

The logo consists of two bright green parallelograms stacked vertically and slightly offset to the right, creating a stylized 'SE' monogram.

Scottish
Engineering

A series of approximately 20 light blue diagonal lines slanted at about 45 degrees, arranged horizontally.

Route map to net zero

Securing a Green Recovery
on a Path to Net Zero

House keeping



- > Please place your microphone on mute and camera off
- > Session will be recorded
- > Slides will be made available



NET ZERO So far....

Contents

- Introduction
- Why we decided to explore NET ZERO
- What we found out
- What we planned
- What we have done
 - Road Map
- What is next

Introduction

- Provide a Nationwide Galvanizing and Powder Coating Service
- Just over 100 employees across 2 sites
- Around £12 million in turnover
- Energy intensive industry

Why we decided to explore NET ZERO

- Recognition that there will be pressure from our customer base
- Futureproof the business
- Recognition that we have a social responsibility
- There is opportunity

What we found out

- What NET ZERO means to Highland
- A better understanding of what our business needs to do
- The technology we need is not yet available (but that is alright)

What we planned

- Reduce Scope 1 & 2 consumption
- Purchase a renewable electricity contract
- Plan for alternative fuel purchase
- Improve internal systems for measurement
- Reduce business travel and commuting emissions
- Engage with supply chain

What we have done

- Completed energy surveys at both sites
- Switched to a 100% renewable electricity tariff
- Improved our internal systems for measurement
- Engaged with supply chain
- Reduced business travel
- Produced a road map of what we think realistic time frames are

Road Map

- Establish Base line – Apr 21
- Switch to Renewable Tariff – October 21
- Reduce Consumption – May 22 ongoing
- Switch to alternative fuel for FLT – Apr 2028
- Start to Reduce reliance on NG – Apr 2040*
- Complete Replacement of NG as a fuel – Apr 2044*

What is next?

- Integrate CO2 figures into existing business processes
- Implement the CAPEX plans for Scope 1 reduction
- Get third party verification and certification
- Promote the road map and achievements internally & externally
- Establish schemes for the reduction in commuting
- Reduce waste production and water consumption

Agenda

The carrot and stick approach



- > The ambitions
- > The drivers
- > The carrots
- > The progresses
- > The sticks
- > Takeaway



