National Oil Reserves Agency

Statement of Strategy

2025 – 2029

November 2024

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1. Executive Summary

1.1 Mission Statement

As a State Agency under the aegis of the Department of Environment, Climate and Communications (DECC), NORA has three key functions:

1. To ensure that Ireland meets its obligations under EU legislation and IEA rules to maintain 90 days minimum stocks of oil for use in an oil supply emergency,[1]

2. To maintain the necessary resources, skills, processes and procedures to effectively and efficiently support the Department in responding to an international or national disruption in any such oil supply emergency; and

3. To administer Ireland's Renewable Transport Fuels Obligation (RTFO) Scheme and fulfilling its role as designated authority for measuring compliance with Article 7(a) of the EU Fuel Quality Directive (FQD)[2].

To fulfill these three key functions the Agency works closely with both the Department for Environment, Climate and Communications (DECC) and the Department of Transport (DoT).

1.2 Overview

This Statement of Strategy sets out a detailed framework, including a set of core objectives and key actions, describing how the Agency will fulfil its remit over the period 2025 – 2029.

The Irish economy has continued its cycle of recovery through 2023 and 2024, post the Covid Pandemic. Despite the persistent relatively high oil prices, this recovery in the economy has driven oil demand back to levels which are close to the peak 12 month rolling average demand maximum seen in March 2020, just before the first societal shutdown. Whilst high natural gas prices had led to some fuel switching in the power generation sector, consumption of oil in this sector has now fallen back to the long term average of less than 1%.

Although legally binding carbon budgets and sectoral emissions ceilings were agreed by government in July of 2022, there has been little sign to date of any significant impact of these constraints on consumption and it is expected that it will take some time to be reflected in final oil demand.

The Department of Transport's policy statement on renewable fuels in the transport sector[3] has established a trajectory for the continued increase of biofuel blending in fossil fuels placed on the market. It is planned that by 2030, petrol will contain a physical blend of 10% ethanol and diesel will contain a physical blend of 20% biodiesel. Whilst this trajectory will lead to a significant reduction in carbon emissions in the transport sector, it will have limited impact on NORA's stock holding obligation which is based on the combined net imports of both fossil fuel and biofuels.

The war in Ukraine and the ongoing crisis in the Middle East continue to present significant uncertainty in global economies. Despite this, the IEA in its latest analysis and forecast for oil demand out to 2030[4] continues to forecast growth in oil demand for the balance of 2024 and into 2025 and indicates that oil demand is not expected to level off until close to the end of the decade.

[1] It should be noted that NORA's annual 90-day oil stocks obligation volumes apply from 1st July each year to 30th June of the following year, while the Plan is set out in annual calendar/financial years.

[2] The obligation to ensure compliance with the FQD will fall away once RED III has been transposed into Irish Law which is expected to be in 2025.

[3] https://www.gov.ie/en/publication/af803-renewable-transport-fuel-policy-2023-2025/

[4] https://iea.blob.core.windows.net/assets/493a4f1b-c0a8-4bfc-be7b-b9c0761a3e5e/Oil2024.pdf

The Irish economy is expected to continue to grow over the coming years, and this, coupled with an expected increase in Ireland's population, will lead to an increased demand for energy which, in the short term, will lead to an increased demand for oil.

In March of this year, the EU softened its position on the total ban on sales of vehicles with internal combustion engines (ICE) post 2035 instead opting to allow for the continued sale of these vehicle types provided they only burn carbon neutral fuels. This move, coupled with the 30% cut in government grants for electric vehicles announced in July of last year will put downward pressure on the switch to electric vehicles. There are early signs that the demand for electric vehicles has stalled, with the share of pure electric vehicles (as a percentage of newly registered vehicles) falling in the first four months of 2024 when compared to the same six month period in 2023. The slow implementation of improvements in public transport and the limited change in consumer behaviour will continue to contribute to the demand for oil in the transport sector.

In the heating sector, there are aggressive plans in place for retrofitting both commercial and residential dwellings. These plans, coupled with the introduction of a (modest) renewable heat obligation expected in 2024/2025 and the proposed ban on the installation of fossil boilers in new house builds, will impact the profile of the energy demand in the heating sector.

The demand in the aviation sector has almost fully recovered to the pre-pandemic levels although demand in first half of 2024 was slightly down on the same period in 2023. The EU agreement on the blending of sustainable aviation fuel (SAF) will see a change in the constituents in aviation fuel but is unlikely to impact the overall volume demand and, as such, is not expected to have an impact on NORA's stock holding obligation. The outcome of the discussions on increasing the passenger cap numbers at Dublin airport will have a significant impact on overall aviation demand over the coming years.

In the longer term, NORA's stock holding obligation will be largely driven by Ireland's delivery on its Climate Action Plans and the effectiveness of decarbonizing the energy system. Trying to strike a balance between the short term need to meet the critical security of supply requirements, the need to ensure economic growth, the imperative to deliver on climate initiatives and at the same time maintain political and social stability presents an enormous challenge for Ireland and many other European countries.

Taking all of these factors into account, it is expected that NORA's stock holding obligation will remain close to the current volume for the period of this five year plan, falling marginally each year but remaining above 1.6 million tonnes for the period.

In an effort to optimise the volume of stocks held on the island of Ireland, the Agency will continue to assess a number of feasibility studies for storage on the island.

In the field of renewables, the Agency will continue to fulfil its role as the Competent Authority for biofuels and as Administrator of the RTFO Scheme. As the range and complexity of biofuels continues to expand and the role these materials play in the transport sector continues to grow, the Agency will need to strengthen and build the necessary resources to support this activity. The introduction of the European Database for tracking and tracing biofuels through the entire supply chain and the obligation on EU Member States to build a European wide framework for the supervision of Certification Bodies will all assist in strengthening the governance in assessing the sustainability of these renewable fuels.

In September 2024, the Department of Transport indicated its intent to appoint NORA as the Competent Authority under the ReFuelEU Aviation Regulations[5]. NORA will engage with the relevant stakeholders to ensure that it fulfills this role.

[5] https://eur-lex.europa.eu/eli/reg/2023/2405/oj

The Agency will continue to effectively and efficiently manage its financial resources, actively streamline its internal financial processes, ensure ongoing compliance with the Code of Practice and the multiplicity of other obligations that are applicable to public bodies and state agencies, including its obligations under:

- Public Sector Equality and Human Rights Duty
- Critical Entities Resilience Directive
- Network and Information Systems Directive (NIS2)
- Emissions Trading System 2
- Climate Action Roadmap
- Corporate Sustainability Reporting Regulations
- Irish Language Act

1.3 Key Actions for 2025

In the context of this ever changing environment, the Agency will focus on the following key actions items in 2025:

1. Maintain a proactive HSE management structure that will minimise the risk of Lost Time Incidents (LTIs) at the Agency's facilities and the loss of product to the environment.
2. Complete a feasibility assessment of the identified on-island storage opportunities.
3. Secure a clean year end C&AG Audit Report and ensure compliance with OGP procurement guidelines and internal policies and procedures.
4. Complete the implementation of the finance and IT systems upgrades and explore the use of Robotic Processing Automation (RPA) and Artificial Intelligence (AI) tools to further streamline operations.
5. Fulfil the Agency's obligations under the Climate Action Mandate and Corporate Sustainability Reporting Regulations.
6. Complete its program of stock rotation and upgrade including the upgrading of stocks held in Cloghan Point and Tarbert.
7. Renew its storage agreements that fall due for renewal.
8. Continue to support the Department of Transport in the development of its transport policies and ensure that the RTFO scheme is upgraded to reflect the changes arising from the transposition of RED III.
9. Continue to engage proactively at EU and international levels (including the IEA) and with international counterparts on matters of common interest.

2. Background

2.1 NORA's stock holding obligation

To comply with EU legislation and the rules associated with Ireland's membership of the IEA, NORA is required to hold the equivalent of 90 days of net oil imports for any given year. This obligation is set in arrears and is determined by the Department of Environment, Climate and Communications (DECC). NORA's current stock holding obligation is 1,645kT, marginally down on the volume of 1,659kT in 2023/2024.

The stock holding obligation is notified to NORA in Q1 of each year to take effect on 1st July of that year. The next adjustment to the obligation that will come into effect on 1st July of 2025 will be based on the net imports of oil (including biofuels) for the calendar year 2024.

In seeking to forecast NORA's stock holding obligation, one reasonable estimate can be made using the volume of oil on which the NORA and RTFO levies are paid. However, whilst the majority of the oil that is imported into Ireland is sold by oil companies to end users and is therefore subject to a NORA levy, some product is imported directly by end users for their own consumption e.g. electricity generation companies. Where these companies hold their own oil stock, equivalent of 55 days of their consumption, such volume does not attract a NORA levy. In addition, certain products (e.g. aviation fuel, marine bunkers etc.) are exempt from the payment of the NORA levy.

A second estimate can be derived from the SEAI's assessment of future energy demand which is carried out as an input into DECC's Climate Action Plans. These SEAI forecasts, reflect many factors, including:

- domestic population and economic growth
- the continued impact of the wars in Ukraine and the Middle East on international commodity pricing, supply and end user consumption
- the ambitions set out by the EU Commission in driving its agenda on renewables, in particular Europe's Green Deal
- the effectiveness of the implementation of Ireland's Programme for Government, in particular the delivery on the targets set out under the greenhouse gas emission sectoral ceilings and carbon budgets
- decarbonisation in both the transport and heating & cooling sectors etc.

2.1.1 Population and economic growth

The most recent census of April 2022[6] noted that the population in Ireland stood at 5.1 million, representing a 7.6% growth since the last census data of 2016. The population was expected to continue to grow year on year, albeit at a slightly slower rate of growth for the next 30 years, reaching some 6 million by 2050[7]. This population growth has been amended in the most recent Draft[8] First Revision to the National Planning Framework which suggests that the population in Ireland will cross this 6 million threshold a decade earlier i.e. by 2040.

Despite the current global turmoil and the ongoing war in Ukraine, GDP in Ireland is set to continue to grow. In its Summer 2024 quarterly economic outlook, the ESRI[9] have forecasted that the economy, as measured by modified domestic demand (MDD), will increase by 2.2 per cent this year and 2.9 per cent in 2025.

Whilst oil demand has largely been decoupled from both economic and population growth, these population and economic growth trends will continue to put upward pressure on energy consumption, oil imports and hence NORA's stock holding obligation.

