



Department for the  
**Economy**  
[www.economy-ni.gov.uk](http://www.economy-ni.gov.uk)

**ENERGY & CLIMATE CHANGE,  
DEPARTMENT FOR THE ECONOMY NI**  
Introduced by Ryan White, Director Heat, Buildings &  
Climate Change



Creating a globally competitive economy that works for everyone



## Climate Change Act (Northern Ireland) 2022

- Legal duty is the first ever in local legislation to recognise the need for strong collaboration in tackling climate change
- Section 24 - Requirement to meet Carbon Budget rests with all departments
- Section 30 - Each department must provide policies & proposals for inclusion the Climate Action Plan
- Section 42 – Public bodies must report, current & predicted impact on Climate Change, create policies & proposals for adapting to, or mitigating the effects of, climate change & delivery time-scales.
- We all must give due regard to supporting nature-based projects, creating green jobs, reducing poverty, inequality and social deprivation through the ‘Just Transition’ and ‘Future Generations’ principles.
- DRIVING A COLLABORATIVE APPROACH.....



### WHAT PHYSICAL CLIMATE RISKS COULD MY UK BUILDING FACE?



#### FLOODING

Either from high rainfall, river overflow, storm surges or rising sea levels.



#### HEAT STRESS & EXTREME TEMPERATURES

Including wildfires.



#### CHANGE IN PRECIPITATION

Including droughts and intense storms.



#### SUBSIDENCE & SOIL EROSION

Can be caused by drought or heavy precipitation.

**ADAPTING TO THESE RISKS WILL BE VITAL AS WE  
FACE THE REALITIES OF CLIMATE CHANGE**

## The Scale of the Challenge

Year	Total NI Emission Levels (MtCO <sub>2</sub> e)	% Reduction from 1990 Baseline
1990 / 1995 (Baseline)	28.1	N/a
2019	22.6	19.7
2020	21.5	23.6
2030 (Target within Climate Change Act)	14.6 or less	48.0+

- We must deliver emissions reductions in the 2020's that previously took 30 years from 1990 to deliver.
- The challenge across all sectors is profound
- If we continue with our current level of policies and proposals, we will miss our Carbon Budget target by around 50%
- Turning plans & strategy into action must now be the focus

## Sectors identified in the Climate Change Act

- Energy Production and Supply → Lead - Peter Russell, Energy Group
- Business and Industrial Processes → Lead – Edward Kerr, Energy Group
- Public Buildings (Buildings sector) → Lead – Ryan White, Energy Group
- Residential Buildings (Buildings Sector)
- Transport
- Waste
- Fisheries
- LULUCF
- Agriculture

- Financial Assistance
- Infrastructure
- **Departmental ‘non-sector specific’**

‘Department for the Economy must ensure that at least 80% of electricity consumption is from renewable sources by 2030’  
**Section 15**