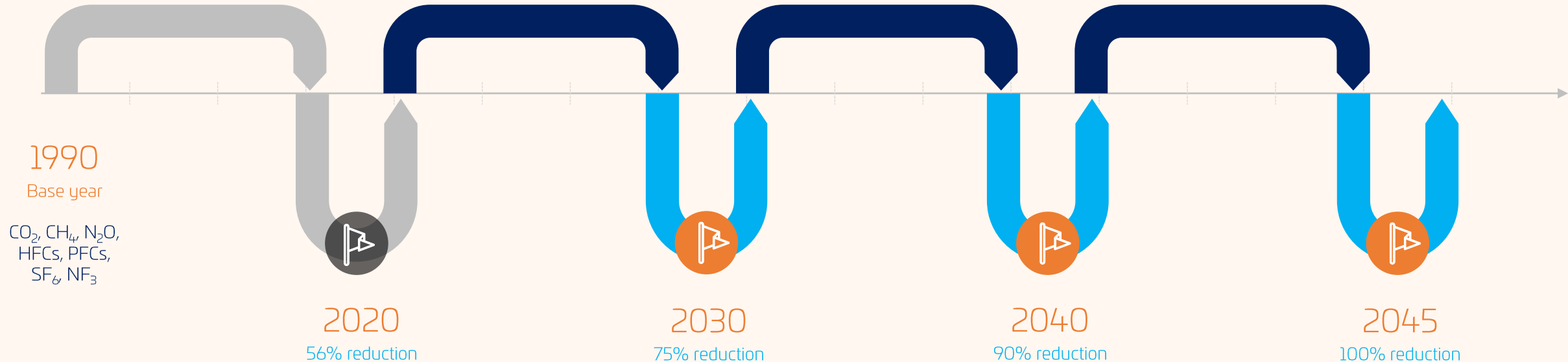
The ambition



Net Zero by 2045 at the latest

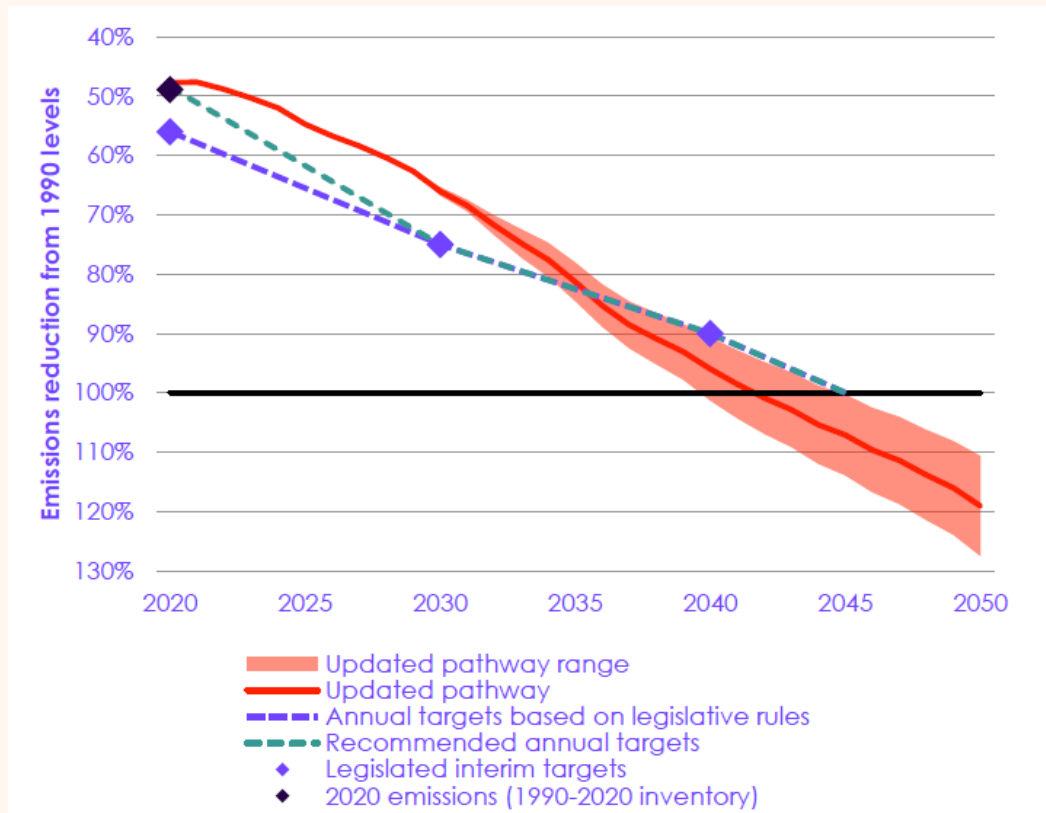
Scottish Government Legislation

Climate Change (Emissions Reduction Targets) (Scotland) Act 2019



Scottish Government Roadmap

Pathway to Net Zero (CCC)



Update to the Climate Change Plan

2018 - 2032

Securing a Green Recovery on a Path to Net Zero



Scottish Government
Riaghaltas na h-Alba
gov.scot

Takeaway



- > Scottish Government has **legally** committed to be Net Zero by **2045** at the latest as measured by the **Climate Change Committee** (CCC)

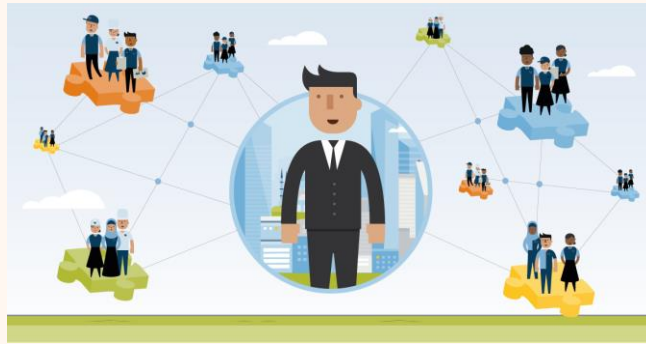
The drivers



Who cares ?



Consumers



Customers



Employees



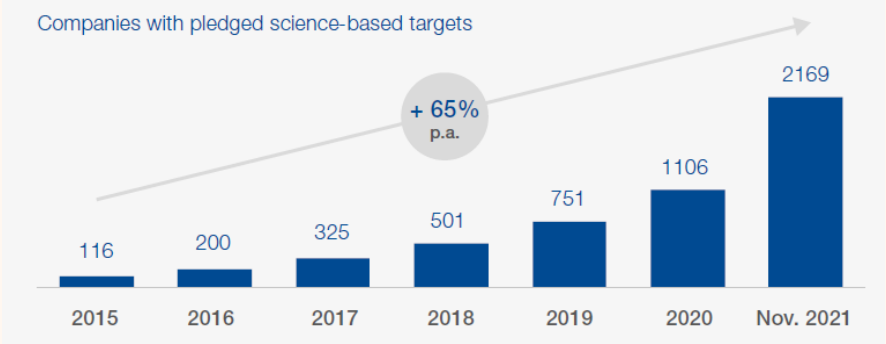
Government

Everybody!