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[6] https://www.cso.ie/en/releasesandpublications/ep/p-cpsr/censusofpopulation2022-summaryresults/keyfindings/
[7] https://assets.gov.ie/200482/f1479eed-f28b-427a-ad01-e557ac4cc923.pdf
[8] https://www.npf.ie/wp-content/uploads/Draft-First-Revision-to-the-National-Planning-Framework-July-2024.pdf
[9] https://www.esri.ie/system/files/publications/QEC2024SUM.pdf

2.1.2 War in Ukraine and Middle East

On 24th February 2022, Russia invaded Ukraine with the resultant humanitarian consequences and its implications for international commodity pricing. After a period of many years of stable oil prices, the threat of the invasion and the invasion itself sent oil product prices soaring. Figure 1 below sets out the base benchmark product price (ARA Platts quotation) for petrol and diesel for the last number of years. The steep rise in product price is clearly evident from the end of February 2022 with a near tripling of product prices.

The recent war in the Middle East has, to date, had limited impact on product pricing, perhaps indicating the diversification of global product supply over recent years. In recent months, prices have begun to stabilise, albeit at a higher level than the 2017 – 2019 period.

Consumers had been partially shielded from some of these price rises by the temporary reduction in excise duty implemented by the government on 9th March of 2022. These support measures, whilst designed to limit inflationary pressure, have also affected what might normally be expected in terms of demand destruction as prices rapidly rose. These excise duty reliefs have been partially unwound though 2023/2024 with the final adjustment made in August 2024.

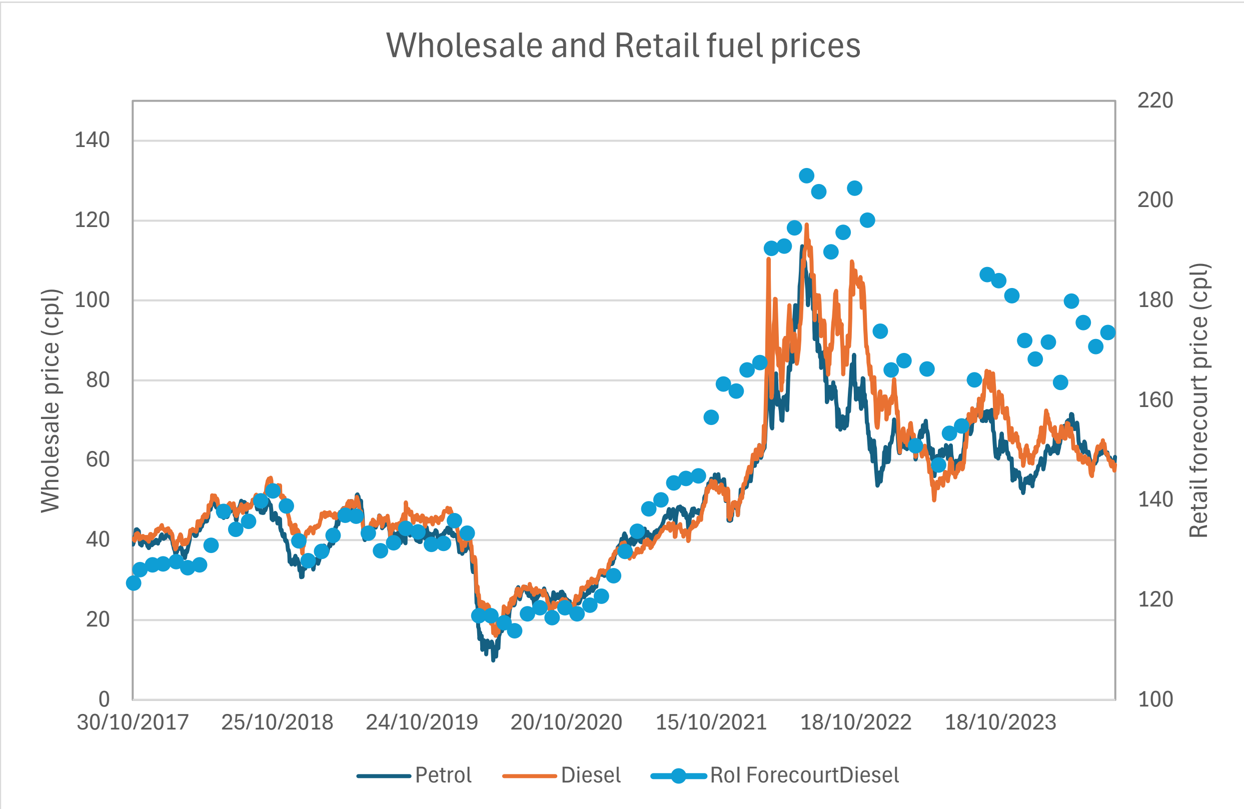

Figure 1. Petrol & Diesel base product price (€ cent per litre)[10]

The decoupling of the trend in forecourt prices from international, wholesale prices shown in Figure 1 reflects the increase in carbon tax (rising from €15 per tonne in 2017 to the current €63.50 per tonne in 2024), any increase in local, wholesale margins and the significant increase in the RTFO blend obligation (which has risen from a volume blend obligation of just under 9% in 2017 to the current energy obligation of 21%).

Despite the sustained elevated fuel prices over the last few years. there has been limited impact on the oil consumption data as shown in Figure 2 below. This relative inelasticity is perhaps indicative of the limited alternatives that consumers have in their chosen mode of transport.

[10] Source: CIF ARA daily Platts price

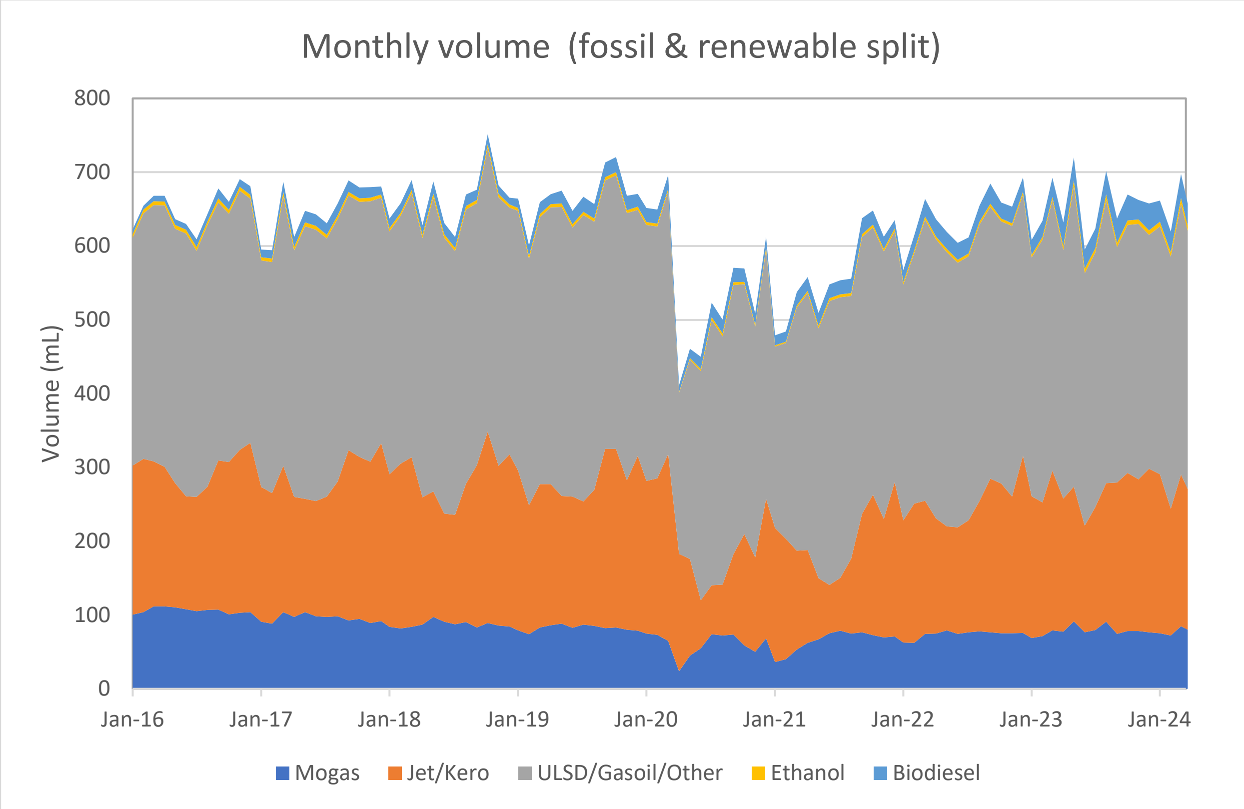

Figure 2. NORA & RTFO levied volumes and aviation volumes by month

The movement in natural gas pricing has been equally significant over the last few years. The escalation in gas prices through 2021 and 2022 led to some material changes in the feedstock used for electricity generation with the use of oil just shy of 7% in the month of October 2021. The fall in international gas prices has seen this trend being reversed with the return to more "normal" levels of oil use within the sector (< 1%).

2.1.3 EU consumption and emission reduction initiatives

Climate change and the management of its impact on the environment and the region's population has become one of the key issues facing the EU Commission. The invasion of Ukraine in 2022 and the recent prevalence of high temperatures across southern Europe have only added impetus to the need for action.

The EU Commission had identified a range of initiatives to reduce Europe's overall greenhouse gas (GHG) emissions and to limit the region's overall dependence on fossil fuels. The cornerstone of these initiatives is the "Fit for 55" package of measures that seeks to reduce the GHG emissions in Europe by 55% by 2030 when compared to the 1990 levels. The Commission has issued a suite of regulations (RePowerEU, ReFuelEU Aviation and FuelEU Maritime Regulations) setting out its policy position and regulatory framework in relation to these sectors. The pressure to drive down the use of fossil fuels is also underpinned by the Commission's stated strategy in relation to the development of green hydrogen[11].

One of the more challenging targets to be met is compliance with the Energy Efficiency Directive (EED). Under Article 7 of the EED, Member States must achieve cumulative end-use energy savings at least equivalent to new savings each year from 1st January 2021 to 31st December 2030 of 0.8% of the annual final energy consumption, averaged over the most recent three-year period prior to 1st January 2019. Ireland has sought to meet these targets through the Energy Efficiency Obligation Scheme (EEOS).

[11] https://energy.ec.europa.eu/topics/energy-systems-integration/hydrogen_en#eu-hydrogen-strategy

2.1.4 Programme for Government

In the Climate Action and Low Carbon Development (Amendment) Act 2021, the Irish government has set binding emissions targets - effectively establishing in law a "National Climate Objective" which states:

> "*The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.*"

The Act requires the Climate Action Advisory Council to propose a series of five-year carbon budgets which the Minister for the Environment, Climate and Communications is obliged to transpose into legally binding, annual sectoral emission ceilings. Specifically, the first two carbon budgets, which cover the ten-year period to 31st December 2030, must provide for a reduction of 51% in the total amount of greenhouse gas emissions compared to the greenhouse gas emissions reported for the year ending 31st December 2018.

