTAL 2022	AVERAGE 2022	TOTAL 2023	AVERAGE 2023	TOTAL 2021-2023	AVERAGE 2021-2023
Electrical EE savings (final energy)	2,541,124 kWh	121,006 kWh	143,557 kWh	134,329 kWh	1,871,371 kWh	311,895 kWh	4,556,052 kWh	126,557 kWh
Thermal EE savings (final energy)	11,673,515 kWh	555,882 kWh	15,308,003 kWh	1,517,843 kWh	7,459,647 kWh	1,243,275 kWh	34,441,165 kWh	956,699 kWh
Electric savings (% of total electric consumption)	-	23.00%	-	-11.88%	-	6.15%	-	8.47%
Thermal savings (% of total thermal consumption)	-	-0.48%	-	28.59%	-	32.01%	-	11.98%
Total annual final energy savings	14,214,639 kWh	676,888 kWh	15,451,559 kWh	1,652,172 kWh	9,331,018 kWh	1,555,170 kWh	38,997,217 kWh	1,083,256 kWh
Total annual primary savings (EE+RE)	23,123,251 kWh	1,101,107 kWh	16,048,893 kWh	1,865,291 kWh	11,930,468 kWh	1,988,411 kWh	51,102,612 kWh	1,419,517 kWh
Total annual cost energy savings	€ 1,000,197.21	€ 47,628.44	€ 817,264.02	€ 98,232.05	€ 656,216.71	€ 109,369.45	€ 2,473,677.94	€ 68,713.28
ETS cost savings from avoided allowance purchases	€ 3,687.24	€ 175.58	€ 38,747.25	€ 4,060.67	€ 22,162.86	€ 3,693.81	€ 64,597.35	€ 1,794.37
Total eligible expenditure	€ 6,951,776.68	€ 331,036.98	€ 5,991,886.38	€ 720,192.04	€ 4,810,994.21	€ 801,832.37	€ 17,754,657.27	€ 493,184.92
Total SEAI grant	€ 1,900,800.19	€ 90,514.29	€ 1,539,588.80	€ 183,133.51	€ 1,207,413.92	€ 201,235.65	€ 4,647,802.91	€ 129,105.64
Total eligible expenditure minus SEAI grant	€ 5,050,976.49	€ 240,522.69	€ 4,452,297.58	€ 537,058.52	€ 3,603,580.29	€ 600,596.72	€ 13,106,854.36	€ 364,079.29
Payback period (without grant)	6.92 years	6.58 years	7.00 years	8.01 years	7.09 years	8.96 years	6.99 years	7.17 years
Payback period (with grant)	5.03 years	4.85 years	5.20 years	5.83 years	5.31 years	6.28 years	5.16 years	5.25 years
SEAI cost per primary kWh saved (in-year)	€ 0.08	€ 0.11	€ 0.10	€ 0.14	€ 0.10	€ 0.15	€ 0.09	€ 0.12
Electricity-related annual tCO2 savings	1,769.26 tCO2	84.25 tCO2	-20.00 tCO2	28.67 tCO2	449.99 tCO2	75.00 tCO2	2,199.24 tCO2	61.09 tCO2
Thermal-related annual tCO2 savings	2,828.43 tCO2	134.69 tCO2	3,293.50 tCO2	323.22 tCO2	1,554.75 tCO2	259.13 tCO2	7,676.69 tCO2	213.24 tCO2
Total annual tCO_2 savings	4,597.69 tCO2	218.94 tCO2	3,273.50 tCO2	351.88 tCO2	2,004.74 tCO2	334.12 tCO2	9,875.93 tCO2	274.33 tCO2
SEAI cost per tCO_2 saved (in-year)	€ 413.43	€ 600.28	€ 470.32	€ 722.85	€ 602.28	€ 819.83	€ 470.62	€ 651.35
Lifetime	-	15 years	-	15 years	-	15 years	-	15 years
SEAI cost per primary kWh lifetime saved	€ 0.005	€ 0.007	€ 0.006	€ 0.010	€ 0.007	€ 0.010	€ 0.006	€ 0.008
SEAI cost per lifetime tCO_2 saved	€ 27.56	€ 40.02	€ 31.35	€ 48.19	€ 40.15	€ 54.66	€ 31.37	€ 43.42