Competitors

Organisations



ESOS
energy savings opportunity scheme

Cabinet Office
Procurement Policy Note – Taking Account of Carbon Reduction Plans in the procurement of major government contracts
Action Note PPN 06/21
05/06/2021

TCFD
TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES
STREAMLINED ENERGY & CARBON REPORTING

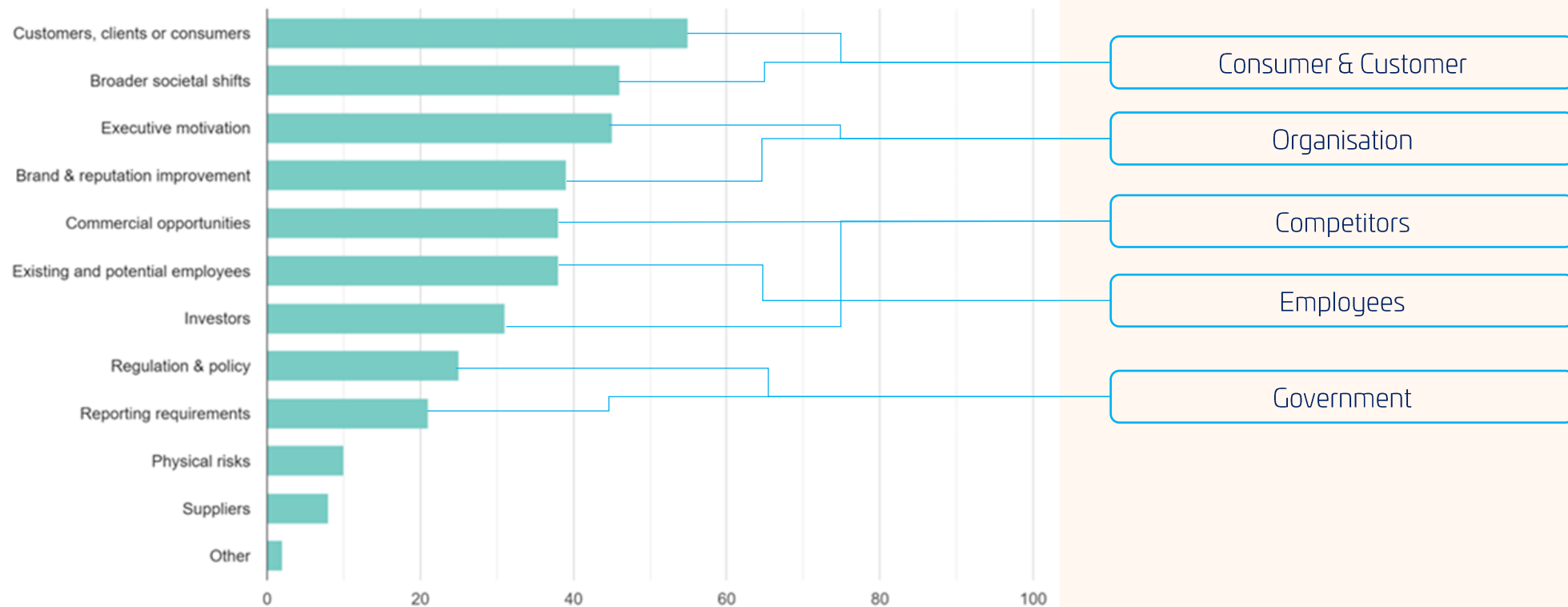


Driver

Stakeholder desire

Key drivers of climate change commitments

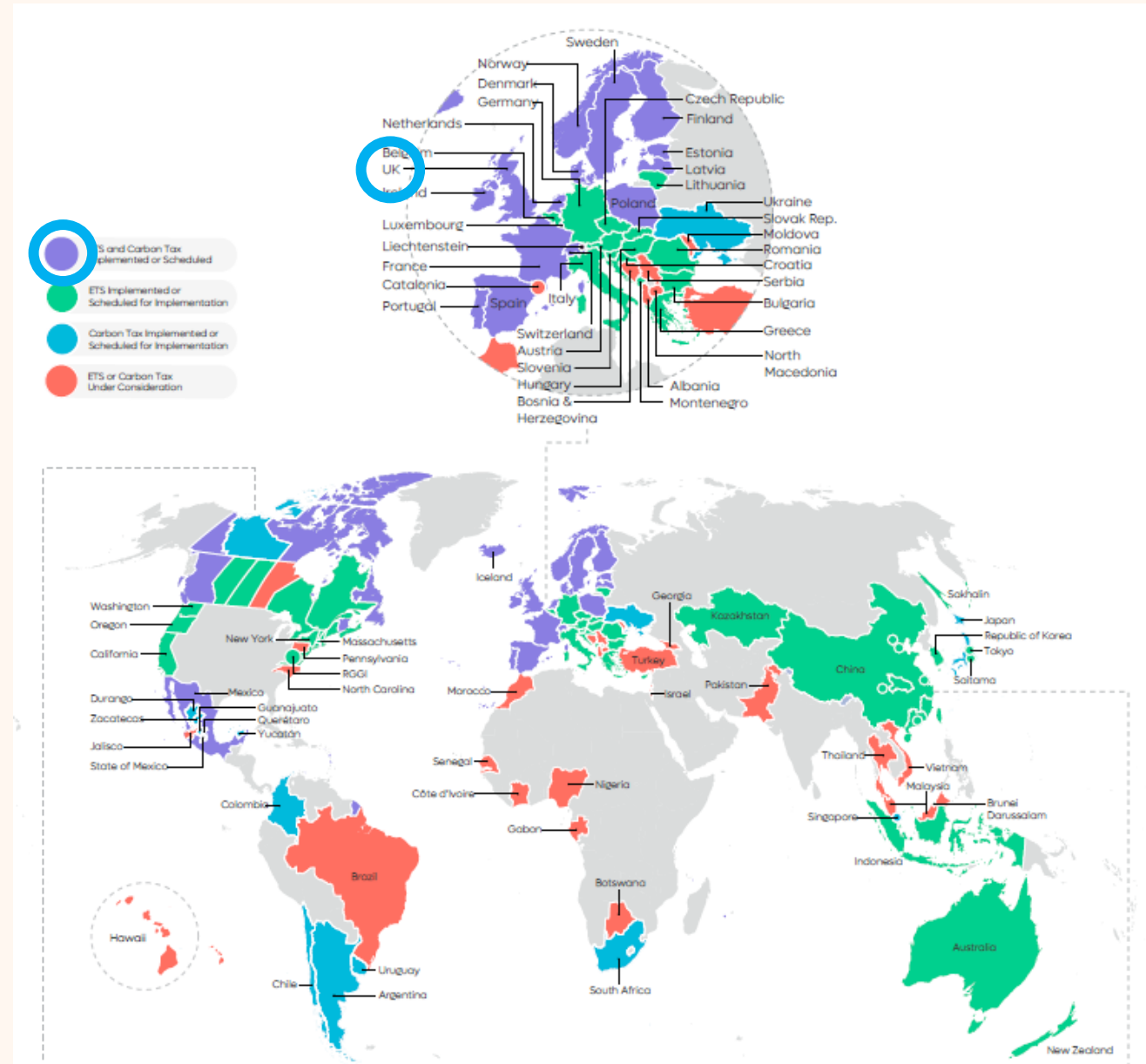
% of companies where this is an important driver



Driver

Government commitment

- As of April 2023, 73 schemes either in force, under development or under consideration
- In 2022, global-carbon pricing revenues reached almost USD\$100bn
- In February 2023, the price of permits (EU ETS) hit €100 (\$107) per tonne of carbon dioxide produced



Takeaway



- > All stakeholders are motivated by either a commitment to ethical responsibility (consumer, employee) or the desire to generate profit (customer, competitor, organisation), driving their ambition in achieving Net Zero (government).