The government has published the sectoral emissions ceilings committing each sector of the economy to reductions in GHG emissions. However, after three years of the first five year budgetary cycle, the EPA's most recent publication[12] on the country's emissions has noted:

"….*Ireland is not on track to meet the 51 per cent emissions reduction target (by 2030 compared to 2018) based on these projections which include most 2024 Climate Action Plan measures"*….and…. *"Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including Agriculture, Electricity, Industry and Transport".*

This being said, these projections do not take account of a number of additional initiatives that are being worked on at present, including the new Biomethane Strategy, an updated District Heating Policy etc….

Overall, Greenhouse Gas Emissions (GHG) have fallen from their peak values of the early 2000's, but in 2023, the latest year for which the EPA data is available, the reduction in greenhouse gas emissions were just 10.7% below the 2018 levels - see Figure 3. However, it should be noted that a portion of this reduction has been achieved via electricity imports across the two UK-Ireland interconnectors where the GHG emissions associated with these imports are recorded in the country of production of the electricity i.e. the UK.

Indeed, if the data for LULUCF (land use, land use change and forestry) is included, the fall in GHG emissions is just 7.8%. Achieving a 51% reduction by 2030 remains a significant challenge.

[12] https://www.epa.ie/news-releases/news-releases-2024/ireland-is-projected-to-exceed-its-national-and-eu-climate-targets.php#:~:text=EPA%20analysis%20shows%20that%20planned,year%20from%202023%20to%202030.

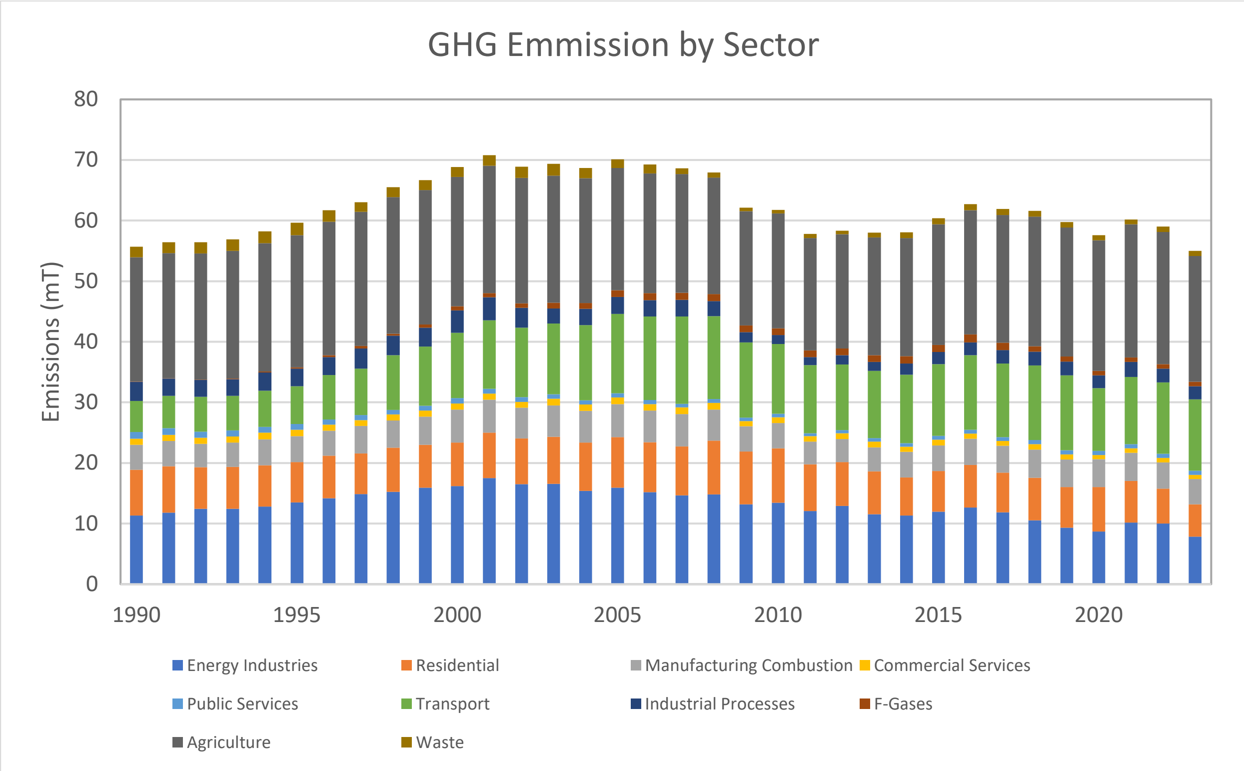

Figure 3. GHG emissions by sector 1990 - 2023

2.1.5 Decarbonisation in the Transport and Heating & Cooling sectors

2.1.5.1 Transport

The overall drive to renewables in transport is, in the short-term, premised on two key pillars:

- the electrification of the small vehicles sector and
- the rapid increases in the use of biofuels in transport fuels

In the longer term, other changes will include the continued drive to improve fleet economies and efficiencies, the increased focus on behavioural changes to personal transport such as improved use of public transport, walking, cycling etc… and a switch to alternative fuels such as CNG and Hydrogen for the Heavy Goods Vehicles (HGV) sector.

In December 2022, the Department of Transport issued its first Road Haulage Strategy document setting out a number of highly ambitious targets for reductions to greenhouse gas emissions in the sector. These targets include 3,500 low emission HGVs to be on the road by 2030 and 30% of all new Medium- and Heavy-duty Vehicles (MHDVs) to be zero emissions by the same year.

Over the last few years, the pace of transition to electric vehicles has gathered some momentum. This change has been driven by a number of elements including the recent increase in petrol and diesel prices, the government commitment to increased carbon tax and its implications for the cost of fuel and the EU ban on internal combustion engine (ICE) powered vehicles.

Figure 4 overleaf shows the EV (electric, plug-in hybrid and petrol/diesel hybrid) share of new, first-time registered **private** vehicles in Ireland. For the first six months of 2024, the share of "any electric" vehicle as a percentage of new vehicles was just under 44%, broadly at the same level of penetration as for the full year of 2023. However, the combined share of pure battery electric vehicles and plug in hybrids has fallen significantly for last year with a resultant increase in share of "self-charging" hybrid vehicles. These vehicles are never linked to the electricity grid and, as such, are simply more efficient ICE vehicles. The absolute number of new, first time registered, private pure EVs vehicles in the first six months is down on the same period last year. This data is set out in Figure 5.

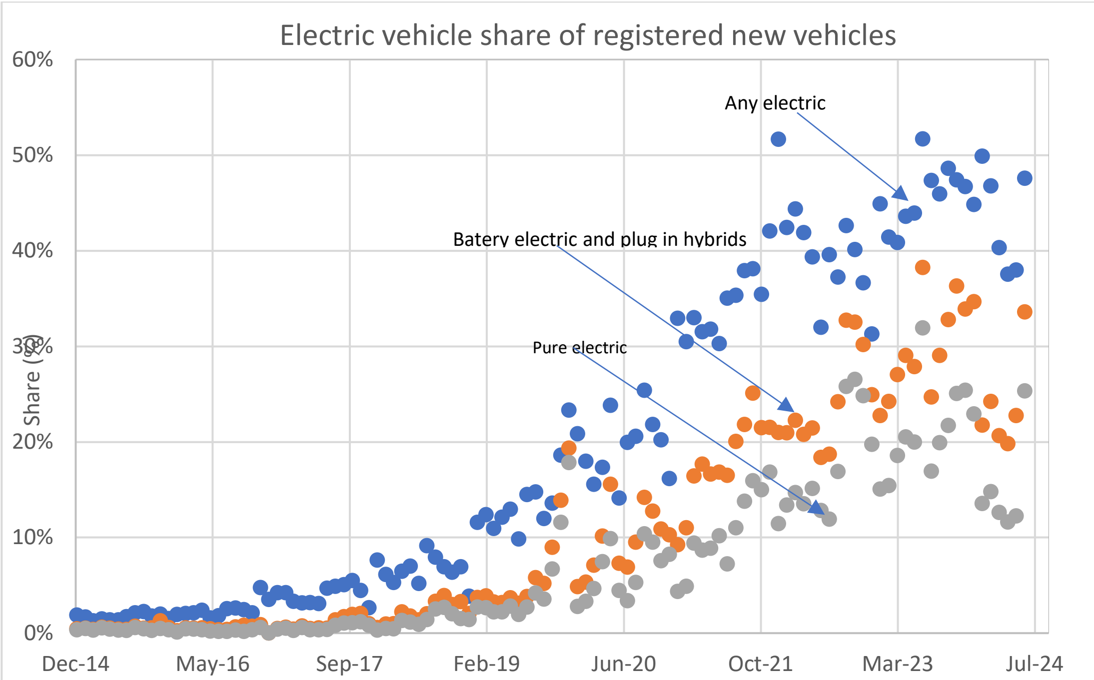

Figure 4. EV share of new first time registered, privately owned vehicles[13].

Interestingly, the number of newly registered, privately owned, petrol vehicles is 1% below the number of new petrol vehicles registered last year and the number of diesel-powered vehicles is some 10% ahead.

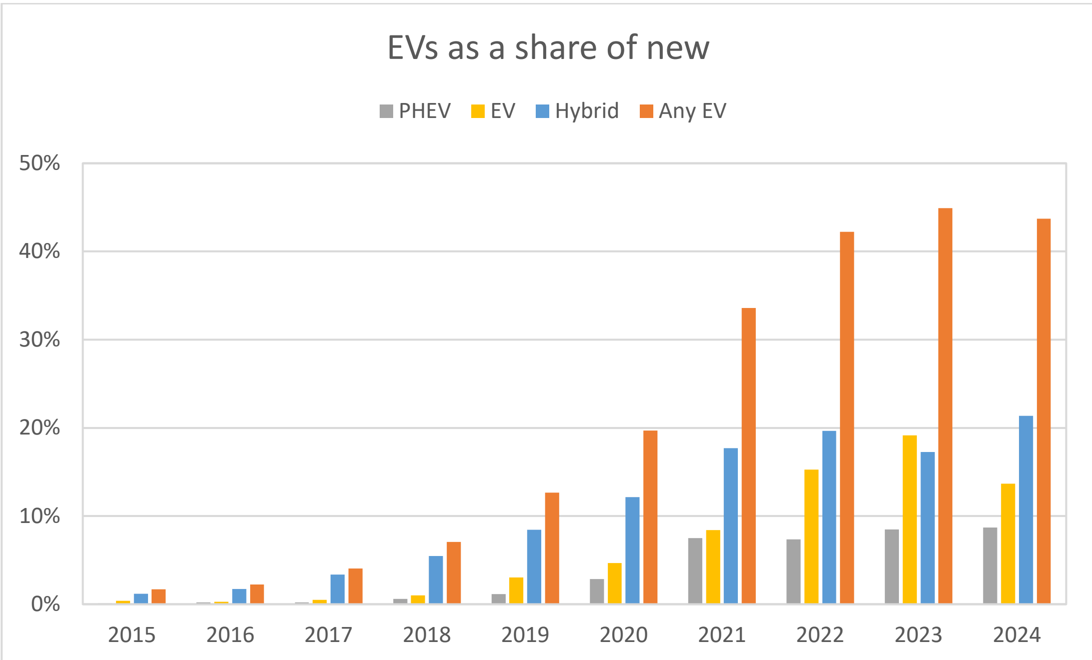

Figure 5. Pure EV share of all new EV registrations.

