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# Facilitating Net Zero

## *Local Area Energy Planning (LAEP)*

October 2022

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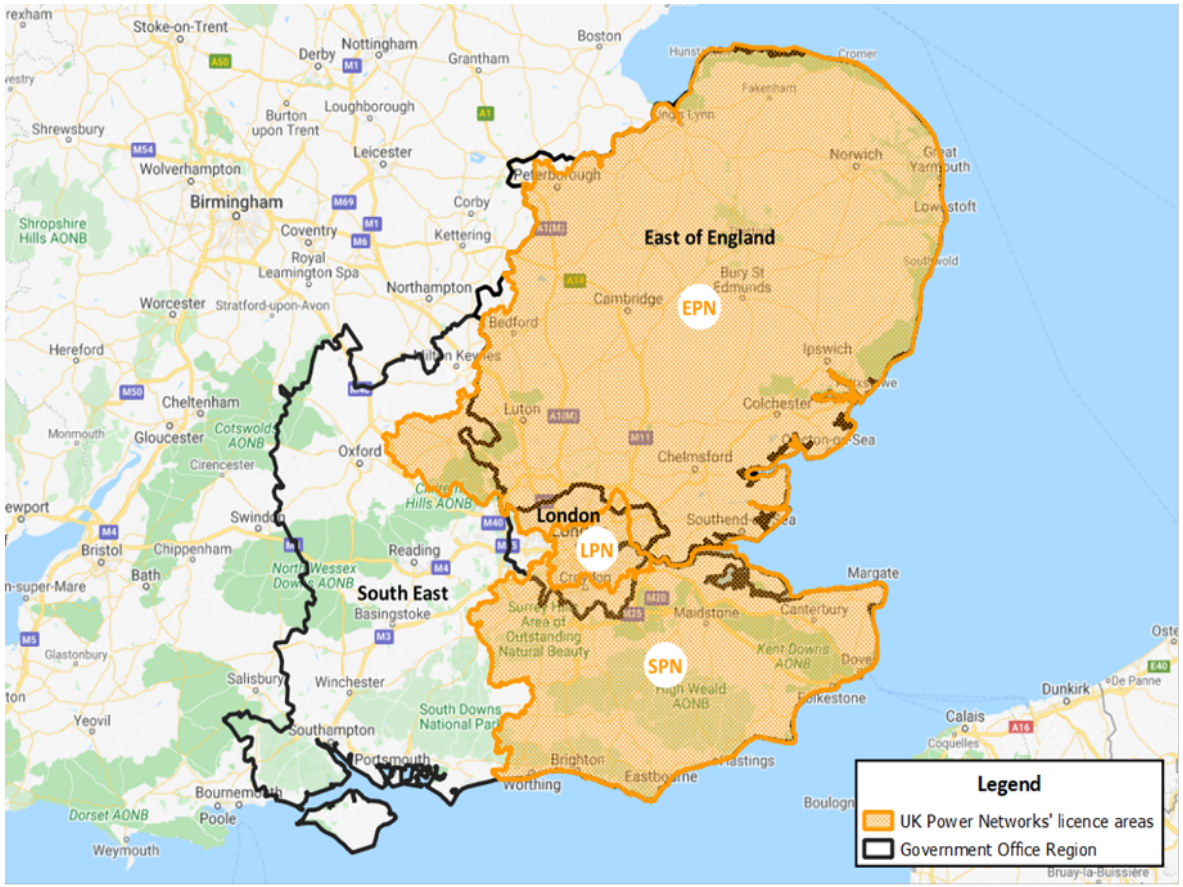
# UK Power Networks

## Serving London, the East and South East of England



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# Local Ambitions

## UK Power Networks serves 127 Local Authorities

**80%**

Climate Emergency declared

**87%**

Accelerated target to reach net zero or be carbon neutral before 2050

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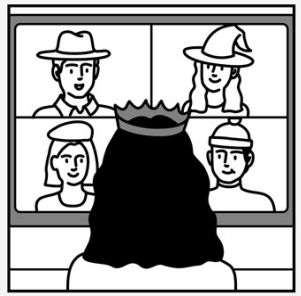
# What is LAEP?

**Local Area Energy Planning (LAEP) is a data driven and whole energy system, evidence-based approach** that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target.

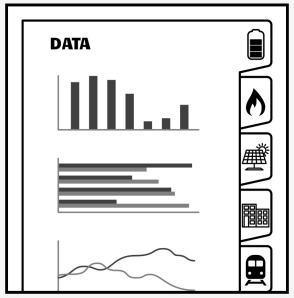
*REF: Guidance on creating a LocalArea Energy Plan - Energy Systems Catapult*

## 1. Awareness

## 2. Preparation

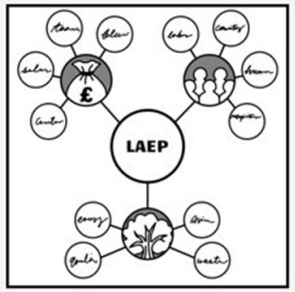


## 3. Establish Baseline

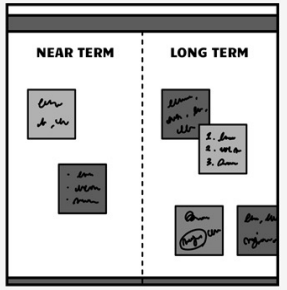



## 4. Modelling Options

## 5. Reviewing Pathways and Refinement




## 6. Decisions on Actions and Priorities




## 7. Local Area Energy Plan (LAEP)

## 8. Implementation and Monitoring

# Data

## Co-creating the Local Authority Data Template

Collaborating with Regen, Essex County Council and Greater London Authority to understand the datasets needed to support the most pressing local net zero planning challenges.

*#1: I want to know the most viable places to connect new energy generation assets that considers connection cost and resource availability*

*#4: I want to deploy renewable generation on council land and procure renewable energy for the council*

*#13: I want to make targeted transport infrastructure investment decisions to improve air quality and public health*

https://www.ukpowernetworks.co.uk/open-data-portal

# Spatial Analysis and Mapping

## Collaborative Local Energy Optimisation (CLEO)

- Engaging with our customers and collaborating with design thinking specialists That Product Studio (TPS), Energy Systems Catapult & Buro Happold
- Developing a self-service digital tool that enables Local Authorities to make the best choices for their communities in developing their Local Area Energy Plan

https://innovation.ukpowernetworks.co.uk/projects/collaborative-local-energy-optimisation/

# DFES – Consumer Transformation scenario

Electric cars & vans in 2030
**4.2m (10.5m by 2050)**

Homes with solar panels in 2030
**374,000**

Battery capacity in 2030
**4.5 GW**

Heat Pumps in 2030
**748,000**

| Geography | Minimum population | Maximum population | Minimum number of households | Maximum number of households |
|---|---|---|---|---|
| LSOA | 1,000 | 3,000 | 400 | 1,200 |
| MSOA | 5,000 | 15,000 | 2,000 | 6,000 |

Forecasts resolved for roughly
**11,000**
individual areas

**57**
individual drivers and technologies modelled out to 2050

https://www.ukpowernetworks.co.uk/future-energy/dfes-2022

**Support** Local Authorities with their Net Zero plans

**Collaborate** and combine our expertise in energy and Local Authorities local knowledge

**Facilitate** best value solutions for Local Authorities and communities: *Right capacity, At the right place, At the right time, At lowest cost*

# Get in touch:

LAEP@ukpowernetworks.co.uk

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