The carrot



Investment

Scottish Government

Investments



- £500 million investment in **active travel** projects over five years
- £500 million to improve **bus** priority infrastructure
- £9 million Scottish Ultra Low Emission **Bus** Fund.
- £62 million **Energy** Transition Fund
- £34 million Scottish Industrial **Energy** Transformation Fund
- £1.6 billion **Heat** in Buildings fund
- £6.9 million support for H100 **hydrogen** for domestic heat demonstration
- £180 million **Emerging** Energy Technologies Fund
- £120 million for Zero Emission **Buses**
- £70 million fund to improve local authority **recycling** collection infrastructure



Government

Funding & Support



> 25 September 2023

- Support options ⇒ 552
 - ↳ Net Zero ⇒ 152
 - ↳ Funding ⇒ 68
 - ↳ Chapter 1 & 8 – Electricity & NETs ⇒ 61 (Energy and Environment)
 - ↳ Chapter 2 – Building ⇒ 50 (Construction)
 - ↳ Chapter 3 – Transport ⇒ 51 (Transport and Storage)
 - ↳ Chapter 4 – Industry ⇒ 55 (Industrial Manufacturing)
 - ↳ Chapter 5 – Waste ⇒ 13 (search)
 - ↳ Chapter 6 & 7 – LULUCF & Agriculture ⇒ 49 (Agriculture, Forestry and Fishing)



Takeaway



- > Scottish and UK Governments are making substantial investments to achieve progress towards Net Zero