This stagnation in EV penetration makes it difficult to see how the government's target of 936k electric vehicles by 2030 is going to be delivered. Given that the total number of EVs in the

[13] Source: https://data.cso.ie/

carpool at present is just over 110k, this would require over 100k EVs to be purchased each year between now and 2030 and assumes that none of the existing electric vehicles fall out of the car pool. The number of new, privately owned, first time registered EVs purchased in the last rolling 12 month period was just under 54k. This is the total number of all electric vehicles (battery electric, plug in hybrid and non-plugin hybrid). Excluding non-plug-in electric vehicles, which are simply more efficient internal combustion engine (ICE) vehicles, the number of pure electric and plug-in hybrid vehicles registered over the last twelve months was just under 30k. Getting to an annualised run rate of 100k will take some time to be achieved.

There is some positive progress being made in other sections of the transport sector, including for example the progress made by An Post in the electrification of its fleet, the move by Virginia Transport, DHL etc… in introducing CNG for heavy goods vehicles. There are currently eight CNG refueling locations operational in Ireland with a further five contracted for completion[14].

In January of this year, the government went out to the market for consultation on its Draft Biomethane Strategy with the Strategy then being published in May[15]. This strategy provides a roadmap for the delivery of the target production of 5.7 TWhr of indigenous biomethane by 2030. To put this level of production in context, this is equivalent to some 490 ktoe of energy or c.10% of Ireland's primary gas demand or 13% of Ireland's total gasoil/diesel demand. This aspiration represents almost a twenty-fold increase on current production and at this point in time it is unclear what this product will displace i.e. displace natural gas in the heating sector under a proposed Renewable Heat Obligation (RHO) or diesel replacement under the Renewable Transport Fuel Obligation (RTFO).

2.1.5.2 Heating and Cooling

The 2019 Climate Action Plan envisaged that a ban on new oil boilers would be in place from 2022 with a ban on new gas boilers coming into effect from 2025. This in turn would place a cap, at current levels, on the use of oil as a means of heating the home. However, the legislative and regulatory framework to give effect to these bans has yet to be finalised. Fossil fuel burners are prohibited for new homes but old, existing units can be replaced with new units. The government also has ambitious plans to compete a deep retrofit of 500,000 homes over the period 2021 - 2030, seeking to increase the BER rating on these homes to at least a B2 level. In addition, the Programme for Government sets ambitious plans for the installation of electric heat pumps as a means of moving away from fossil fuel and towards electrification as a means of heating and cooling buildings.

These ambitions will be offset by limited access to alternatives for houses outside urban settings, the suitability of older housing stock for the installation of heat pumps and the capacity and willingness of homeowners to invest now for projects which may take several years in delivering a return on the investment.

In August of 2021, the Department of Environment, Climate and Communications issued a consultation paper on the introduction of a Renewable Heat Obligation[16]. This Obligation is expected to be similar to the RTFO Scheme and will place an obligation on suppliers of fuel that is used for heating to ensure a certain proportion of that fuel is renewable. This obligation is not expected to apply to electricity but will apply to all other fuel types. Early indications are that this obligation will be set at a relatively low level rising to c. 15% over the decade. Under the consultation paper, it is also envisaged that compliance with this obligation scheme will not take effect until 2025 to allow the industry to develop the necessary supply chains and infrastructure.

As in the case of transport fuels, it should be noted that if the oil industry were to meet this requirement through the blending of a renewable biofuel, this would not impact NORA's stock holding obligation. However, given that the majority of oil used in home heating is kerosene and the fact that the cost of adding biofuel into kerosene will be very high, it is likely that any

[14] https://www.gasnetworks.ie/docs/business/natural-gas-in-transport/cng-stations-map-update-v2-feb-2021.pdf
[15] https://www.gov.ie/en/publication/d115e-national-biomethane-strategy/
[16] gov.ie - Consultation on the Introduction of a Renewable Heat Obligation (www.gov.ie)

renewables obligation in the heating segment will put further downward pressure of oil demand in the sector.

2.1.6 Aviation Sector

The aviation sector was one of the sectors that was most severely impacted by Covid 19. However, 2022 brought a significant recovery in demand which has continued through 2023. Demand in 2024 has not continued at the same pace of recovery.

Modelling forecasts carried out by Byrne Ó'Cléirigh for the Department of Transport, show the overall demand for aviation increasing by between 1% and 2% per year and, by 2030, aviation demand is forecast to represent close to 30% of transport energy consumption. This continued uplift in demand will continue to put upward pressure on NORA's stocks holding obligation for a number of years to come.

Aviation is perhaps the most intractable sector amenable to decarbonisation. It is a well-established fact that the energy density of liquid fossil fuels provides one of the most efficient means of powering aviation. That being said, there has been significant research into the development of sustainable aviation fuels – more commonly known as SAF.

This drive to decarbonise the aviation sector has been underpinned by the recent proposals under "Fit for 55"[17], with the Commission introducing a minimum share of 2% for SAF in aviation fuels from 1st January 2025 rising to a minimum share of 63% by 2050. However, as with the case of renewables in the transport and heat sector, any future mandate to include renewables in the aviation supply chain will not have an impact on the volume of NORA's stock holding obligation.

2.2 Biofuel Blending

The Renewable Transport Fuel Obligation scheme (formerly the Biofuels Obligation Scheme - BOS) has been in place since 2010. Under this scheme, obligated parties are obliged to hold sufficient biofuel certificates to meet their biofuel blending obligation targets. Biofuel certificates are awarded to suppliers who place biofuels into the transport sector but obligated parties also have the option to pay a buy-out price in the event that they do not hold sufficient certificates to meet their obligation at each year end.

In 2023 the scheme moved to an energy based scheme with one RTFO (BOS) certificate being awarded for each megajoule of biofuel placed on the market and introduced a sub target for the blending of "advanced biofuels". Double certificates are awarded for biofuels that are produced from waste or residue. New legislation introduced in Q1 of 2023 provided for further additional certificates for renewable fuels from certain feedstocks. In Ireland, the vast majority of the biodiesel placed on the market is of waste origin and, as such, the physical blend rate for biodiesel is significantly lower than the effective certificate rate or the obligation rate.

The biofuel blending obligation rate has been steadily increased since its inception in 2010 - rising from 4.17% by volume in 2010 to the current blend rate in 2024 of 21% by energy. Figure 6 sets out the profile of the physical blending rates for ethanol and biodiesel, together with the obligation rate and effective certificate rate (this data is the relevant share of fossil placed on the market). The uplift in ethanol blending from 1st January 2023 reflects the move from E5 to E10. Of equal note is the fact the blending obligation now requires the use of hydro-treated vegetable oil (HVO) in the diesel stream given the 7% blend constraint for normal biodiesel.

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17 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en

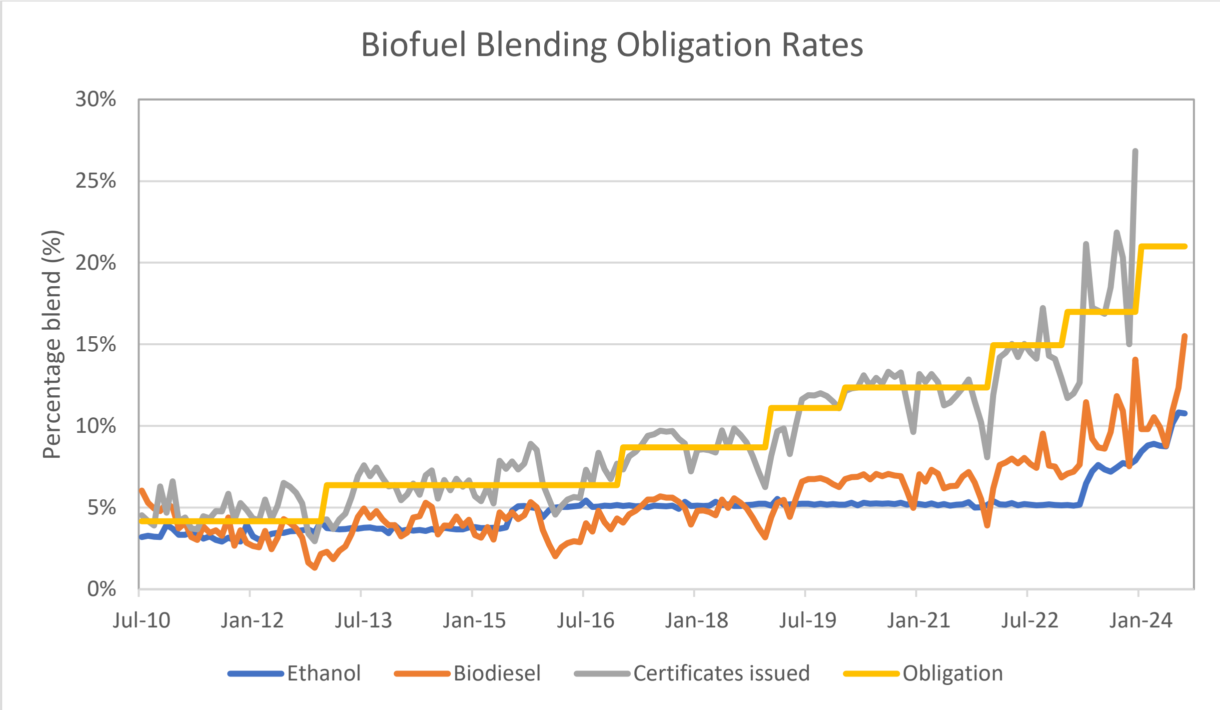

Figure 6. Physical biofuel blending, obligation and awarded certificate rates[18].

In June of 2023, the Department of Transport issued a Policy Statement[19] which set out a series of planned actions for the coming years. Given the extent of the use of feedstocks being awarded double certificates, the policy document has set an indicative trajectory for an overall blend rate of 21% in 2024, 25% in 2025 and potentially 49% by 2030.

This indicative blending obligation is significantly higher than the rate set for the UK but is consistent with a number of other EU member states.

NORA's stock holding obligation will not be materially affected by these changes in the biofuel obligation blending rate as biofuels are included in the computation of net imports for the assessment of NORA's stock holding obligation. If anything, the increased RTFO blend obligation will lead to a marginally higher stock holding obligation given the lower energy density of renewable fuels.