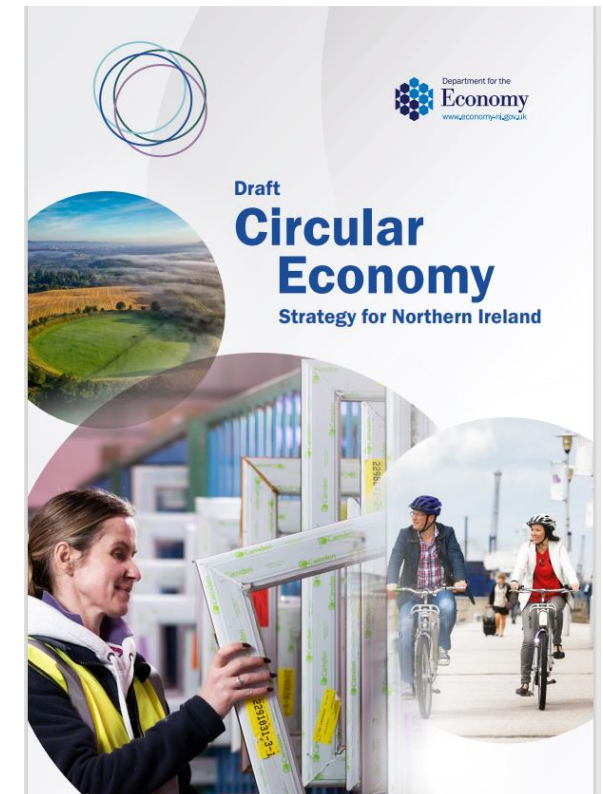
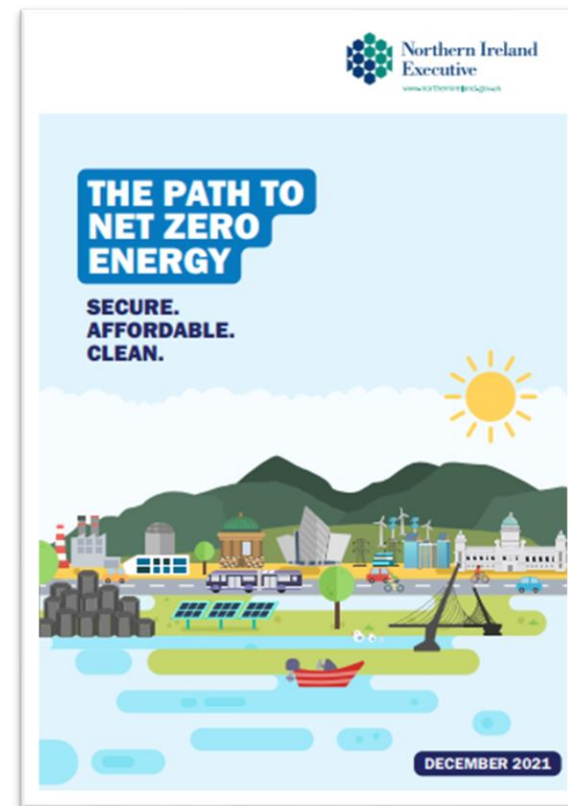


# Carbon budgets explained

Carbon Budgets (NI sectors, total over five year periods, AR5 without carbon feedback)

Sector	First Carbon Budget			Second Carbon Budget			Third Carbon Budget		
	Emissions (MtCO <sub>2</sub> e)	Emissions reduction from 2019	Emissions reduction from 1990/1995	Emissions (MtCO <sub>2</sub> e)	Emissions reduction from 2019	Emissions reduction from 1990/1995	Emissions (MtCO <sub>2</sub> e)	Emissions reduction from 2019	Emissions reduction from 1990/1995
Agriculture	27.2	7%	1%	23.2	21%	16%	20.8	29%	24%
Buildings	13.6	12%	34%	10.1	35%	51%	5.6	64%	73%
Business and Industrial	11.5	21%	50%	8.1	45%	65%	5.0	66%	79%
Energy	9.5	31%	64%	7.4	46%	72%	6.7	52%	75%
Fisheries	0.1	-10%	9%	0.1	-8%	10%	0.1	34%	45%
LULUCF	11.0	8%	23%	9.2	23%	35%	6.4	46%	55%
Transport	17.4	19%	-2%	12.2	43%	29%	6.7	69%	61%
Waste Management	3.4	17%	67%	2.3	43%	77%	1.7	59%	84%
<b>Total</b>	<b>93.8</b>	<b>15%</b>	<b>33%</b>	<b>72.7</b>	<b>35%</b>	<b>48%</b>	<b>52.9</b>	<b>52%</b>	<b>62%</b>

# Department for the Economy Strategic Context



# 10X Economic Vision

## Inclusiveness

- Support to develop relevant skills that will help them transition fairly and inclusively from carbon intensive industries into new jobs.
- Future skills programmes will be designed and a review of current programmes is proposed to support a Just Transition.
- Supports the market across all regions, which will create new job opportunities.

