

## SP Energy Networks Zero Carbon Communities Initiative

In October 2019 SP Energy Networks launched our Zero Carbon Communities Initiative in the cities of Liverpool & Glasgow as a first step on the journey to a zero carbon future. This is first detailed roadmap to show how local communities can play their part in reaching NetZero targets, as the country transitions to an electric future.

In the coming months, the Zero Carbon Communities campaign will roll out to other areas served by SP Energy Networks beyond Liverpool & Glasgow – including Edinburgh, Fife, Dumfries and Galloway, the Isle of Anglesey and Cheshire. This will span major cities and rural communities to reflect how different places have differing needs.

By recognising there is no 'one size fits all' model, and by setting out clear information for communities about the scale of the challenge, SP Energy Networks wants to work at local levels to make sure its networks support and deliver a greener energy future for all. Doing this will ensure local communities will have a system that works for them.

# 5%

or less of homes currently use low carbon sources for heating



## The UK's decarbonisation challenge

At both national and municipal levels, the UK is setting the global pace by committing to, and legislating for, zero carbon targets.

### An electric future driven by local demands

As the committee on climate change has identified, investing in renewable generation alone is not going to be enough. We need to reduce emissions significantly in many other areas of our daily lives:

**Transport:** Accounting for 23% of UK greenhouse gas emissions, transport requires urgent action. The CCC recommends that all new cars and vans should be electric by 2035 and advocates the earlier switchover of 2030 if possible. This is a more ambitious aim than the Government's own targets to phase out diesel and petrol cars by 2040, although the Scottish Government has identified 2032 as the date to phase out the need for diesel and petrol cars.

**Heating:** The sector faces a significant decarbonisation challenge, with 23 million UK properties heated by gas today - that's roughly 83% of homes. The UK Government has already announced that gas boilers will no longer be fitted in new homes from 2025, but currently less than 5% of homes use low carbon sources for heating. While nationally binding targets for climate change are welcome, we know that the journey each community takes to zero carbon will be very different.

# 23%

of UK greenhouse gas emissions is down to transport



## Zero Carbon Case Studies

### Glasgow

As part of plans to modernise the city's electrical network infrastructure, SP Energy Networks is investing £20m between now and 2022 to facilitate an increase in available network capacity and to support regeneration initiatives.

"Glasgow is determined to lead the UK's 'race to zero'... We simply have to act now and the City Government will develop those partnerships necessary to get to where we simply have to be."

"There is a historic pertinence that Glasgow should lead the transition into a carbon neutral future and that we should collaborate with those driving the technological innovation to take us there."

"I welcome Scottish Power's comments as a significant step in that direction, a mutual recognition that there is much to achieve in collaboration."

Glasgow City Council Leader Susan Aitken, May 2019, The Herald

### Liverpool

Liverpool City Region – which has set a 2040 Net Zero target – was the first of the Zero Carbon Communities to launch, and provides a clear demonstration of the local approach needed to reach net zero.

"We declared a Climate Emergency and became the first Combined Authority to set a target of being net carbon zero by 2040 precisely because we recognise the importance of urgent action at a national and local level.

"Hitting our target will require significant changes to how we use energy – and how we live our lives. We are working towards achieving that change and I welcome this initiative that also tackles the challenges we face head on."

Steve Rotheram, Metro Mayor of the Liverpool City Region, October 2019, Zero Carbon Communities Launch

#### Key Glasgow targets for the path to Net Zero by 2030

- Number of electric vehicle charging points needed by 2030: **175,652**
- Number of these which will be installed in non-residential places: **16,660**
- Estimated cost to install chargers across Glasgow: **£298 million**
- Number of homes that will install heat pumps by 2030: **244,183**
- Estimated cost of installing these heat pumps: **£1.4 billion**
- Estimated network investment cost by 2030: **£648 million\***



#### Key Liverpool City Region targets on the path to Net Zero by 2040

- Number of electric vehicle charging points needed by 2040: **585,340**
- Number of these which will be installed in public places: **47,711**
- Estimated cost to install chargers across the Liverpool City Region: **£890 million**
- Number of homes that will install heat pumps by 2040: **547,459**
- Estimated cost of installing these heat pumps: **£4.9 billion**
- Estimated network reinforcement cost by 2040: **£1.4 billion\***
- Estimated jobs supported by decarbonisation investment: **12,466**



\* Based on SP Energy Networks analysis, the co-ordinated and strategic use of SMART planning and advanced management techniques has the potential to reduce overall network reinforcement costs by 30%-40%.