As the physical blending rate increases in the later half of the planning period, the Agency will review the slate of product that it holds and will consider the potential of holding (a) a mogas grade that can be blended with ethanol and (b) specific biodiesel products that can be blended with diesel.

2.3 Forecast of NORA's stock holding obligation.

2.3.1 Short term forecast

Figure 7 sets out the historic NORA levied volume plus aviation fuel demand which is exempt from the NORA levy. This highlights the level of recovery that continued to be seen through 2023, despite higher oil prices and the general concerns in relation to climate change. The data for 2024 is based on the actual data for the period Jan – Jun of 2024 and reflects the consolidation of the recovery through 2023.

[18] Blend rates are volume blends and represent biofuel share of fossil fuel
[19] https://assets.gov.ie/262016/0f9661c4-30d8-4ecd-ae1d-eaa5b313d225.pdf

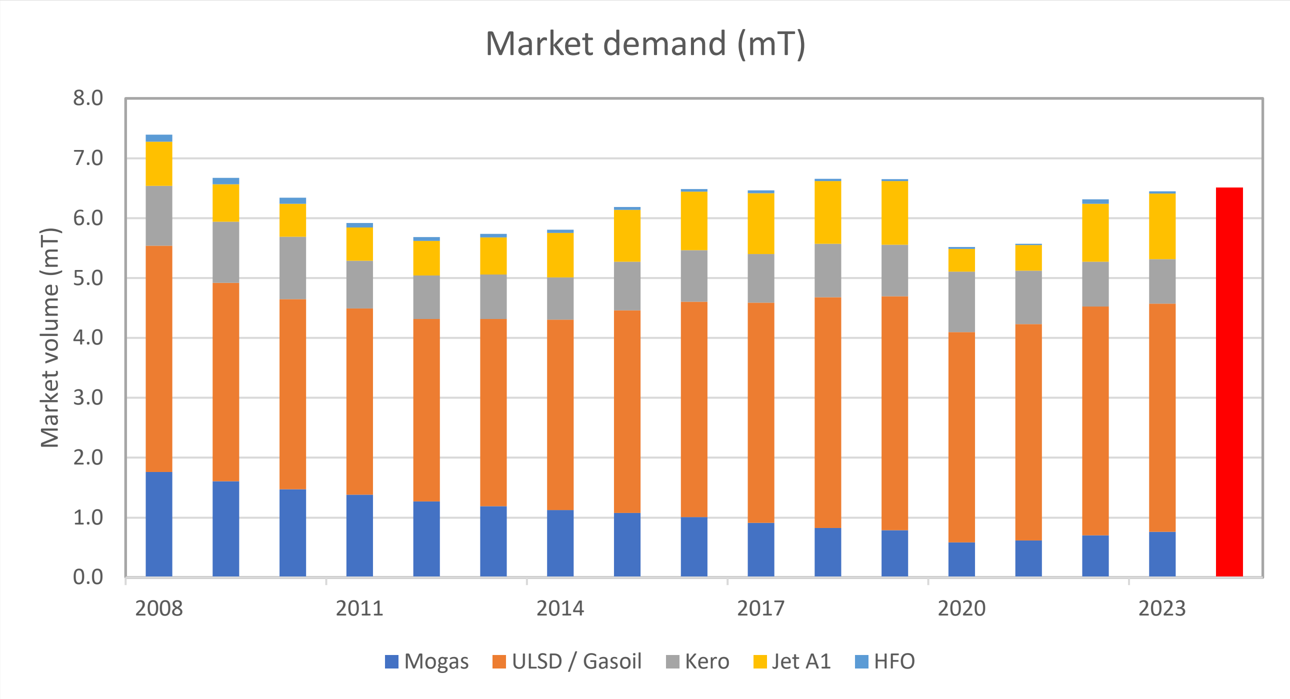

Figure 7. NORA levied volumes plus Aviation fuel demand

NORA's 90 day obligation is set on the equivalent of 90 days of nett imports – which in turn is driven by the end use demand as there is very limited storage capacity on island. Figure 8 below sets out the profile of market demand for the period 2008 to 2023 together with an overlay of NORA's 90-day stock holding. The stock holding obligation data has been stepped back by one year to reflect the fact that NORA's obligation for any given year is based on the volume import data for the previous year.

As expected, market demand is reasonably correlated to the NORA stock holding obligation.

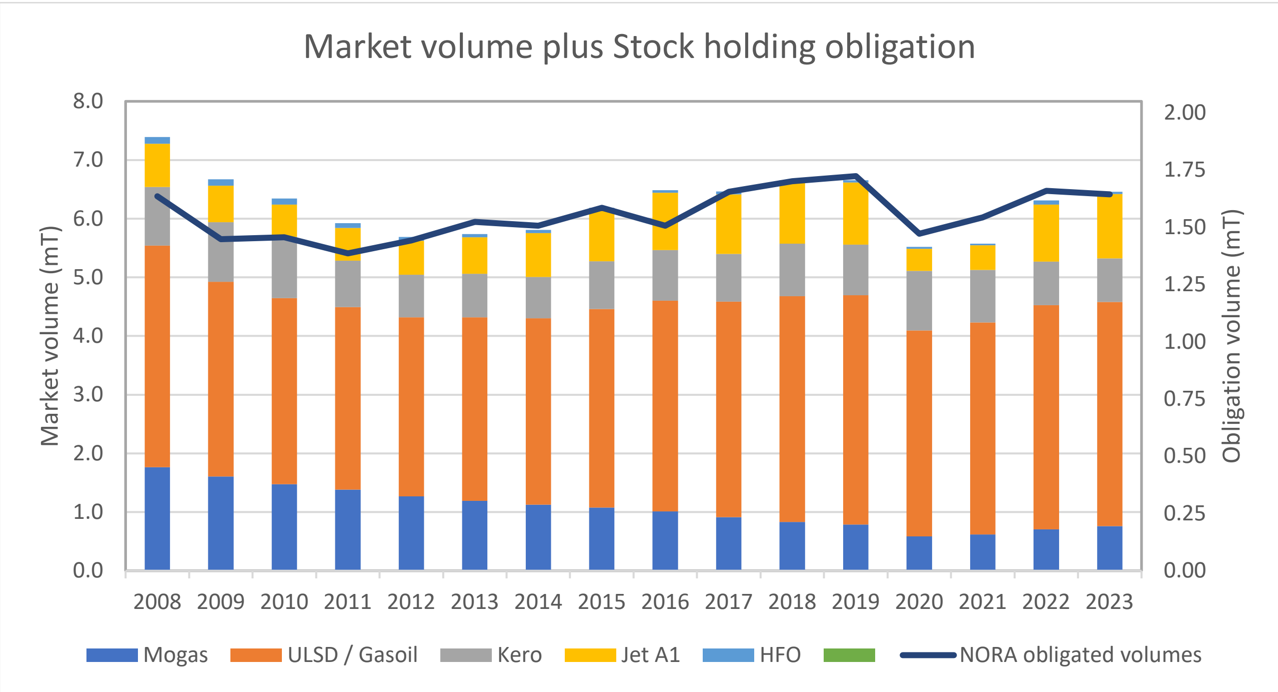

Figure 8. End use oil demand vs NORA's ninety-day stock holding obligation.

Based on the volumes for the first six months of 2024, it is estimated that NORA's stock holding obligation for the period 1st July 2024 to 30th June 2025 will again be in the region 1.7 million tonnes.

2.3.2 Longer term forecast

As highlighted above, the profile of future oil demand will be dependent on multiple drivers including, but not limited to, such elements as population growth, economic growth, energy efficiency improvements, biofuel blending targets, fuel switching, transport modal change etc.

As an input into the development of the National Climate Action Plan for 2024 (CAP24), SEAI have developed, amongst other metrics, a number of projections for oil demand out to 2035 and beyond. Two scenarios are presented below – a scenario with existing measures (WEM) and a scenario with additional measures (WAM). In both scenarios, a high end-use demand is forecast.

Under the WEM model, **implemented** policies as set out in the National Development Plan and the Climate Action Plan 2023 (CAP23) are included. Those policies and measures defined in the CAP23 that have yet to be implemented are excluded. Under the second scenario, with additional measures (WAM), policies and measures from the Climate Action Plan 2024 are included irrespective of their implementation status.

The demand for the sum of oil and biofuel consumption under these two scenarios is set out in Figure 9. Also included in the figure is the forecast that had been provided last year by the SEAI in its assessment. It is evident that the SEAI have taken a less aggressive view on the fall in demand out to 2035.

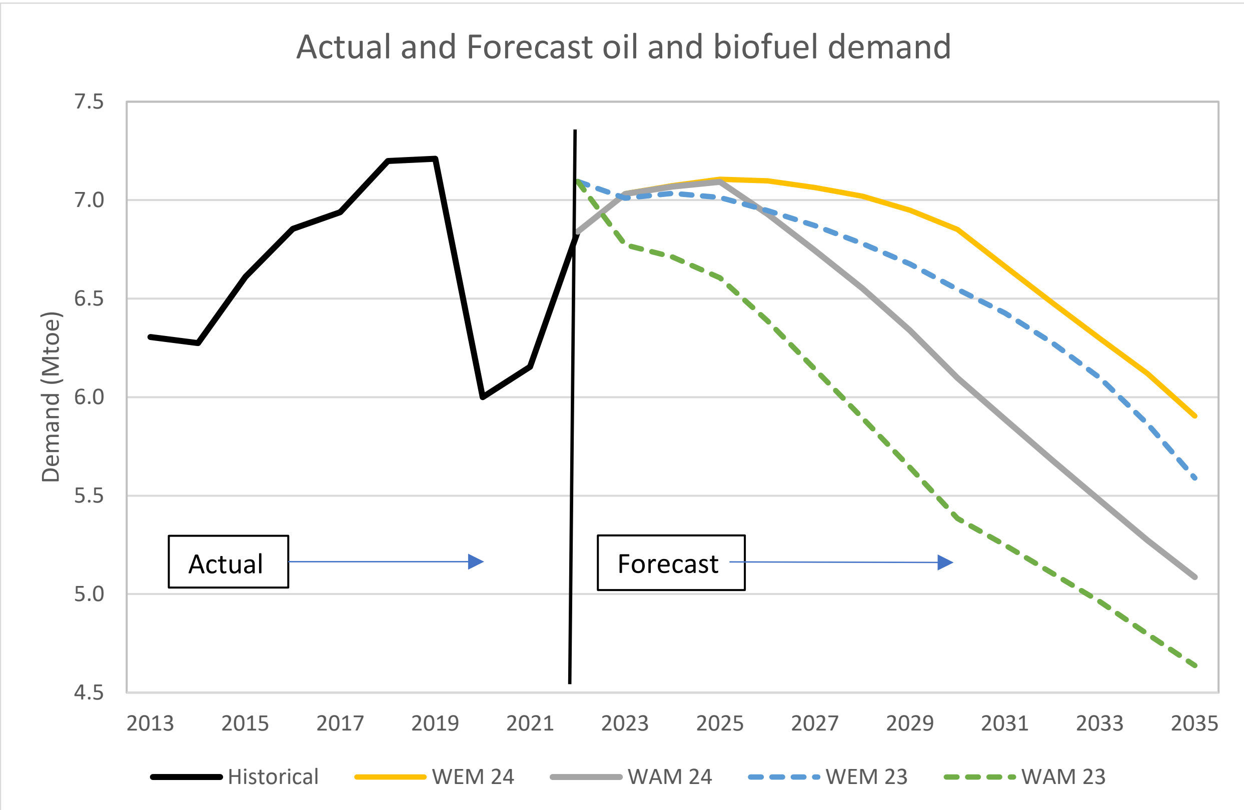

Figure 9. Historic demand and future projections for oil and biofuels

Using this SEAI forecasted oil demand, the Agency's stock holding over the next <u>**five**</u> years would be in the range of 1.5 million tonnes under the WAM scenario and 1.64 million tonnes under the WEM scenario. In the longer term, the obligation in year 10 could range between 1.2 and 1.4 million tonnes.

