



Subject/Title	Climate & Sustainability – Plans to achieve Net Zero
EMT Lead	Dean Sullivan, Chief Strategy Officer
Prepared by	Dr. Philip Crowley, National Director of Strategy and Research; Peter Smyth, Assistant ND Capital & Estates
Purpose	Discussion

Recommendation to HSE Board

The HSE, as a leading Public Sector Body, has a key role to play in tackling the climate crisis by further developing options to curb its own emissions and understanding the link between environmental pollution and disease, and environmental quality with population health. The healthcare sector is a notable contributor to global greenhouse gas emissions (est. 5 to 15%) and one of the sectors at the forefront of supporting human health adapt to the impacts of climate change.

The HSE's Infrastructure Decarbonisation Roadmap (published in Nov 2022) and the HSE Climate Action Strategy (2022-2050) (endorsed by the Board, soon to be published) outline commitments to the actions and targets set out in the Government's Climate Action Plan, the Climate Action and Low Carbon Development Act (Amendment) 2021 and are essential enablers to providing low carbon healthcare infrastructure to support current and future service needs, and to respond to a rapidly changing climate and environment.

It is recommended that HSE Board members note and consider the progress made and future plans to respond to the climate crisis and our aim to achieve Net Zero.

Statement of Strategic Objective for the HSE

The Government's Climate Action Plan sets out the energy efficiency and energy related greenhouse gas emissions reduction targets which Public Sector Bodies in Ireland are legally obliged to meet.

Key Targets:

- Achieve net-zero greenhouse gas emissions no later than 2050
- Reduction of 51% in greenhouse gas emissions by 2030
- Improvement in energy efficiency of 50% by 2030
- Phasing out of fossil fuel heating systems after 2023.

HSE Capital & Estates have developed the HSE's **Infrastructure Decarbonisation Roadmap** which is implementing the HSE's **Capital & Estates Strategy (2022 – 2050)** objective of achieving a net zero estate by 2050. The Roadmap sets out the approach and a detailed set of actions to achieve the Climate Action targets to 2030 and 2050. It also satisfies the Public Sector mandate (which is contained in the Government's Climate Action Plan) to publish an action plan to achieve the key targets noted above.

The HSE's **Climate Action Strategy (2022-2050)** responds to and outlines a broader approach to the actions and targets set out in the Government's Climate Action Plan, looking at non-energy and built environment related emissions that we can influence such as: Procurement, Transport and



Mobility, Water and Waste Management, Adaptation and Resilience and Greener Models of Healthcare Delivery.

The Current Status Update

In summary, the HSE have to date:

- **Developed the HSE Climate Action Strategy (2022-2050) and corresponding implementation plans which have been considered and endorsed by EMT, ARC and the Board in November 2022**
 - A summary of the short-term work programmes and actions to take forward the Climate Action Strategy (2022-2050) is appended in Annex A.
- **Progressed Greener Models of Care**
 - At a national level, 20% of anaesthetic departments that used desflurane in 2019 have ceased its use completely. In the National University of Ireland Galway, the review and repair of nitrous oxide (N₂O) piping leaks has led to a c. 80% reduction in CO₂ emissions from N₂O.
 - The HSE Green Healthcare Programme has resulted in many examples of improvement practices and cost reduction through practice change (e.g., Midlands Tullamore Hospital produced 0.5kg less clinical waste/bed/day, saving €26k per annum compared to the average acute facility).
- **Progressed Adaptation & Resilience**
 - The HSE plays a critical role implementing the Department of Health's Health Climate Change Sectoral Adaptation Plan (2019-2024).
 - The HSE is in the process of implementing a Skin Cancer Prevention Plan and vulnerability assessment of health infrastructure to severe weather events.
- **Enhanced the HSE Green Environment**
 - Implementation of the eHealth (telehealth) national programme, which reduces the carbon footprint of outpatient and community-based care
 - Examples of other initiatives include: St John's Hospital, Limerick has introduced static spin bikes, outdoor picnic tables and a cultivated a garden. The HSE's academic partner, The Royal College of Surgeons, recently has built an outdoor gym, installed bicycle racks, provided eco-friendly garden furniture and cultivated pollinator-friendly wildflower gardens.
- **Developed the HSE Infrastructure Decarbonisation Roadmap which was approved by EMT 11 October 2022**