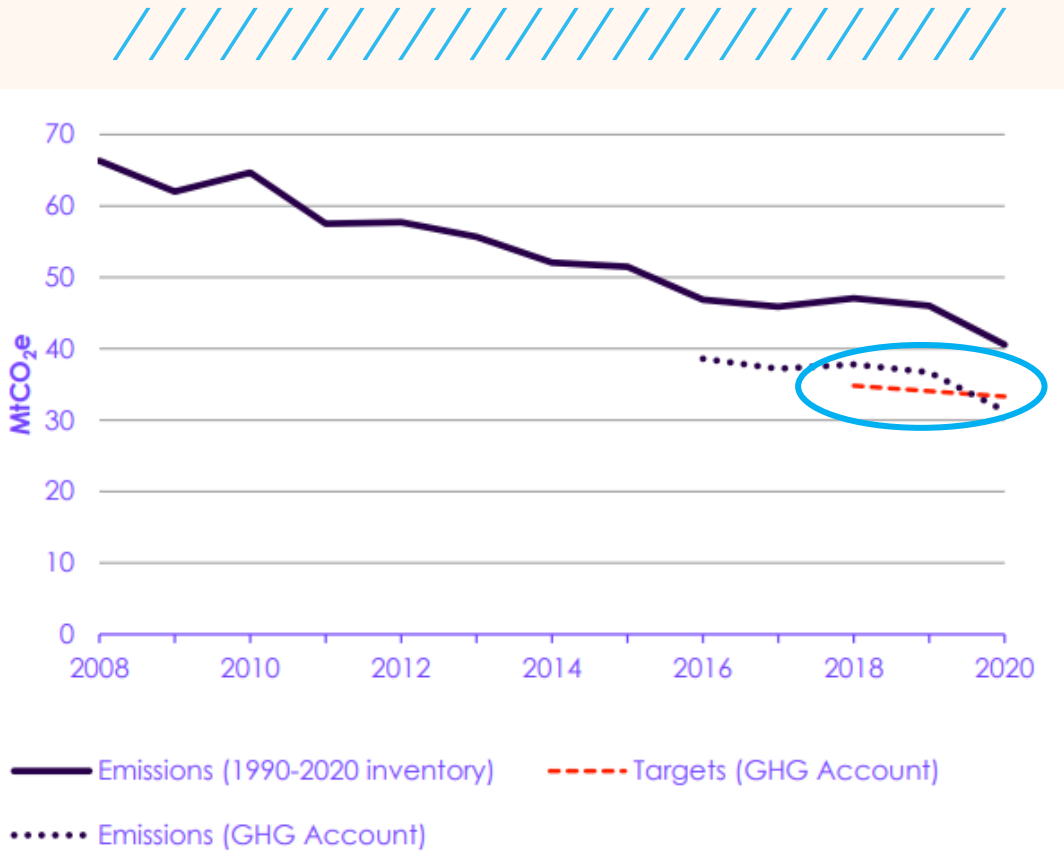
The progress



Disappointing

Target

Climate Change (Emissions Reduction Targets) (Scotland) Act 2019



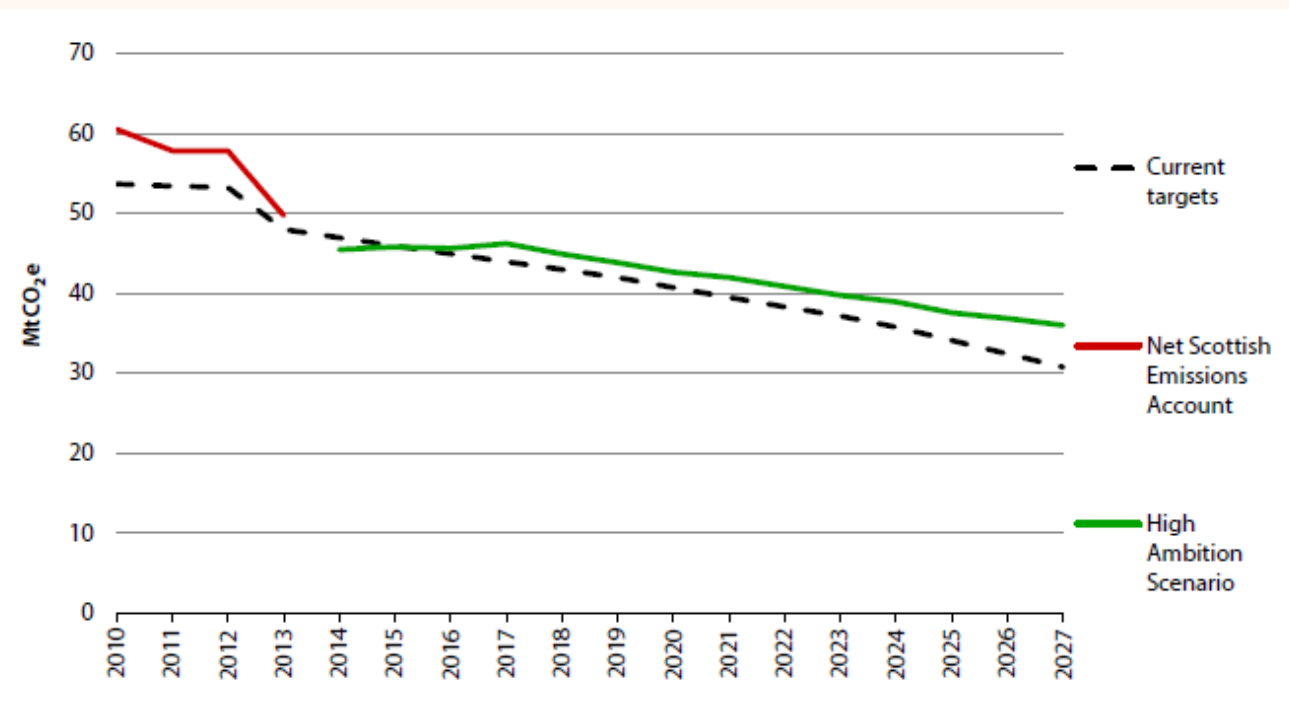
CCC	Mt CO2e	Reduction	Target	
2021	41.6	49.2%	57.9%	Not met
2020	40.0	58.7%	56.0%	Met
2019	47.8	51.5%	54.1%	Not met
2018	41.6	50.0%	52.3%	Not met
2017	46.4	39.1%	50.4%	Not met

Roadmap

Progress against Scotland's milestones and CCC pathway



Sector	Milestone	Ambition	On track?
Transport	No new fossil-fuel car sales by 2030	High	Slightly off track
	20% reduction on 2019 car-kms by 2030	High	Significantly off track
	Aviation demand	None	N/A
Buildings	Low-carbon heat	High	Too early to say
	Energy efficiency	High	Significantly off track
Agriculture and land use	Afforestation	High	Slightly off track
	Peatland restoration	Low	Significantly off track
Waste	Recycling rates	High	Significantly off track



Takeaway



- > Despite the investments, the Scottish Government keeps on missing its Net Zero targets as assessed by the arm's length body that the CCC is

The stick



Reporting and Taxonomy

Reporting

Measuring and managing small and medium enterprises' GHG emissions



- There are 5.5 million small and medium enterprises (**SMEs**) in the UK, comprising over **99% of businesses** and around **50% of total GHG emissions** from UK businesses.
- The **UK government** is working with Bankers for Net Zero, the British Business Bank and a range of industry stakeholders, to **automate SME sustainability reporting** on a national scale.
- Enabling banks to help their SME customers to **track GHG emissions, including scope 3 GHG emissions**, will help unlock further **access to capital** to help achieve net zero goals. Bankers for Net Zero plan to feature the pilot programme of this at **COP28** (Dec'23).