Given the current trajectory of oil demand and the pace of change in consumer behaviour, the Agency is of the view that the stock holding obligation will more closely follow the WEM scenario profile and remain in the range of 1.6 – 1.7 million tonnes for the five-year period of this plan.

However, given the EPA's assessment of future GHG emissions, it is possible that the government may move to implement more aggressive policies in the coming years in an effort to reduce demand for fossil fuels.

Irrespective of the view of what may occur over the next decade, it is clear that, in the medium to longer term, and in the absence of any change in scope for the Agency, NORA's stock holding obligation will decline in time.

2.4 Developments in the Renewable Transport Fuel Obligation

The Renewable Energy Directive (RED) set binding targets on Member States to meet a defined quantity of energy from renewable sources in their energy demand – with specific targets for the transport sector. Ireland has sought to meet this obligation through the introduction of the Renewable Transport Fuel Obligation (formerly the Biofuel Obligation Scheme, BOS) – requiring fuel suppliers to have a specified blend of renewables in the transport fuels supplied to the market. This obligation has steadily increased over the last number of years (as set out in Figure 6) and under the recast of the RED[20], commonly known as RED II and its further update to RED III[21], this blending obligation is set to increase further.

2.4.1 RED II

In July 2022, RED II was transposed into Irish law via SI 350 of 2022. This SI covered a broad range of issues outside of the RTFO, but the transposition brought into effect a significant number of changes to the National Oil Reserves Agency Act 2007 and BOS Act. These changes included:

- a move to an energy based system for the blend obligation
- the requirement to introduce an advanced biofuel blend obligation
- the need for supervision of Certification Bodies (CBs) to be carried out by the competent body (NORA).

The first two changes have been implemented by way of SI and came into effect on 1st January 2023. There remains some ambiguity about the specific meaning of "supervision of CBs" and work is in hand at a European level to clarify exactly what the Commission is seeking to achieve.

In the meantime, the Agency has progressed with the supervision of CBs in 2023 and will continue with its own procedures and protocols for supervision pending clarification from the Commission on what it wishes to see implemented.

2.4.2 RED III

RED III has been formally approved by the Commission and Ireland is now obliged to transpose this Directive into Irish law by May 2025.

Amongst other things, RED III will open up the option for the RTFO to be changed to a carbon-intensity based scheme. This structure would require some changes to be made to the RTFO operating system but would also do away with the complexity of multipliers. It would not change the fundamental drive and pathway to the Department's E10/B20 overall objective.

The revised directive will increase the advanced biofuel sub target to 5.5% and require that a minimum of 1% is met solely by renewable fuels of non-biological origin (RFNBOs). RFNBOs

[20] EUR-Lex - 32018L2001 - EN - EUR-Lex (europa.eu)
[21] https://eur-lex.europa.eu/eli/dir/2023/2413/oj

cover a broad class of fuels including hydrogen produced from renewable power (green hydrogen) and E-fuels which are produced by converting renewable electrical energy into another energy carrier such as methane, methanol, or Fischer-Trope fuels, often referred to as PtX fuels.

RED III also requires that RTFO certificates should be granted for the renewable electricity that is supplied to the transport sector via public charging points. The Agency has been engaging with the Department of Transport and with the industry in general on how this process might be managed.

2.4.3 Fuel Quality Directive

The Fuel Quality Directive set an obligation on fuel suppliers to reduce the carbon intensity of fuel supplied into the transport sector by a minimum of 6% compared to a fuel base line standard (FBS) of 94.1 gCO_{2eq}/MJ by 2020. This obligation was transposed into Irish legislation by SI 160 of 2017[22] and further amended by SI 670 of 2020[23].

Under SI 160, NORA is required to designate suppliers responsible for monitoring and reporting life cycle greenhouse gas emissions from the fuel and energy they supply. NORA is also empowered to apply, by way of a motion to the High Court, to make a compliance order in the event that a supplier fails to meet its obligations. However, the level of fine that can be imposed by the High Court for such non-compliance is limited to €250k. To put this in context, this level of fine, for the largest non-compliant supplier, would be equivalent to c. €1.50 per tonne of CO_{2eq} – in other EU Member States this fine is in excess of €600 per tonne. At this penalty level, there is limited incentive for suppliers to comply with the obligations set – the cost of compliance by blending additional biofuels is significantly higher than this €1.50 per tonne.

As a result, the level of compliance by suppliers, as a whole, has fallen short of this 6% obligation. In 2023, the industry achieved a carbon intensity reduction of just 4.8% and the industry is not expected to comply with the obligation in 2024. Whilst the Department continues to pursue a strategy that is based on an increased biofuel blending obligation, the current trajectory for this obligation is unlikely to deliver compliance with SI 160 until 2025. Although the Policy statement issued by the Department of Transport indicated an intention to address this issue, there has been no real traction on the matter. It is relevant to note however, that the review of RED II has identified the inconsistency between the obligations and methodologies of RED and FQD and as a result, the obligations under Article 7(a) of the FQD will fall once RED III is transposed into Irish Law which is expected to take place in 2025.

2.4.4 Union Database

There have been repeated concerns raised in relation to the risk of fraud in the biodiesel supply chain. There have been a number of cases of fraud in Holland in relation to Proof of Sustainability documentation and in the second half of 2023 the Competent Authority in Germany (BLE) has asked the EU Commission to investigate the authenticity of the labelling of some biodiesel imported into Europe from Asia. Equally, in 2023, the European Biodiesel Board (EBB) lodged a formal complaint with the Commission in relation suspected fraudulent movement of biodiesel into the EU from China and the UK. The European Anti Fraud Division of the Commission (OLAF) initiated an investigation which was subsequently terminated its investigation[24] following the withdrawal of the complaint by the EBB.

In an attempt to strengthen the oversight on the movement of biofuels in general, the Commission has been developing a biofuels database which seeks to track and trace the biofuel feedstock from their initial collection through to the placement of the product on the market. It is expected that this database will come into operational sometime late in 2024 or

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[22] S.I. No. 160/2017 - European Union (Greenhouse Gas Emission Reductions, Calculation Methods and Reporting Requirements) Regulations 2017. (irishstatutebook.ie)
[23] S.I. No. 670/2020 - European Union (Greenhouse Gas Emission Reductions, Calculation Methods and Reporting Requirements) (Amendment) Regulations 2020 (irishstatutebook.ie)
[24] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401273

early 2025. Economic operators in the supply chain, from the first point of collection of the raw material feedstock to the final point of placement of the finished biofuel on the market place, will be required to enter into the database all necessary data in relation to the movement of the product. NORA will have a role to play in ensuring the accuracy, validity and timeliness of data submitted to this database by Irish economic operators.

2.4.5 Renewable Heat Obligation

The Department of Environment, Climate and Communications (DECC) has begun the process of establishing a Competent Authority for bioliquids. Bioliquids are effectively biofuels that are placed in non-transport sectors (i.e. the heating and cooling sector). The role of the Competent Authority would be to ensure that bioliquids placed on the market comply with the necessary sustainability criteria. Given NORA's experience in its role as the Competent Authority for biofuels there would be clear synergy in appointing the Agency as the Competent Authority for bioliquids. However, the role of Competent Authority for bioliquids should also sit within the role of the "administrator" of the Renewable Heat Obligation. Given that the SEAI effectively manage all of the government grants scheme for home energy upgrades and improvements there is a natural fit between this activity and the role of Administrator of the Renewable Heat Obligation and hence the Competent Authority for bioliquids. The SEAI has recently been designated as the Competent Authority for Biomass and is building up its systems to fulfil this obligation. Extending this role to include bioliquids would also have some benefits.

The Agency awaits the decision of the Department on where the role of Administrator of the Renewable Heat Obligation and that of the Competent Authority will sit.

2.4.6 Competent Authority for Aviation Fuel Suppliers

In a recent communication the Department of Transport's has expressed its intent to designate NORA as competent authority for aviation fuel suppliers for the purposes of the ReFuel Aviation Regulations. Work is in hand to establish the scope and requirements for this role.

3. NORA's Corporate Objectives

3.1 Objectives

NORA has established the following strategic objectives for the business:

1. To maintain a strong culture of Health, Safety and Environmental compliance and standards in all of the Agency's activities.

2. To continually meet the Oil Stock Obligation as set by the Department of Environment, Climate and Communications (DECC), fulfiling the Agency's remit as the holder of Ireland's strategic oil reserves under EU Directive and IEA requirements.

3. To optimise the holding of NORA owned physical stocks with a grade profile (including biofuels) that is matched to end use consumption and, subject to cost considerations, to limit the use of stock tickets.

4. To maximise the level of oil stocks held on the island of Ireland, subject to storage availability and cost considerations, and in doing so to repatriate oil stocks from abroad.

5. To maintain robust, detailed and tested Emergency Plans for the supply of Emergency Oil Stocks to both the national and international market in an oil supply emergency.

6. To embed in the organisation a culture that seeks value for money in all of its activities, ensures full compliance with government procurement guidelines and maintains a level of financing adequate to meet the Agency's ongoing requirements.

7. To maintain a strong culture of awareness and compliance in relation to Risk Management, Corporate Governance, Data Protection and IT security in all of the Agency's activities.

8. To administer the Renewable Transport Fuel Obligation Scheme, including the Agency's responsibilities under the Fuel Quality Directive, and effectively monitor regulatory compliance.

3.2 Meeting the Objectives

3.2.1 Objective 1: Health and Safety Management

NORA operates three Upper Tier COMAH oil storage locations. Whilst the actual day-to-day activity in any one site at any point in time may be limited, the risk associated with operating a multiplicity of sites nonetheless places a significant obligation on the Agency to ensure that these facilities are managed and operated to the highest possible safety standards.