The EXEED stage 2 application process is perceived as time and resource intensive – often when compared with grant schemes that don't require the same level of transparency on the design process or a requirement to meet a certification standard. The EXEED process itself requires a deeper engineering and design analysis which the supply chain is struggling to adapt to and the value-add of the EXEED process is getting lost in the grant application process. This is resulting in lower quantity of applications submitted and approved and proving problematic as many of evaluations are getting delayed because clarifications are required on energy savings calculations and eligible costs or there is a lack of evidence that the EXEED process being applied correctly.

- The vast majority of both stage 1 and stage 2's are associated with major energy upgrades of existing buildings.
- The main Asset types engaging with the EXEED programme are manufacturing facilities, hotels, industrial facilities and retail facilities – the retail figure is slightly skewed by Woodies 12 x stage 2 applications.
- As per table 1 below, large companies are availing of the majority of the grant support. It is particularly noticeable that large companies are responsible for 76% of the stage 2 offers issued whereas they make up 50% of stage 1's. This aligns with our belief that EXEED is best positioned at large companies and Irelands largest energy users where the value-add of the engineering design process can be realised and where the time, resources and money required to implement the process effectively can be facilitated. SMEs are struggling to convert the studies at stage 1 into capital projects at stage 2.

Table 1 – Successful grant applications by company size

	EXEED Stage 1		EXEED Stage 2	
Row Labels	**Count of Company Size**	**% of total**	**Count of Company Size**	**% of total**
Large	77	50%	29	76%

Medium	39	25%	6	16%
Small	38	25%	3	8%
Grand Total	**154**	**100%**	**38**	**100%**

- It is also clear from the spend review response that large companies are responsible for the majority of the energy and emissions savings from the scheme – it is felt re-positioning the scheme towards the largest energy users will help ensure greater impact from the scheme.
- The majority of stage 1 and stage 2 applications are associated with individual buildings as opposed to a wider site/group of buildings or process/value stream boundary.

<table>
<tr><th></th><th>Impacts</th></tr>
<tr><td>Case level impact</td><td>Actual impact numbers are unknown; estimated case level impact: Medium.

Since re-launch in 2021, the following are the average estimated % savings for the 40 x stage 2 capital grants issued. This is at the point of offer and based on information provided at application stage.

<table>
<tr><th></th><th>% savings</th></tr>
<tr><td>Electric savings (% of total electric consumption)</td><td>5%</td></tr>
<tr><td>Thermal savings (% of total thermal consumption)</td><td>18%</td></tr>
</table>
</td></tr>
<tr><td>Policy level impact</td><td>High – based on proposed savings for 40 x stage capital grant offers issued since 2021. Mixture of sectors including Food & drink, Pharma, Hospitality, and retail.</td></tr>
<tr><td>Size</td><td>Since the scheme re-launched in 2021, there has been one application that included a motor replacement project for proposed funding.

See case study: MSD Carlow makes Energy Efficient Design a priority | Case Studies | SEAI</td></tr>
<tr><td>Energy</td><td>See table below which tracks savings from scheme since re-launch in 2021. Note this does not include first phase of scheme from 2016-2019.

<table>
<tr><th></th><th>2021</th><th>2022</th><th>2023 (YTD)
[Up to 19/07/2023]</th><th>Total savings</th></tr>
<tr><td>Total annual tCO2 savings</td><td>4,598</td><td>3,274</td><td>2,005</td><td>9,876</td></tr>
</table>
</td></tr>
</table>

	Total annual final energy savings (MWh)	14,215	15,452	9,331	**38,997**
Impact evaluation	n/a				

Description of the method used for calculating the final energy- / cost- savings achieved through the measure.

There is no calculation formula nor a detailed methodology available.

If anticipated electric motor replacement a/o upgrade an existing motor with a VSD is claimed as eligible measure, the Irish SEAI will always ask for a detailed engineering report with the proper M&V savings on the entire project.

