SOUTHAMPTON CARBON ROADMAP

– The Net Zero Challenge.

BACKGROUND

1.5°C

Based on scientific recommendation the level of global temperature rise at which we risk triggering dangerous climate change

2030

The point at which - at current rates - the world will have locked into more than 1.5 C of warming

GLOBAL TO LOCAL

8.8m tonnes

- Southampton's share of the global carbon budget by population (to keep to 1.5 C warming) from 2021.

CO_2

Southampton is emitting approx

0.8m tonnes

of carbon per year. At this rate we will have used up our budget by

2032.

29% of Southampton's emissions come from transport, **31%** from housing, **23%** from public and commercial buildings **17%** from industry.

BASELINES AND TARGETS

We need to decrease carbon emissions by

62%

by **2025**

To keep on track for the UK government of a

78%

reduction in emissions by **2035**

To achieve the UK governments target of being

NET ZERO CARBON

by **2050**

Southampton will need to close the gap with the following options

COST EFFECTIVE OPTIONS

Cost effective options such as improved insulation in houses, and better cooling and insulatation in commerical buildings could close the **2050** gap by **40%.** These are options where the costs are covered by the benefits.

These options would reduce Southampton's total energy bill by

£62m

per year and create

744

years of employment in the area.

MORE AMBITIOUS OPTIONS

More ambitious but expensive options could further close the **2050** gap by

26%

These would have benefits for the economy, travel, health, quality, and environment.

These options include low carbon heating such as heat pumps and insulation in domestic buildings, electric vehicles, energy efficient appliances and low energy lighting.

REACHING THE TARGET

Southampton still has to identify innovative options for the last

34%

of the gap between the business as usual scenario and net zero in **2050.** These will include changing some behaviours and consumption habits and offsetting any residual emissions with tree planting or other carbon capture methods.

There isn't a sliver bullet. A range of measures will need to be adopted and each sector will be different

Net Zero by 2050

*Net-zero, like "carbon neutral", refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere, with any residual emissions removed through carbon sinks.

OURGREENERCITY SOUTHAMPTON

SOUTHAMPTON CITY COUNCIL