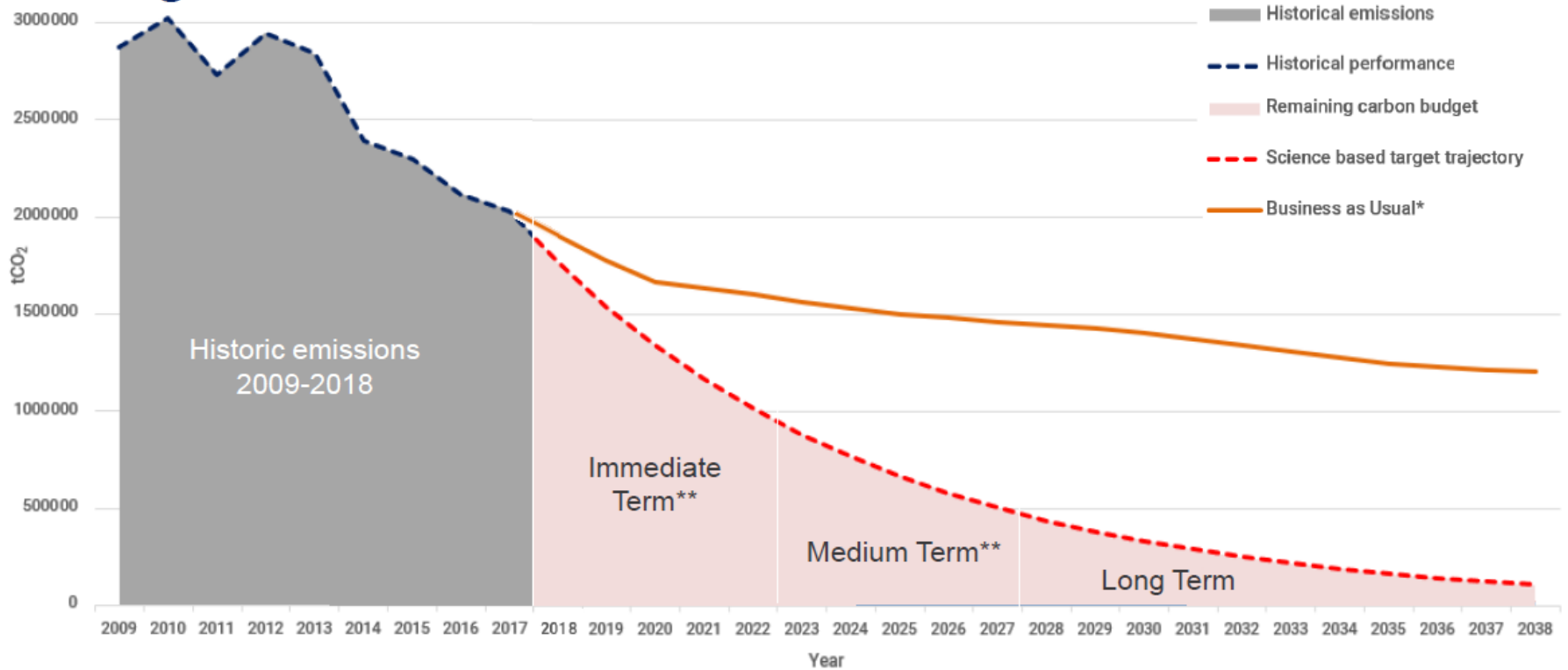


ZERO CARBON OXFORD  
AMBITION AND REALITY



# 1. Carbon emissions pathway consistent with 2°C Paris Agreement



Total budget (2018-2100) tCO <sub>2</sub>	Immediate term (2018-2022) tCO <sub>2</sub>	Medium term (2023-2027) tCO <sub>2</sub>	Long term (2028-2037) tCO <sub>2</sub>
15,187,610	6,928,620	3,593,560	3,046,920

\* Business as usual as defined by Level 1 ambition thresholds within the Anthesis' SCATTER model.

\*\* Immediate Term & Medium Term periods align with the 3<sup>rd</sup> and 4<sup>th</sup> nationally legislated carbon budget periods (respectively) under the UK Climate Change Act (2008).