The tool "Electric Motors and Variable Speed Drives Evaluation Tool" on the SEAI website, see: Tools & Calculators | SEAI is used by companies mostly to help them work out pay back times. They do not report back to SEAI for EEOS with these calculations.

This excel tool developed by SEAI is designed to assist organisations evaluate the benefits of retrofitting a range of high efficiency motors and/or VSDs. The methodologies used in the calculation engine are based on the EMEEES1 approach. The EMEEES project funded by the EU whose objective was to develop harmonised evaluation methods to evaluate measures implemented to archive targets set out in the energy end-use and energy services directive is the key component of this tool.

Two calculation outputs are possible:

- Energy Savings Calculator - to provide an estimate of energy savings,
- Payback Calculator - to provide a simple payback and average payback of all measures included in the retrofit project.

Three retrofit options can be evaluated:

a) VSDs installed on existing standard motors
b) Motor replacement with either a High Efficiency (IE2) motor or Premium Efficiency (IE3) motor
c) Motor replacement (with higher efficiency class) and incorporating VSD

Unfortunately, as this tool has been developed >10 years ago, the references and sources for their few indicative, „default" values are obsolete or highly questionable for current industry processes.
e.g.

- Motor efficiency only covers IE2 and IE3, but not IE4
- Operating hours depending on industry vs tertiary vary from 2.200 to max 5.000 hrs/a
- Motor load factors vary depending on application – where only a limited choice between pumps, fans, air compressors, conveyors and refrigeration is possible – from 0,42 to 0,70

1.1.3 Lessons Learnt

Description of the lessons learnt and/or (initial) feedback gathered in response to the measure's implementation. The main barriers found that hamper and/or the conditions that are necessary for the implementation of the measure.

Challenges	Solutions / Opportunities
Lack of understanding and buy-in to the EXEED Process & certification. EED Experts still focused on equipment replacement rather than Energy Service challenge & small pool of competent EED expertise in supply chain	Further training and mentorship supports including development of additional guidance materials - e.g. Templates and sample EXEED documents.
Market predominantly see the value of EXEED in the grant rather than the process. Some applicants starting with projects in mind – Solar PV	Develop additional Case Studies – Diageo, Wyeth, Aurivo, Pfizer,, Glanbia, Kerry Ingredients, Irish Water, Ahascragh Distillery, Tyndall National Institute etc to showcase value-add of process. Address grant positioning and remove grant % uplifts which are making the scheme more attractive for SMEs and thus sending false message to the market.
Slow uptake of EXEED certification (time, effort, money & lack of awareness due to reliance on supply chain)	Transition from the EXEED standard to the new revision of the I.S.399:2021 standard I.S.399 Masterclass programme
Alternative "simpler" routes to capital support from likes of IDA, Enterprise Ireland and SEAI Community Energy Grant available.	Revamp EXEED grant offering to improve customer journey and scale up activity and delivery of high impact energy efficiency and decarbonisation projects.
EXEED stage 2 application process is perceived as time and resource intensive.	Simplify grant application and approval process where possible. Re-position to large industry only (increase minimum threshold) and focus on lower volume higher impact projects with greater engagement at both application and implementation stages.

Numerous scope changes and extension requests being requested on stage 2 approved projects due to contractors delays, lead time delays on equipment deliveries, limited shutdown windows to accommodate works and changes during the details design activity.	Separate out the detailed design support offering as a new application pre-stage 2 application to increase uptake and drive greater detail on project design at the point of capital support grant application. Remove contract deadlines completely or increase implementation period included on letters of offer.