Taxing

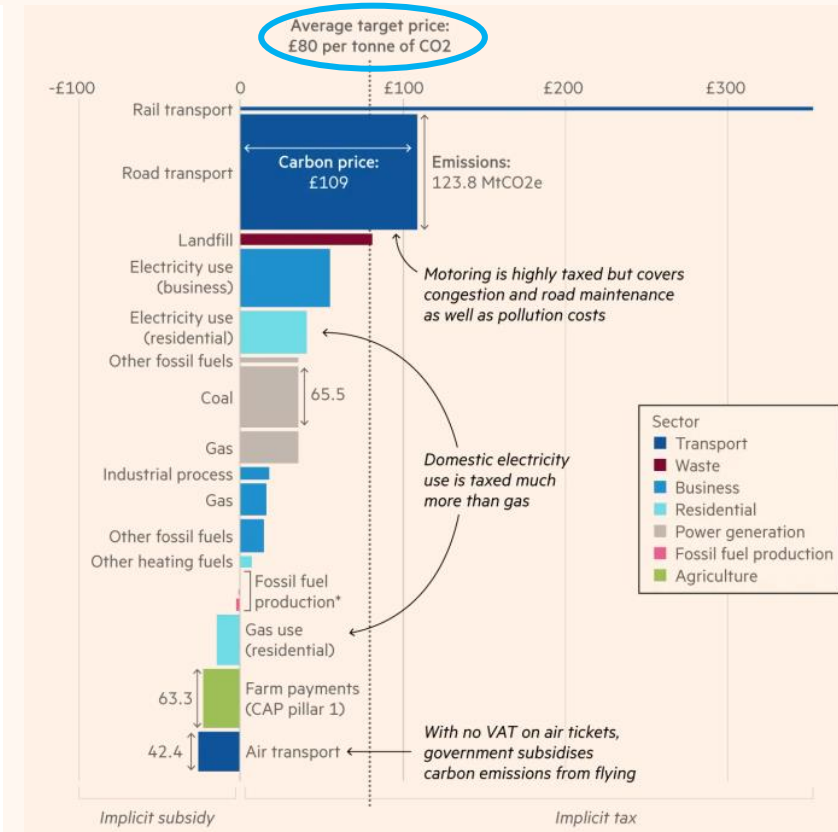
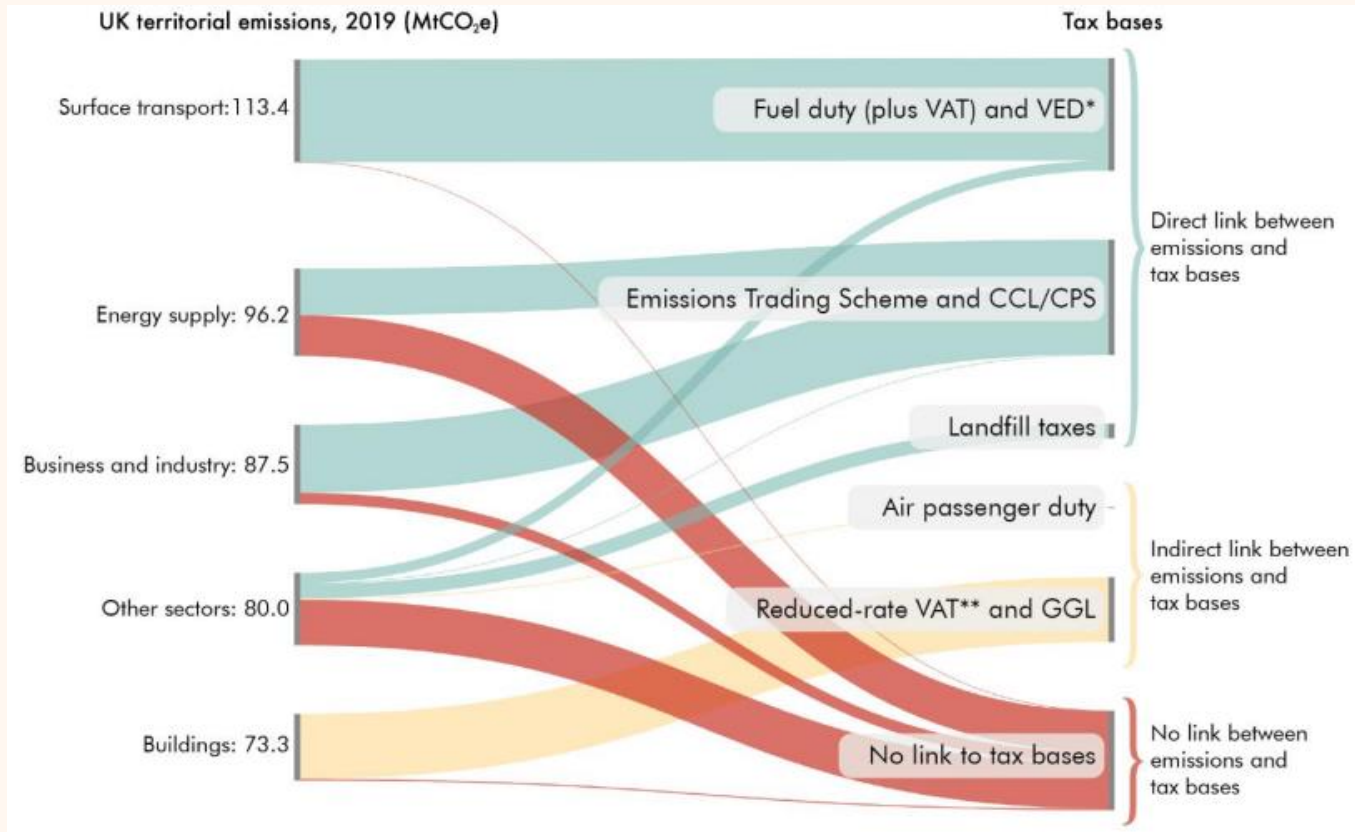
Institute for Fiscal Studies and LSE recommendations