To support NORA in managing these facilities, NORA has entered into a long term "operations and maintenance" contract with Sunoco (formerly Zenith Energy) for the operation of the three locations. This contract is for a period of ten years, extending out to 2030. The agreement brings with it access to significant expertise and knowledge embedded within the Sunoco organisation which operates extensive oil storage facilities across the US and in Europe.

Layered on top of this, NORA will ensure that it retains sufficient, in-house knowledge and expertise in the management of such contracts.

As a final layer of oversight, NORA will ensure the completion, by a recognised independent expert entity, of a Heath, Safety and Environmental Audit of NORA's safety management systems, Sunoco's operational governance and the operations of the terminals at a frequency which is not less than every two years. The most recent audit was carried out in 2023 and will be repeated again in 2025.

NORA will continue to review and update its operational procedures and guidelines for its head office staff and ensure the Safety Statement which includes the safe use of display screen and office equipment, lone working and the remote working environment is reviewed and approved annually to ensure the HSA standards and the needs of the Agency are met.

3.2.2 Objective 2: Meet the Stock Holding Obligation

The analysis set out above indicates that NORA will be required to hold in excess of 1.2 million tonnes of product for the forthcoming decade. For the period of this five-year plan, the volume to be held is expected to remain in the range of 1.6 – 1.7 million tonnes.

The Agency has a flexible mix of short term and long storage agreements that will allow the Agency to flex its capacity to match the evolving stock holding obligation. Where necessary, CSO tickets may be used to bridge short term operational needs.

3.2.3 Objective 3: Match End User Demand Profile

The absolute profile of future end user demand is uncertain and dependent on multiple factors, including the level of remote working that becomes the "norm" in the coming years, the extent of the growth of the aviation sector, the extent to which EVs replace petrol or diesel powered vehicles, the speed of penetration of electricity into the space heating sector, etc.

NORA will retain sufficient flexibility in its storage agreements / stock ticket contracts to match, in so far as possible, the profile of end use demand as this demand unfolds over the coming decade.

3.2.4 Objective 4: Optimise Stocks held on the island of Ireland

The Agency's roadmap for storage contracts is expected to bring NORA to a position where just under 90% of the Agency's stock will be held on the island of Ireland by 2030. Although the storage in Derry and Cloghan Point sit outside the state, the retention of these contracts plays a pivotal role in meetings Irelands security of supply.

The Agency has identified a number of possible storage projects that would allow for some additional volumes to be stored on the island. These sites would be termed as "primary locations" (i.e. they would provide for direct product placement on the market by way of road loading facilities) and could bring to six the total number of locations owned and operated by the Agency.

Over the next 18 months the Agency will commission a feasibility study for these locations and, if appropriate, prepare a business case for presentation to, and approval by, the Board.

3.2.5 Objective 5: Maintain Robust Emergency Plans

Managing the supply of oil stocks from NORA's oil reserves either in the event of a national or international oil supply crisis, as directed by the Minister for DECC, is a core component of NORA's remit.

In its recent review of Ireland's readiness for an emergency, the IEA has recommended that the Department update its response planning tools including the incorporation of such components as demand constraint measures etc.

The war in Ukraine served to trigger a full review and update of the Department's response systems and led to the development of a range of allocation schemes designed to manage a structured release of oil to the market in the event of an emergency.

As part of a broader response by the Department to the crisis in Ukraine, an Energy Supply Emergency Group (ESEG) was established in March of 2023. This group has now been stood down and has been replaced by an Energy Security Group. NORA continues to sit on this Group.

The early stage of the crisis also allowed NORA to test its newly implemented cloud-based system for the collection of real time oil supply data. The system will continue to be upgraded to reflect the identified gaps.

Ireland has a significant dependency on the supply of natural gas for its electricity generation. This demand is filled by ingenious supply from the Corrib field (c. 20%) with the balance imported from the UK. Corrib reached peak production in 2018 and the future years will see its share of Ireland's gas demand fall. Electricity generation plants are required by the Commission for Regulation of Utilities (CRU) to hold certain quantities of oil as a secondary fuel source in the event of an interruption to the supply of natural gas – the volume being equivalent of between three to five days peak running depending on the nature of the plant. In the event of a significant interruption to Ireland's gas supply, plans have been developed to use NORA's strategic oil reserves to support the production of electricity.

Recent legislation[25] has given the Minister additional discretionary powers over the distribution of NORA's oil reserves in the event of such a disruption to gas supply and hence electricity production. To provide some context to the scale of energy consumption used by these electricity plants that can potentially run on oil, the daily consumption is close to the average national daily demand for oil for all sectors taken together – aviation, transport, heating etc…. The current 90 day stock holding obligation does not include for such demand and any release of stocks to the power generation sector naturally alters NORA's capacity to respond in the event of a simultaneous oil and gas crisis.

The Department of Environment, Climate and Communication has set up a specific group to address the risk of a prolonged outage in the supply of Natural Gas and NORA will continue to work with this team in developing a response plan which will include the use of NORA's stocks as a means of secondary refueling of power stations.

3.2.6 Objective 6: Maintain Adequate Financing, Seek Value for Money & Procurement Compliance

The funding of NORA's activities is provided by way of two distinct levies that are placed on the sale of oil and biofuels in Ireland. A NORA levy of 2.00 cent per litre is charged on each litre of oil that is sold whilst a Biofuel/RTFO levy of 0.10 cent per litre is applied to sales of biofuels. There is an exemption from the NORA levy for commercial entities that hold the equivalent of 55 days of sales – these include for example power generation companies etc or where product is deemed to be consumed outside of the state – i.e. aviation demand and marine volume.

Over the years this levy has been used to fund both NORA's operating costs and the costs associated with building up the physical volume of oil reserves.

In recent times the surplus of levy income over the cost of operations, together with the sale of stocks, have led to a position where NORA had accumulated c. €450m surplus cash in bank. By way of legislation[26], effective from 1st August 2020, the Government repurposed the NORA levy to be used to fund a Climate Action Fund (CAF) – a fund established to support projects that reduce Ireland's carbon footprint. The drafting of the legislation means that, in effect, only 10 months of the collected NORA levy can be repurposed in any given year. In 2020, €28m was paid over to the CAF, followed by €96m in 2021, €92m in 2022 and €80m in 2023. It is expected that over the next five years NORA will continue to contribute to the CAF.

On the assumption that payment to the CAF continues as currently structured and that the NORA levy remains unchanged, then the surplus of the levy collected, together with the proceeds generated by the run-down of stocks over the period of the plan will mean that NORA is expected to have adequate funds to meets its operational needs for the period of the plan.

[25] https://www.irishstatutebook.ie/eli/2023/act/2/enacted/en/print
[26] https://www.irishstatutebook.ie/eli/2020/act/6/enacted/en/html

The Agency plans to retain its existing policy of holding its cash surplus with the NTMA.

As a public sector body, the Agency is committed to compliance with the Public Spending Code and the guidelines and principles of the OGP framework and, in all of its activities, will continue to focus on ensuring that value for money is delivered.

Specific focus will continue to be applied in ensuring that the Agency complies with its obligations under the applicable national and EU procurement guidelines.

3.2.7 Objective 7: Risk Management, Corporate Governance, Data Protection and IT Security

Risk Management:
In keeping with the Code of Practice for the Governance of State Bodies (2016), NORA has a robust Risk Management process in place with the management team reporting to the Audit and Risk Committee (ARC) at each of its meetings. The ARC in turn reports to the Board. The CEO has been given specific responsibility for the risk management process and has been assigned the role of Chief Risk Officer. Within the area of risk, there are a number of components worth noting, including HSE, counterparty risk, commodity and FX exposure.

Internal Audit:
The role of internal audit is an essential and critical means of providing the Board with the necessary level of assurance that the Agency is meeting its compliance obligations and that effective arrangements for governance, risk management and internal control are in place. The Agency's internal audit function is currently outsourced to an external third party. In line with OGP guidelines, this service is subject to a tender process which is completed every three to four years, depending on contract extension clauses. The scale of the organisation and its operations means that, in reality, this service is a relatively small project for any of the larger companies that provide such services. As a consequence, whilst the service provides a reasonable level of assurance to the ARC and the Board it may not represent the optimum means of providing this. During the course of this five-year plan, the Agency will explore alternative mechanisms of providing this assurance.

Corporate Governance and Data Protection:
State bodies and their subsidiaries are required to confirm to their relevant Minister that they comply with the Code of Practice for the Governance of State Bodies 2016 ("the Code") and Annex on Gender Balance, Diversity and Inclusion (September 2020) in their governance practices and procedures. NORA will continue to focus on compliance in this area.

The Agency is committed to protecting personal data held by the Agency in compliance with the General Data Protection Regulation (GDPR) and relevant data protection laws. All personal data is processed lawfully, fairly and transparently in accordance with the data protection principles set out in the relevant data protection legislation. The Agency has appointed a Data Protection Officer and training is provided to all staff on an annual basis.

The Companies (Corporate Governance, Enforcement and Regulatory Provisions) Bill 2024 has been initiated in Dáil Eireann and the resulting legislation, when enacted, will make changes, some significant, to the Companies Act 2014. The legislation is expected to be enacted before the end of 2024.

The European Union (Corporate Sustainability Reporting) Regulations 2024 were signed into law by the Minister for Enterprise, Trade and Employment on 5th July 2024, and came into effect on the 6th July. The Regulations require that all large companies and all listed companies report sustainability information (environmental, social and governance (ESG) and human rights matters) in the Directors' report in accordance with the European Sustainability Reporting Standards (ESRS) and the report must be produced in single electronic format by digitally tagging the information making it more amenable to digital analysis. In addition, there are a number of items that must be added to the financial statements including the financial materiality of the sustainability claims. Sustainability reporting must be provided with an auditor's opinion with limited assurance and reported digitally. NORA is required to report on its 2025 data.

IT Security:

- **Cybersecurity**
  Cybersecurity will continue to be an area of focus for the Agency and whilst there is no single solution when it comes to cybersecurity, NORA is using DECC's Public Sector Cyber Security Baseline Standards framework to assess and improve the management of cyber security risks which should put the Agency in a position to be able to identify, respond to and recover from an attack. Network penetration testing is conducted annually and will continue to be part of NORA's risk mitigation measures. In compliance with the Baseline Standards, NORA has developed a Cybersecurity Incident Response Plan (CIRP) which is tested annually and cybersecurity awareness training is conducted annually with all staff.

- **Infrastructure Upgrade**
  In tandem with the Government's Public Service ICT Strategy of a 'cloud first' approach, over the course of this plan NORA will, whilst ensuring that systems are run in the most secure and cost-efficient means possible, seek to complete current projects to improve its IT systems, including but not limited to the following projects:

• Upgrade of NORA's financial accounting system to include implementation of additional and bespoke modules which leverage the latest technology to read and extract relevant document content thereby automating a number of processes.

