

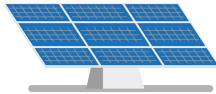
SCRUTINY PANEL PRESENTATION

26th October 2021

Rotimi Ajilore: Head of Procurement

Mary Aladegbola: Head of Energy and Carbon Management

Katie Glasgow: Strategic Planning Manager



**REBUILDING
A GREEN
HACKNEY**

CONTENT

- Review of the Council's Net Zero Energy Strategy in relation to the Council's work for climate change and the approach being taken to achieve net zero carbon by 2040.

SCOPING

Emissions before offsetting and after accounting for Clean Electricity purchasing					
tCO ₂					
	2010 Baseline	2016	2019	2040	
Scope 1 (Vehicle fuel & gas)	15,576	17,055	17,601	190	
Scope 2 (Electricity)	26,643	15,464	6,828	1,345	
Scope 3 (Embodied carbon)	16,506	16,733	16,733	5,983	
Scope 3 (Staff travel)	724	724	724	241	
Scope 3 (Unseen energy)	132,131	100,806	77,348	4,163	
					<i>Systems upgrades included in cost estimates</i>

CONTEXT

Several core strategic areas are identified:



Monitoring and tracking

systems will be established to ensure that objectives are met and the strategy can remain flexible to the rapidly changing situation we are facing. This will include better data collection and intelligence.



There is a policy and

funding gap between the intention to move to net zero carbon and current asset management strategies.



Energy efficiency and

renewable generation are a central part of the strategy. All Tier 1 and 2 opportunities for solar PV will be bought forward for feasibility and installation. A fabric first and retrofit approach will be taken to upgrading buildings.



Fuel switching should be trialled immediately.

All planned boiler replacements should consider the feasibility of hydrogen or electrification. After 2025 gas boilers should only be purchased in exceptional circumstance.



Electrical infrastructure:

the electricity grid is becoming progressively cleaner as the provision of renewables increases. The technologies that are needed to support electrification include electric vehicle charging infrastructure, increased supply and distribution capacity, and new ways to share energy locally (smart grids) and shift times of energy demand (demand management). This will help manage energy and reduce peak demand.



A Power Purchase Agreement

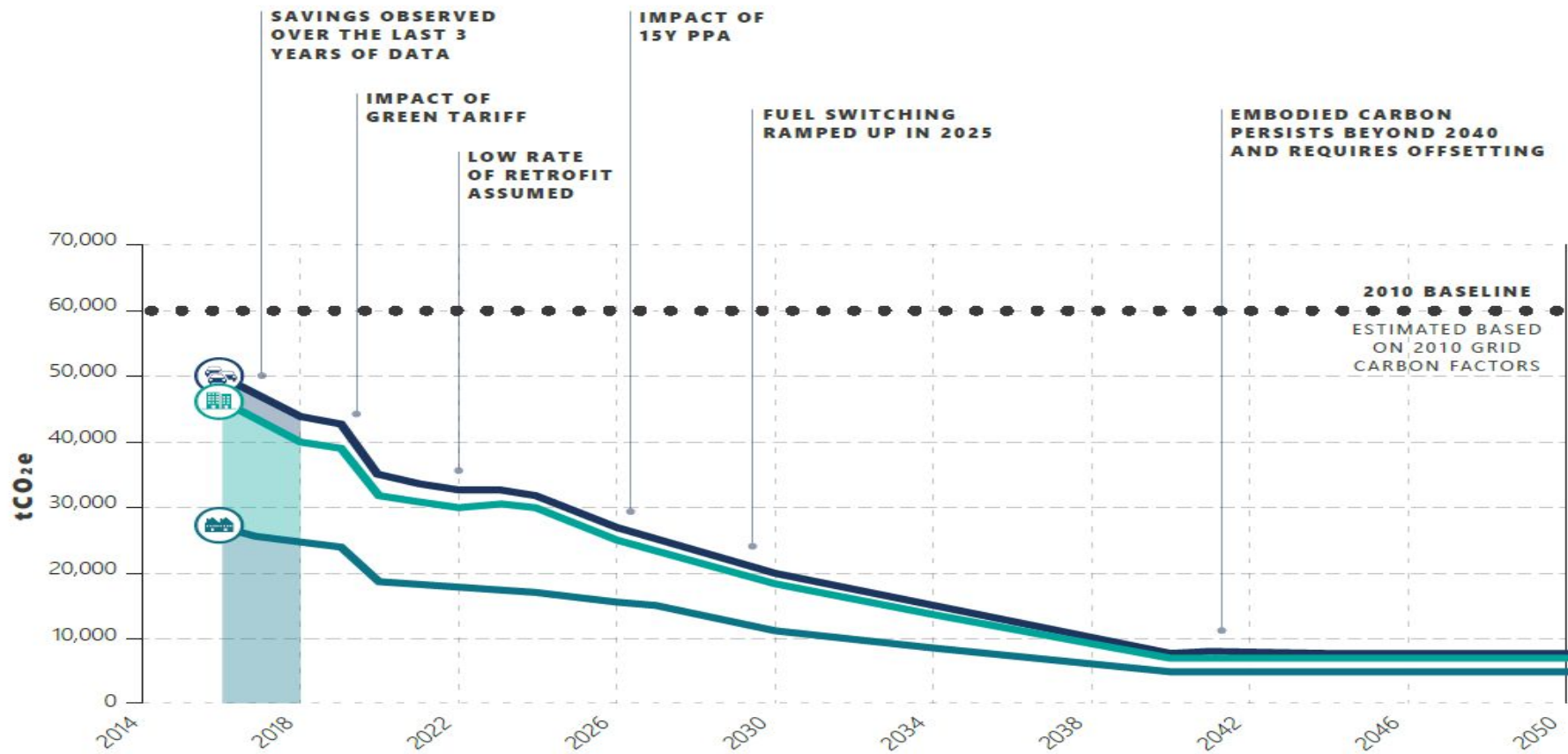
should be agreed. Net zero emissions from electricity consumption can only be achieved where there is investment in additional renewables infrastructure which is not included in grid carbon calculations. A properly negotiated PPA will help to strengthen UK renewable electricity infrastructure.