	Lessons Learnt
Key takeaways	As per the above
Recommendations	N/A
Linked measures	N/A
Reference(s)	Link to EXEED Certified Grant page Link to EXEED Certified Program page
Other	
Thoughts, comments, considerations …	

1.2 Measure 2: EEOS Energy Efficiency Obligation Scheme

	Overview
Short Description	Energy Efficiency Obligation Scheme (EEOS) Credits to Obligated Parties Obligated parties have energy efficiency targets under the scheme. For every unit of energy saved through these projects, they achieve energy credits towards their targets.
Responsible Authority	SEAI
Status	Ongoing
Issue Date	2014
Start Date	2021
Ending Date	2030
Duration	Min until 2030 The design of the scheme for 2022-2030, outlining who should be obligated, the size of the target and how these targets will be delivered, will be decided following a public consultation process.
Reference:	S.I. No. 522/2022 - European Union (Energy Efficiency Obligation Scheme) Regulations 2022 (irishstatutebook.ie)

1.2.1 Main Description

A detailed description of the policy measure – including references to (if applicable) anchoring national law, EU directives, other schemes

EEOS
Obligated parties have energy efficiency targets under the scheme. For every unit of energy saved through these projects, they achieve energy credits towards their targets.

The target did rise to 700 GWh from 2018-2020. The target will be set in final energy from 2021 onwards as per the new Energy Efficiency Directive.

Targets are allocated to each obligated party based on their share of the energy market. This is calculated in terms of sales volume to final customers. Each company's target is divided across three sectors: 75% non-residential, 20% residential and 5% energy poverty (residential).

The obligated party will calculate the energy credits achieved in accordance with the SEAI guide on authenticating and claiming energy credits see: EEOS Guidance to authenticate & claim energy credits (seai.ie)

Eligible measures include: **Motors, drives and pumps &** Replacement, VSDs and control.

M&V Protocol report is always required to claim these credits.

	Characteristics
Budget	N/A
Financing of the measure	Through ESCOs & OP
Policy focusses	Product
Intervention Type	Equipment upgrade
Main Barriers Addressed	ease of regulation, emission reduction
Key Driver(s)	EU Directive
Replicability	High
EU Inclusion	Yes/ included in NECP and eligible under EED
Related Characteristics	

1.2.2 Impacts

A detailed description of the final (expected) results of the measure implementation and any achievements related to the measure implementation.

Motor upgrades make up a very small portion of the estimated total savings. Some large projects with multiple ECMs would include motor upgrades. But there is no monitoring and data available on the impacts attributed to electrical motors specifically.

	Impacts
Case level impact	Actual value: Unknown; Estimated gut feeling impact of measure: Low
Policy level impact	Low, estimated
Size	N/A – not tracked
Energy	N/A - Not tracked, very few examples in recent years but some historic. May represent a small portion of savings achieved in larger projects with multiple ECMs. Best guess estimate is 20 GWh from all NREC projects 2014 to date, based on conservative estimate from PEP key word search.
Impact evaluation	N/A

Description of the method used for calculating the final energy- / cost- savings achieved through the measure.

Estimates for cumulative savings in industry & tertiary sector together over 2021-203 through all EEOS are 25,975 GWh

1.2.3 Lessons Learnt

Description of the lessons learnt and/or (initial) feedback gathered in response to the measure's implementation. The main barriers found that hamper and/or the conditions that are necessary for the implementation of the measure.

Motors only a part in larger non-res projects and hence not targeted by a specific measure. No real tracking of impacts, and energy savings are always included in the total EE process savings Perception is that % savings from motor upgrades would be small in a lot of cases, which makes it difficult to justify replacement and ROI on existing motors before end-of-life.

	Lessons Learnt
Key takeaways	N/A
Recommendations	N/A
Linked measures	N/A
Reference(s)	N/A
Other	N/A
Thoughts, comments, considerations …	N/A

Table 2: National Policy Measure Overview - Ireland

#	Measure Title	Short Description	Type of Measure	Start Year	End Year	Duration	Target Groups	Source link / Reference	Case Level Impact of the measure
1	EXEED Certified Programme	The EXEED programme provides grant support for energy projects that follow the EXEED certified standard for Excellence in Energy Efficient Design, which encourages innovation in design projects.	Energy Efficiency	2021	2023	3 Years	All	link	Medium
2	Energy Efficiency Obligation Scheme (EEOS)	Gives credits to Obligated Parties Obligated parties have energy efficiency targets under the scheme. For every unit of energy saved through these projects, they achieve energy credits towards their targets.	Equipment upgrade	2021	2030	9 years	Large Companies (energy intensive)	link	Low