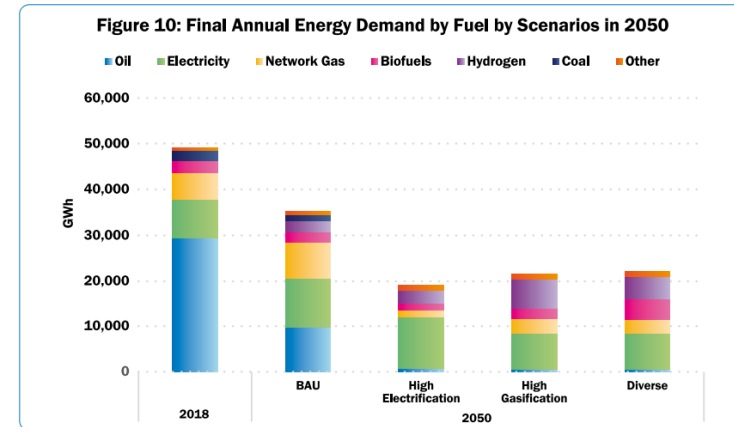
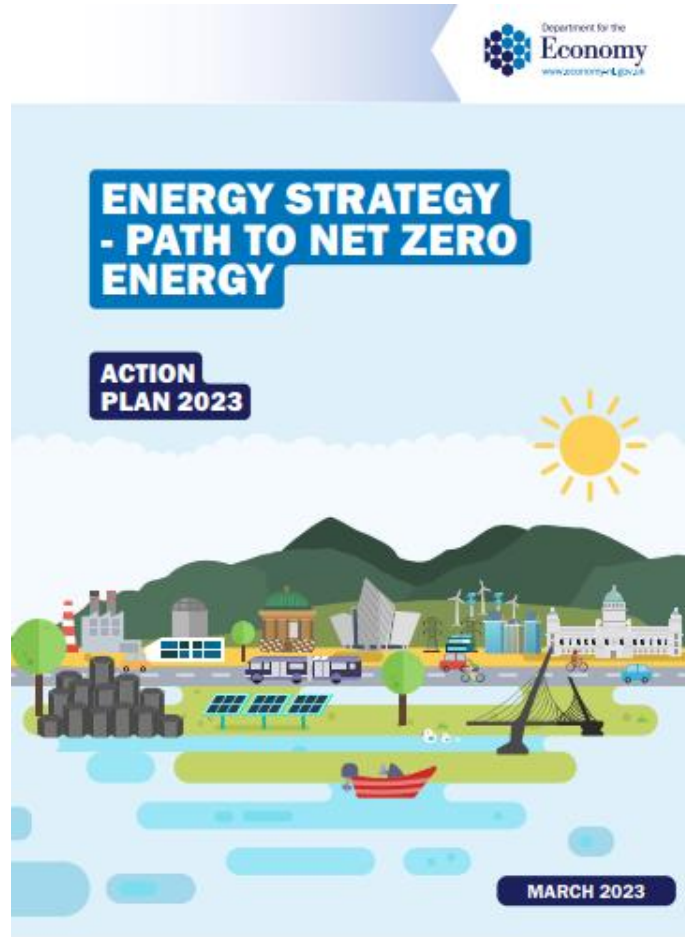
## Sustainability

- By moving to a circular economy we can reduce up to 45% of our emissions & scale up our low carbon & renewable energy economy.
- Fuelled by 80% renewable electricity by 2030. We must prioritise decarbonisation of the energy system to double the turnover of our low carbon & renewable energy economy.
- Embedding DfE strategic principles within our climate action plan, departmental/sectoral plans will greatly assist in reducing all emissions.