Embodied carbon is important and

difficult to reduce. Embodied carbon from construction could make up the majority of remaining emissions in the Hackney Council portfolio. While best practice industry targets to reduce the embodied energy of construction should be met, this footprint will require some offsetting after 2040.

DELIVERY PATHWAY



ACTIONS

- **Emissions from new development:** Implementing policy to incorporate district energy requirement into appropriate planning sites and identifying policy levers to support the adoption.
- **Project Identification:** Identifying bid ready projects e.g. through the Retrofit Accelerator Scheme
- **Monitoring and Metrics Development:** Develop guidance documents for metering, monitoring, energy performance management. Develop carbon metrics to capture co-benefits of carbon measures alongside financial metric

ACTIONS

- **Heat Decarbonisation Measures** to include a mix of heat pump and District heat systems
- **Low Carbon Infrastructure Development:** Electrical infrastructure and district heat schemes
- **Solar PV RollOut:** Delivery of large scale Solar PV rollout integrated into our PPA objective and other decarbonisation technologies
- **Fabric first Approach through the Retrofitting Programme:** A retrofit rate of 9,000 homes and 206,000m² by 2040 will need to be achieved. This is against the backdrop of a complex portfolio and diverse building stock with varying tenancy types, building types and usage patterns.

KEY SUCCESS CRITERIA

- Improved understanding around cost and effectiveness of the technological measures available
- Achieve a retrofit rate of 500 homes and 10,000m² per year, replace most vehicles with EV and fuel switch 2,000 homes and 50,000m² per year.
- Data gathering and monitoring on the effectiveness of our actions
- National policy
- Collaboration: We are in a similar position to most other LA and there is opportunity to collaborate and build capacity.