The UK Government has passed legislation to reach 'net zero' carbon by 2050.

**Q.** Should Oxford be more proactive and seek to achieve 'net zero' sooner than 2050 and what trade-offs are we prepared to make?

# OXFORD'S VIEW

90% of Assembly Members said


**YES,** but



Domain	Zero Carbon Grid post SCATTER			
	Level 1	Level 2	Level 3	Level 4
<b>Renewable Energy General</b>	170% increase in installed solar PV by 2025.	240% increase in installed solar PV by 2025.	300% increase in installed solar PV by 2025.	460% increase in installed solar PV by 2025.
<b>Passenger Transport Shift</b>	By 2050: •100% zero emission cars and buses  •100% busses and passenger trains electrified.	By 2040: •100% zero emissions cars& buses  By 2050: •Complete railway electrification	By 2035: •100% zero emissions cars and buses  By 2050: •Complete railway electrification	By 2035: •100% zero emissions cars and buses  By 2025: •Complete railway electrification
<b>Commercial Property Appliances</b>	Energy demand for lights & appliances increases by 33% with electricity providing 60% of demand	Energy demand for lights & appliances increases by 15% with 100% electric use	Energy demand for lights & appliances decreases by 5% with 100% electric use	Energy demand for lights & appliances decreases by 30% with 100% electric use
<b>Freight Shift to Low Emissions</b>	•Road haulage makes up 73% of distance, using conventional engines  •Rail all diesel	Some shift from road to rail and water  •More efficient engines	Greater modal shift to rail and water  •More efficient HGVs  •More efficient logistics	Road modal share falls to 50%; greater hybridisation  •Rail freight is all electric
<b>Electrification of Heating</b>	The proportion of domestic heat supplied using electricity is 0-10%, as today	The proportion of domestic heating systems using electricity is 20%	The proportion of domestic heating systems supplied using electricity is 30-60%	The proportion of domestic heating systems supplied using electricity is 80-100%
<b>Energy Storage and Demand</b>	•150 MW storage  •170 MW interconnection & some demand shifting	•170MW storage  •422MW interconnection & substantial demand shifting	300MW storage  •634MW interconnection & substantial demand shifting	•845MW storage  •1.27GW interconnection
<b>Domestic Property</b>	17% of homes insulated, average thermal leakiness reduces 20%	Over 20% of homes insulated, average thermal leakiness reduces 39%	45% of homes insulated, average thermal leakiness reduces 57%	60% of homes insulated, average thermal leakiness reduces 75%
<b>Increase in Recycling</b>	65% recycling, 10% landfill,25% incineration by 2040, remaining constant to 2050	65% recycling, 10% landfill,25% incineration by 2035, remaining constant to 2050	65% recycling, 10% landfill,25% incineration by 2040, increasing to 75% by 2050	65% recycling, 10% landfill,25% incineration by 2035, increasing to 85% by 2050

# MESSAGES FOR COUNCIL

Council should:

- Make most of convening powers to form coalition of willing
  - Lead on engagement with institutions, communities and individuals
  - Build a much wider appreciation of and support for the notion of being an exemplar city and council
  - Biodiversity, nature, quality of life as important as technical measures
  - Build evidence base for action at national level
- 


# OUR RESPONSE?

- **Action**
- **Partnership**
- **Influence**

Science/data led targets and actions



# HEADLINE COMMITMENTS

- Significant step up in engagement
  - Net zero carbon Council for Council operations during 2020
  - Outline plan for assets in time for budget
  - Zero Carbon Oxford summit and partnership
  - Significant step up in commitment around Natural Resource Management
  - Call for bring forward of end of ICE vehicle sales
  - Campaign for clarity ambitious zero carbon homes standards
- 



# SCIENCE AND DATA LED

- Set and report against 5 year carbon budgets for city
- Appoint “chief scientist” to advise council
- Only set targets where we have consensus that that they are achievable



**OXFORD CITIZENS ASSEMBLY**  
ON CLIMATE CHANGE