The HSE Infrastructure Decarbonisation Roadmap outlines how we have to date:
- *Developed joint three-year rolling Capital Funded Partnership Agreement with Sustainable Energy Authority of Ireland (SEAI)*
 - Commenced in 2017 (in advance of the first Climate Action Plan which was published late 2019) and a pilot programme progressed in 2018 to prove the concept and processes with €200k seed funding.
 - There is now a three-year rolling (2021 to 2023) indicative capital fund of €60m.
- *Progressed the collation and consolidation of energy usage data*
 - Identified 170 Significant Energy Users (SEUs) which together account for c75% of energy use and carbon emissions across the health sector.
 - There is a focus of efforts and resources directed to top 170 SEUs.
- *Established three Regional Energy Bureau and employed 11 Energy Officers to support local Energy Management Teams across Significant Energy Users (SEUs)*



- There are currently 111 supported Energy Management Teams in place. These Teams progress reduction through behavioural change and identification of energy reduction opportunities. We are aiming to have 140 Energy Management Teams in place by the end of 2023.
- Providing support to HSE facilities and Section 38/39 Voluntary organisations. There are 26 Teams currently supported in Sec 38/39 organisations.
- **Implemented a Shallow Retrofit Energy Minor Capital Upgrade Programme to support the work of Energy Management Teams**
 - Engineering works are being implemented such as LED lighting upgrades, window and insulation upgrades, heat pump installations, improved control systems, building management systems (BMS) upgrades, meter upgrades, pump upgrades and photovoltaic (PV) installations.
 - A total of 559 projects have been progressed at 187 Significant Energy User locations.
- **Established the Capital & Estates Climate Action & Sustainability Office in 2021**
 - We restructured and augmented existing resources with appointment of a Senior Manager and additional resources to lead the team.
 - This includes a dedicated Energy Unit to assist and coordinate the Regional Energy Bureaus, support Energy Management Teams and manages the SEAI partnership programme and capital administration process. Participating in National Energy and Built Environment Taskforce.
 - Contribute to the annual update of the Government's Climate Action Plan.
- **Are in the process of exploring District Heating opportunities**
 - There is ongoing engagement with City of Dublin Energy Management Agency, Dublin City Council and the SEAI in exploring opportunities to implement District Heating solutions in the Dublin area.
- **Adapted and Implemented an Energy Efficient Design (EED) and Towards Carbon Zero Design methodology on all new and replacement buildings on the HSE's Capital Plan**
 - The HSE is one of the first Public Sector bodies to have mandated the inclusion of this innovative approach as part of its design process.
 - Ensures that all new and replacement works progressed through the HSE's Capital Plan will be designed so that they achieve the highest energy and emissions performance and that they are carbon zero ready.
 - Also progressing – as outlined in the HSE Capital Strategy – a new, standardised approach to future projects using Modern Methods of Construction which is an approach that inherently has a lower carbon footprint, significantly reduced waste and significantly increased potential for reusability.
- **Commenced a deep energy and carbon retrofit programme for existing HSE buildings**
 - Jointly funded in partnership with SEAI under a Public Sector Pathfinders Capital; Technical partnerships progressing with Higher Education Colleges; and, programme academic partnership with TU Dublin as part of the pilot pathfinder programme
 - This will inform an up-scaled strategy to retrofit all relevant health sector building [REDACTED]
[REDACTED] The learnings from the report will be shared with all other Public Sector Bodies.
- **Continued the roll out of the SEAI Engaging People programme, which has been tailored specifically for healthcare**
- **Completed a statutory compliance assessment in 2021**
 - Demonstrated the HSE's compliance with our legal obligations regarding energy audits and energy performance improvement activities under the Statutory Instrument SI 426.