IMPLEMENTATION

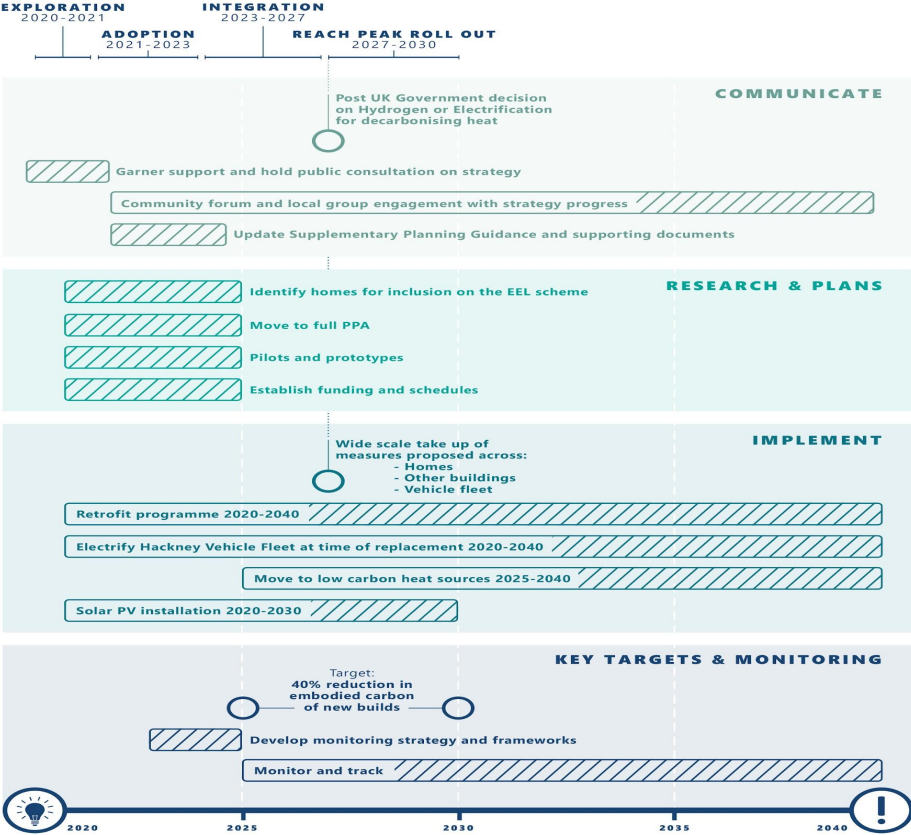


Figure 1-4
Key timeline for the Green Energy Strategy implementation

WHAT ARE WE DOING NOW

We are not starting from scratch

- New buildings follow the latest London Plan and LP55 guidance
- Asset Management Strategy to EPC C, which necessitates demand reduction through fabric / efficient systems e.g. insulations, controls.
- Masterplanning has identified the potential for district heat
- Green Homes Programme
- Boroughwide solar study has identified an opportunity to install up to 15MW of solar capacity.
- Power Purchase Agreement (PPA)- Scoping with a decision to be reached on either Corporate PPA or investment in a generation facility
- Appraising alternative delivery models for the deployment and roll out of decarbonisation measures
 - 50% Reduction in Scope 2 emissions from:
 - Grid Decarbonisation
 - LED light fittings (including Street Lighting) and other energy efficiency savings.
 - Purchase of renewable energy (REGO)
 - Solar panels Installation

RISK AND CHALLENGES

- Complex Portfolio
- Residential building Typologies and Tenures
- Technological Readiness
- Existing assets in good/operational condition

RISK AND CHALLENGES

- Funding
- Expenditure vs Savings
- User awareness, visual impact of heat pumps, grid limitations will also have an impact
- Coordinated approach to project scoping and delivery needed to accelerate of the roll out of low carbon projects will decrease

IMPACT

- Potential increase in energy cost associated with electrification of heat but overall benefits is focus of communication
- Lower carbon emissions would yield savings on utility bills, this is a key benefit of low carbon technology alongside reduced carbon emissions. There is compelling evidence on financial benefit of energy efficiency, retrofitting and low carbon technology.
- Engaging with residents over retrofit work will be difficult unless they can see how the work fits into the country's wider net zero ambitions.

COMMUNICATION PLAN



Hackney's Climate Action Plan



Community Engagement

INTERNAL GOVERNANCE

Three distinct tiers below Senior Leadership Group and Hackney Management Team with connections also to Cabinet:

- **Environmental Sustainability Board:** Refreshed membership, senior officers and Cabinet members, with a clear 12 month work plan - **Chair Ian Williams** meets every 2 months
- **Strategic Officer Climate Group:** Key tool for delivery of the Board's work plan including overseeing the Climate Action Plan working groups - **Co-Chairs Matthew Carrington and Sam Kirk** meets every six weeks
- **Climate Action Plan working groups:** Develop the seven draft Climate Action Plans broadly in alignment with the themes identified by London Councils - **accountable leads confirmed** - meeting monthly

PLANNING

- The role of planning comes to play in new buildings that require planning, helping to shape the the development of district heating systems.
- National, regional and our local Planning Policy all promote decentralised energy provision.



PLANNING SECTION



ANY QUESTIONS

THANKS