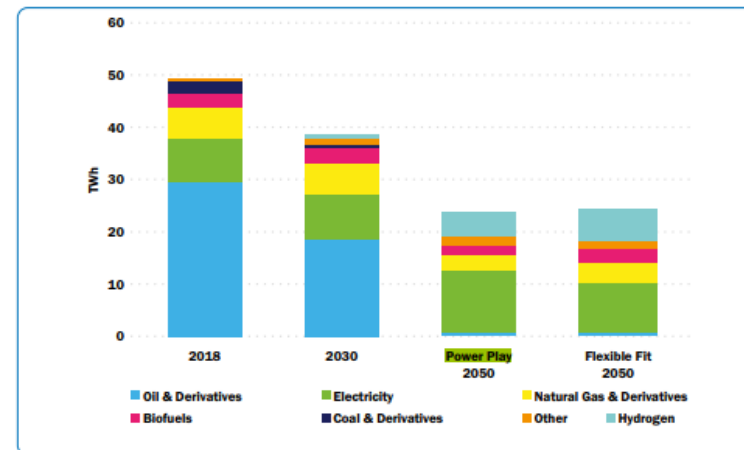
## Innovation

- The strategy proposes investment in research and development to support work to encourage businesses to increase innovation
- The strategy will also deliver benefits in creating a more innovative economy
- Innovation will be prioritised and invested in to develop new technological solutions and the right set of skills and competences.

# NI Energy Strategy – Path to Net Zero Energy



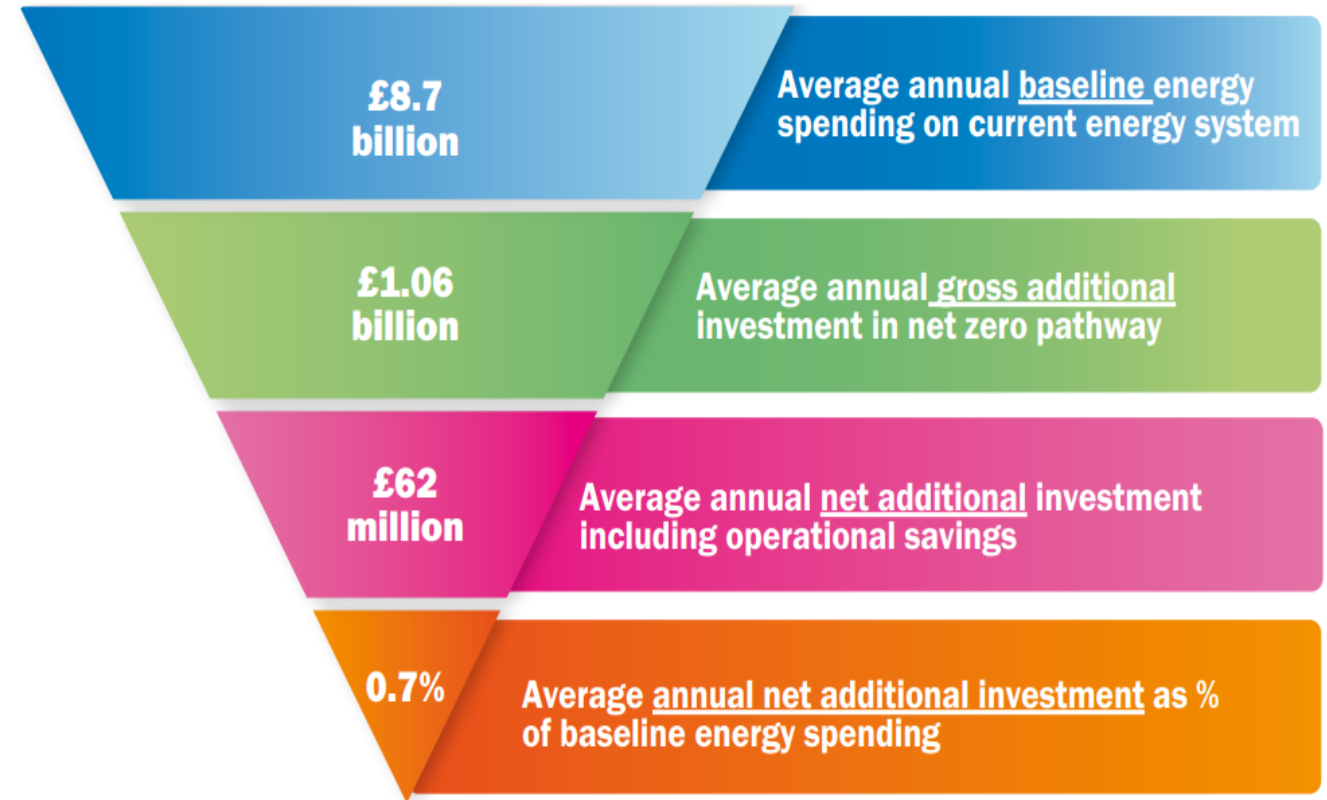
**Figure 14: Final Energy Demand by Scenario to 2050**



- Annual Action Plans for 2022 & 2023 have been published.
- Covid-19 recovery and Economic Recovery Action Plan offered an opportunity for funding.
- Interim phase to ensure alignment of the Energy Strategy deliverables with the legislative targets resulting from the Climate Change Act.
- Extensive modelling through the Energy Transition Model for NI.