• Migration of the current Windows server based network file sharing scheme to a cloud-based environment to improve file structure and allow for remote access to the files across multiple device types (mobile/laptop/etc.) without the need for VPN connections.

• Migration of the current virtual machines from a single data centre to a cloud platform which will provide higher availability, enhanced security and scalability of resources based on demand.

3.2.8 Objective 8: Administer the Renewable Transport Fuel Obligation (RTFO)

One of NORA's key activities is the management of the Renewable Transport Fuel Obligation (RTFO) – formerly known as the Biofuels Obligation Scheme (BOS). This is a scheme which places an obligation on fossil fuel suppliers to blend renewable fuels (biofuels) into the products they place into the transport sector. These obligations are imposed under the Renewable Energy Directive – more commonly known as RED and its subsequent recast – RED II. NORA is also the designated authority for monitoring compliance by suppliers with the obligation set under Article 7(a) of the Fuel Quality Directive.

Since the inception of the scheme in 2010, NORA has outsourced this administration to a consortium of Byrne O' Cléirigh and Evelyn Partners (formerly Smith & Williamson). This mechanism has provided NORA with access to professional, experienced and highly trained personnel from the Consortium who are available not only to assist NORA in day-to-day administration, but also in liaising closely with DECC, Dept of Transport, the relevant EU departments and other key stakeholders. NORA's strategy is to continue with this approach and to this end, the outsourcing agreement with the consortium has been contracted out to July 2026, with an option to extend for a further year.

Given the government's commitments to carbon reduction, it is likely that the role that biofuels plays in decarbonising the economy will continue to grow over the next decade. This will bring additional complexity, with the addition of biofuels from new and as yet unknown feedstocks and manufacturing processes, and a need for increased oversight and supervision to ensure products meet the stringent sustainability criteria.

In 2023, the Department of Transport legislated for an increase in the ethanol blend in petrol – setting a minimum blend rate of 5.5% - in effect an attempt to move the industry to a 10% blend. It also has a stated policy of increasing the blending obligation which will lead at least a 20% blend of biodiesel in the diesel stream by 2030.

The Department is also committed to extending the scope of the sectors that fall under the RTFO, to include the rail and Marine sectors and to extend the incentive structures to encourage the development and deployment of advanced biofuels and renewable fuels of non-biological origin (RFNBOs).

As part of the implementation of RED III, the Department is obligated to provide for the awarding of RTFO certificates for renewable electricity consumed by EVs. The legislative framework to give effect to this process is being drafted at present and NORA has begun the necessary design work to allow for this extension in the scope of the RTFO. In the early stages of this, awarding of certificates will be confined to renewable electricity supplied via publicly accessible charging points.

In addition, the scale and complexity of legislative and regulatory framework that supports this activity is only set to increase with the evermore ambitious increase in the targets for greenhouse gas reductions. The EU Commission has completed its review of RED II, leading to the introduction of RED III. RED III and other complementing Regulations reflect a suite of changes to support the delivery of the goal of carbon neutrality by 2050. These include:

- the deletion of the obligations under Article 7(a) of the FQD,
- the introduction of binding targets for the use of SAF and eFuels in the aviation sector,
- more stringent carbon intensity targets for the marine sector,
- tighter emissions criteria for vehicles on the road, etc.

Keeping abreast of these developments and ensuring that NORA has the necessary knowledge, skills and processes in place to manage these developments will be both a key objective and requirement for the Agency.

As set out above, the transposition of RED II (via SI 350 of 2022) increased the scope of activity under the RTFO. The more significant of these activities included:

- a move to an energy-based obligation system,
- a requirement to integrate our local systems and processes with an EU wide, track and trace biofuel database (the EU Union Database), and
- a requirement to implement a supervision regime of Certification Bodies (CBs). CBs certify that economic operators in the biofuel supply chain operate in accordance with the standards as set down by the EU approved Voluntary Schemes. Although the EU has yet to determine what is meant by the term “supervision”, a working group has been established under CA-RES to define the roles and responsibilities.

NORA will continue to use its outsourced resource model to cater for these additional developments.

As noted earlier, Member States are obliged to transport RED III into its national legislation by May of 2025. NORA will continue to provide support to both DECC and the Department of Transport with the implementation of these revised regulations.

4. Agency Resources

4.1 Remote Working

One of the impacts of the Covid-19 pandemic has been that the Agency has successfully demonstrated its capacity to seamlessly operate on a remote basis. This has demonstrated the resilience and flexibility of the Agency and brought significant benefits to all members of the team. The Agency has developed and implemented a blended working policy, striking a balance between retaining the benefits of home working and placing the Agency on a stable long-term operating platform. This policy will continue to be reviewed and updated to comply with new legislation and to suit the Agency's requirements.

4.2 Human Rights and Equality

The Agency is committed to protecting and promoting human rights and equality in accordance with the Irish Human Rights and Equality Commission Act 2014.

In accordance with Section 42 of this Act, NORA is obliged, in the performance of its functions, to have regard to the need to:

a. eliminate discrimination,
b. promote equality of opportunity and treatment of its staff and the persons to whom it provides services, and
c. protect the human rights of its members, staff and the persons to whom it provides services.

These obligations are referred to as the Public Sector Equality and Human Rights Duty. In the course of 2021, NORA carried out a team survey to assess the level of internal understanding and implementation within the organisation of this Duty. The survey was carried out as part of an audit by NORA's internal auditors. The survey identified a number of specific actions and steps that the Agency could take to improve its compliance with the Duty. A second follow up survey was conducted by the internal auditors in Q3 2022 to assess the quality of the follow up actions taken. The CEO met with each individual in 2023/2024 to discuss the findings and address any concerns. A further assessment may be conducted in 2025.

Finally, it should be noted that the Agency has recently published policies on Equality and Gender Identity and Expression and will continue to provide awareness training in the area in addition to operating a policy of equal opportunity in all of its recruitment activities.

4.3 IT developments

In line with the Government's 'Digital First' policy, and in an effort to improve the accessibility of data whilst working remotely, the Agency has assessed the potential benefits that can be secured by way of holding its data in Cloud based systems. The Agency is currently migrating its data to the Cloud, with the added benefit of reducing its exposure to single point server failures for its data management and processing. In addition, developments in the Agency's finance systems will also provide a window of opportunity to further automate and streamline its processes and procedures.

4.4 Climate Action Mandate

To support public sector bodies leading by example, a Public Sector Climate Action Mandate applies to public bodies covered by the Climate Action Plan 2023 (CAP23) decarbonisation targets, with the exception of local authorities, commercial semi state bodies, and schools. As part of this process, each public sector body has been tasked with the formation of a green team, the appointment of a climate and sustainability champion and an energy performance officer and to ensure that appropriate, specific climate action leadership training is provided to all key staff and that all senior staff complete prescribed mandatory training. The Agency is also required to maintain its Climate Action Roadmap and to provide same to DECC and the SEAI annually.

In addition, NORA is required to meet its Public Body Energy Management obligations as SI 426 of 2014.[27] Specifically, NORA is charged with tracking its energy consumption and delivering a 50% improvement in energy efficiency by 2030. Each year, with the support of SEAI, the Agency produces an Energy Management Report.

[27] S.I. No. 426/2014 - European Union(Energy Efficiency) Regulations 2014

Over the period of the plan the Agency will

- continue to report and improve on its energy management processes.
- install solar units at the Poolbeg terminal and additional panels at Tarbert to reduce its carbon footprint.
- identify and quantify its scope one, two and three carbon emissions and establish appropriate plan and actions to reduce these emissions.
- provide appropriate climate leadership training to its key staff.

4.5 Critical Resilience and NIS

The EU Network and Information Security Directive 2016/1148 (more commonly known as the NIS Directive) was transposed into Irish Law by SI 360 of 2018. The responsibilities that the Directive places on the State and on businesses in general are wide ranging, but, among other things:

- Involve the application of a set of binding security obligations to a wide range of critical infrastructure operators, i.e. Operators of Essential Services. These include energy, healthcare, financial services, transport, drinking water supply and digital infrastructure and telecommunications.

- Require the State to apply and police a new regulatory regime on so called Digital Service Providers (DSPs). These include cloud computing providers, search engines providers and providers of online market places.

- Critically, and in a similar manner to that for data protection, the State has responsibility for dealing with the security of services provided by multinational companies across the European Union that have their European headquarters located in Ireland. The majority of these multinational companies are from the United States.

In the early days of the implementation of this Directive, NORA was deemed to be in scope for these obligations. However, the Agency was in a position to demonstrate that its organisational structure and operational processes meant that it fell outside the scope of this Directive.

However, in December 2022, the NIS Directive was superseded by EU Directive 2555/2022[28] (or NIS2) which now explicitly includes in its scope central stockholding entities (CSEs) – which includes NORA.

Also in December of 2022, the European Parliament and Council approved Directive 2557/2022[29] on the resilience of critical entities – known as the Critical Entities Resilience Directive or CER.

Over the period of this strategic plan, the Agency will work with both DECC and the Department of Defense in identifying the necessary actions that are required to be completed by the Agency to ensure compliance with both NIS2 and the CER.

4.6 Irish Language Act

The Agency is incorporating the requirements of the Irish Language Act into it reports and will continue to do so over the course of the plan.

4.7 Staffing

It is clear from the above that the Agency faces significant scope creep in the breadth and complexity of the issues that it will need to address over the period of the plan.

[28] https://eur-lex.europa.eu/eli/dir/2022/2555
[29] https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32022L2557&qid=1691168061335

NORA currently has a Delegated Sanction for nine posts. At present, the Agency has eight members in the team, one of whom is temporary. Over the coming twelve months, the team is expected to be at full strength through the recruitment of a permanent finance and corporate governance resource in addition to a new RTFO position to help manage the extended scope and complexity of the RTFO Scheme.

In the event that any of the feasibility studies for additional storage successfully identify suitable opportunities then the Agency may take on an additional Operations Engineer to support this activity.

4.8 Succession Planning

Essential to the Agency will be the need to develop and implement a robust succession planning process. The retirement of the previous CEO in 2021 means that the average length of service of the team is circa six years with the longest serving member being eleven years with the Agency.

This change means that there is currently limited expertise and knowledge within the team of the broader oil industry, the global oil supply chain and the role that storage plays in this chain. Indeed, this is equally the case in the continued evolution and growing complexity of renewable fuels and in the legislative framework that is used to support them.

Over the course of this plan, a key objective for the Agency will be building this internal knowledge base.

The current NORA CEO contract is due to expire in 2026. A robust succession plan will need to be drawn up to extend the contract term or replace the CEO during the period of this plan.