- **Developed a Green Healthcare Programme**
 - This is an enhanced guidance and support programme for all smaller healthcare units on energy, carbon, water and waste reduction.
- **Commenced an improved metered data and utility supplier data including integration with the new National Estates Information System (NEIS).**
 - Developed improved reporting systems and will integrate these programmes with the HSE's intention to transition to ISO 50001 accredited Energy Management Standard.

The Key issues arising

The following key issues are noted:

- Availability of revenue and capital resources to successfully deliver the HSE's climate action ambitions to net zero will be a key dependency.
- Pressures of delivering business as usual and continuation of existing services.
- Availability of necessary staffing resource with necessary skills to participate in the programmes of work.
- Willingness of stakeholders to support the new approach outlined in the HSE climate action ambition.
- Procurement requirements and ability to demonstrate best value for sustainability/climate-based outcomes that are desired.
- Capacity and capability in Irish Supply chain in the construction sector to deliver the scale of the programme required.
- Technology readiness including availability of technology and availability of data.
- Integrated working with external stakeholders including other government sectors.

The Assurance Process for the Board

The governance structure to take forward the implementation of the HSE Climate Strategy comprises a Steering Group reporting to the HSE EMT, ARC and the Board. A Programme Management Office is also established with responsibility for driving and co-ordinating the Programme's implementation. Individual work programmes (chaired by HSE colleagues at the appropriate level) are being established for delivering on the required climate action objectives.

The HSE's approach to climate action implementation will be iterative, and the implementation approach will be continuously updated, reflecting the following: as work programmes are progressed; internal and external subject-matter expertise are included; as policy developments arise; and, as detailed project plans and related costings are further developed over the years. Appropriate arrangements will be established to provide ongoing reporting updates to ARC and the Board. For example:

- Monthly updates will be provided through the Board Strategic Scorecard,
- Other status and progress updates will be provided to ARC and the Board as required (i.e., deep dive sessions, request for information, etc.).

The Key Performance Indicators (KPIs)/targets

A Measurement and Assurance work programme is being progressed and will play a key role in the Strategy implementation and be responsible for:



- Providing oversight and guidance of the data capture of HSE carbon footprint (Scope 1, 2 and 3), environmental impact, and contribution to the sustainability goals across all priority areas of focus. Data capture will be in line with national and international standards.
- Identifying metrics and key performance indicators for corporate reporting, while setting out new operating and risk management processes, to best manage and monitor the HSE's climate ambition in a timely manner.
- Effectively tracking the progress of the implementation of the Strategy on a regular basis and setting measurement rules for set data fields (this may include the development and integration of an IT platform / system to support data management and engagement with staff and suppliers).
- Regularly monitoring progress with the Implementation Plan, refining targets, reviewing best practice, reviewing lessons learnt and publishing updates as required.
- Assisting Capital & Estates in achieving formal environmental accreditation such as ISO 50001 (Environmental Management System).
- On an ongoing basis provide corporate reporting updates to key internal and external stakeholders.

The Implications for Other Strategic Priorities / Service Plan

The achievement of net zero by the HSE will require a co-ordinated, sustained approach across the organisation (and its suppliers). As such, climate issues should be appropriately considered in the development and delivery of all organisational priorities and plans.

The Approach to Stakeholder Management

As part of the implementation of the Climate Strategy, a Communications and Training work programme is being established with responsibility in the following areas:

- Help mobilise our workforce to tackle climate challenges in their local environment and making sustainability part of their daily routine.
- Maintaining effective communication between all work programmes and between various stakeholder groups (both internal and external) to help inform the implementation of the Strategy and encourage a culture of sustainability and climate awareness.
- Identifying key stakeholders and developing associated communication plans to proactively engage with stakeholders and keep people informed of progress as well as engaging on the relevant subject matter.
- Encouraging collaboration and learning by ensuring all aspects of the Strategy are embedded into the applicable HSE communication channels (internal and external) and training courses etc.
- The HSE will also develop a supplier communication strategy on climate action that will assist suppliers in their understanding of the sustainability requirements.