# Investing In Our Future

- No single answer to the costs of energy transition for NI, the CCC have estimated costs of £2bn annually from 2030.
- Significant upfront capital investment and on-going operational savings lends itself to alternative funding mechanisms.
- Redirect funding through the monetisation of carbon in the business case.
- Challenging the status quo - How are benefits being assessed?



Current estimated levels of spend on energy across sectors, for context. Sources: CCC; DfE estimates



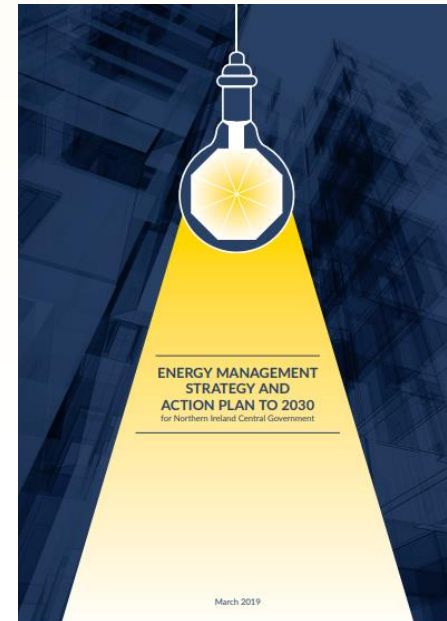


## NI Central Government – Energy Management:

In 2019 the NI Central Government Energy Management Strategy (EMS) was launched under the mandate and governance of the Executive's Asset Management Strategy:

***Objective 1.*** Establishing effective energy management processes that unlock value.

***Objective 2.*** Lowering net energy consumption by 30% by 2030 across Government (from a 2016/17 baseline year).





### Recommendation 1

Ensure that ownership for strategic energy management across the estate is aligned with wider energy policy responsibilities.



### Recommendation 2

Adopt a net energy consumption reduction target of 30% by 2030.



### Recommendation 3

Establish an Energy Management Unit (EMU) to help Departments develop potential energy-saving opportunities, and maximise energy efficiency skills and measures across Government.



### Recommendation 4

Mandate annual reporting of energy consumption against a 30% reduction target to the NICS Board and/or NI Executive.



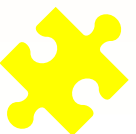
### Recommendation 5

Develop a pipeline of energy reduction projects.



### Recommendation 6

Create an Energy Invest to Save Fund.



### Recommendation 7

Develop better energy buying. Improve collaboration between CoPEs and Departments. Access to specialist services and establishing an Energy Buyers Group