- > If the government were willing to be ambitious, replace a raft of existing policies with a **single carbon tax**, or with an **emissions trading scheme**
- > There is certainly scope to **extend the ETS well beyond** the 29% of emissions it currently covers, even if it never covers all emissions
- > **Taxes on aviation** are low relative to its emissions, particularly for long-haul flight
- > The government could consider bringing in a **border tax** on emissions embedded in **imports**
- > The **carbon tax** level **needs to be raised**. A carbon tax consistent with net-zero emissions by 2050 would start at £50 per tonne of carbon dioxide.

Taxing

Vehicles for taxation already exist



Procuring

PPN 06/21



Cabinet Office

Procurement Policy Note – Taking Account of Carbon Reduction Plans in the procurement of major government contracts

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This PPN sets out how to take account of suppliers' Net Zero Carbon Reduction Plans in the procurement of major Government contracts.

Carbon Reduction Plan (to be published on supplier's website)

- > Suppliers must confirm their organisational commitment to achieving **Net Zero by 2050** at the latest
- > **All Scope 1 and Scope 2** emissions are to be included, along with a **subset of Scope 3** emissions: **5 of the 15** categories defined by the GHG Protocol: Upstream transportation (4), Downstream transportation (9), Waste generated (5), Business travel (6) & Employee commuting (7), i.e. Transport and Waste
- > Carbon footprint should adhere to the **Greenhouse Gas Protocol's** Corporate Accounting and Reporting Standard

Customer

Multi-national companies (MNCs)



- > **67%** say the first step in their net zero strategy will be reducing supplier emissions.
- > **78%** say they will start removing slow-to-transition suppliers by 2025.
- > MNCs expect to cut around **35%** of their current suppliers as they respond to net-zero pressure.

Key net zero dates for MNCs and their suppliers

2020 ● 15% of MNCs have already begun removing suppliers

2024 ● 62% will have begun removing suppliers

2025 ● 78% will have begun removing suppliers

2050 ● 96% of MNCs plan to have reached net-zero emissions

Takeaway

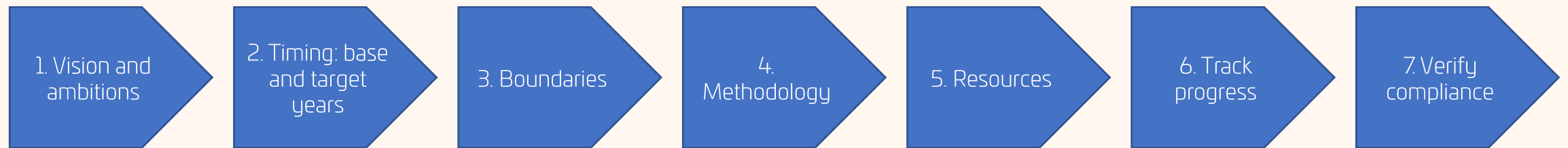


- > Reporting is already in place for large organisations and is being recommended for small organisations
- > Taxonomy is on the rise, new taxes have been recommended and implemented and vehicles are available
- > Stakeholders are starting to take notice and are acting accordingly

Summary



- > Ambition to achieve Net Zero by 2045 in Scotland has been legally set
- > The carrot of investment is not working
- > Get ready for the stick of reporting and taxonomy, it is coming





Thank you



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