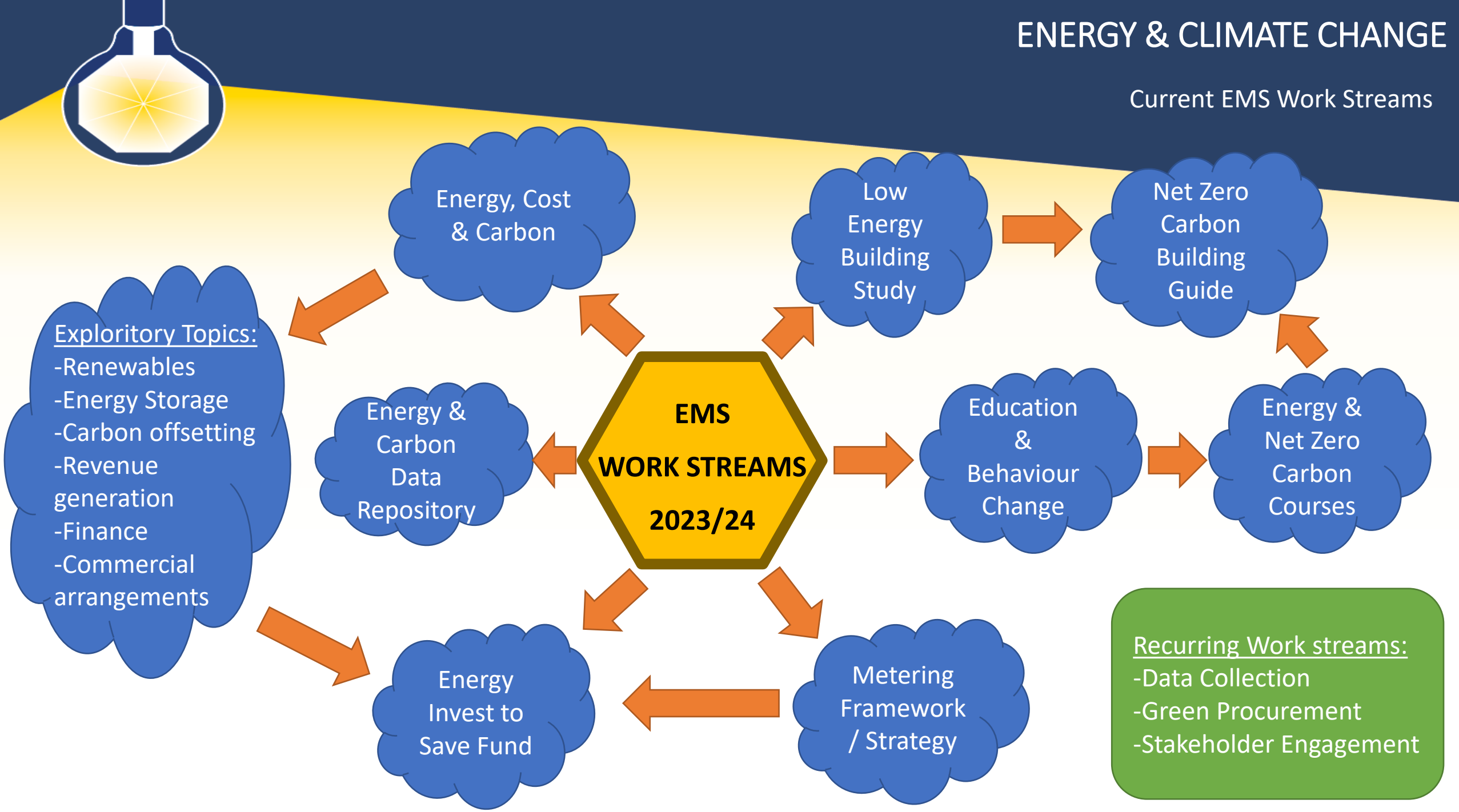
### Recommendation 8

Work in collaboration with relevant partners to ensure building standards contribute to the 30% energy consumption reduction target.

**ENERGY MANAGEMENT  
STRATEGY AND ACTION PLAN TO 2030  
for Northern Ireland Central Government**

# ENERGY & CLIMATE CHANGE

Current EMS Work Streams



## The Public Buildings Sector to 2030

**48% Reduction in GHG emissions by 2030 in line with the Climate Change Legislation, on a 1990 baseline.**

- For 'Public buildings' the contribution would be a 20% reduction in CO2 emissions by 2027 from a 2019 baseline.  
[Advice report: The path to a Net Zero Northern Ireland - Climate Change Committee \(theccc.org.uk\)](https://theccc.org.uk)
- The Energy Management Strategy and Action Plan for Central Government to 2030 also sets a 30% Consumption reduction to 2030, based on a 2016/2017 base year.  
[Energy-Management-Strategy-March-2019.pdf \(sibni.org\)](#)

## Forward Planning



## FINAL THOUGHTS

- WE ALL NEED TO WORK TOGETHER!
- FOCUS ON WHAT IS IN YOUR CONTROL!
- DO THE SIMPLE THINGS WELL!