



SOLENT  
**LOCAL**  
ENTERPRISE  
**PARTNERSHIP**

#Solent2050

# Powering the Solent:

To be the UK's leading gateway  
for innovative and sustainable heat  
and power solutions by 2050

# Powering the Solent:

Vision: To be the UK's leading gateway for innovative and sustainable heat and power solutions by 2050

Local Enterprise Partnerships (LEPs) are responsible for ensuring opportunities for economic development in their local area are identified and maximised.

This Solent Heat and Power Strategy recognises that energy generation drives economic growth and prosperity for the region. Innovation in low carbon and energy efficiency are significant economic opportunities for the Solent and align with the Clean Growth Grand Challenge in the Industrial Strategy.

Working with the Carbon Trust, Solent businesses, local authorities, academia and the third sector, we've developed an action plan, benchmarking our energy needs today, how we secure our future requirements and capitalising on our strengths to do even better. Our long-term vision which focuses in six priority areas, is to be the UK's leading gateway for innovative and sustainable heat and power solutions by 2050.

It is a transformative approach that will see the Solent region increase productivity and prosperity while securing sufficient energy to do so. We are keen to empower and support communities, businesses, the public sector, education providers, researchers and others, to make it a reality and place the Solent at the leading edge of clean growth innovation.

**Here we set out just some of the ideas in our plan across our six priority areas, to support the Solent region to become the UK's leading gateway for innovative and sustainable heat and power solutions by 2050.**

# The Solent region - economy in numbers

**£31bn**

annual  
value of  
Solent  
economy

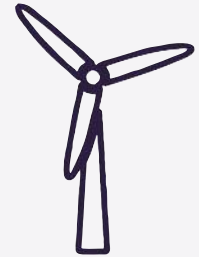


**42,000**

jobs in sectors  
including marine,  
maritime,  
manufacturing  
and engineering

**250**

jobs in wind  
turbine  
manufacture  
at MHI Vestas  
Offshore Wind



**29%**

proportion of renewable or low  
carbon sources in current  
installed electrical capacity



**5.2**

terawatts of electrical energy  
generated in the Solent in  
2015, of which 11% came  
from renewable sources



**300**

homes to receive  
retrofit energy  
measures in the  
Havant Council  
area by 2020



**2020**

Southampton  
Green City  
Charter to be  
implemented



**100%**

the Isle of  
Wight's target for  
self-sufficiency  
in renewable  
energy



# 1 How to unlock growth in marine, maritime and defence

Drive more energy efficiency in port operations and across the marine, maritime and defence sectors.

Increase local sourcing of cleaner, more affordable fuels, working with Solent universities and industries to build upon innovation.



# 2 How to embrace the energy system revolution



Capitalise on the Solent's existing web science and digital sector strengths.

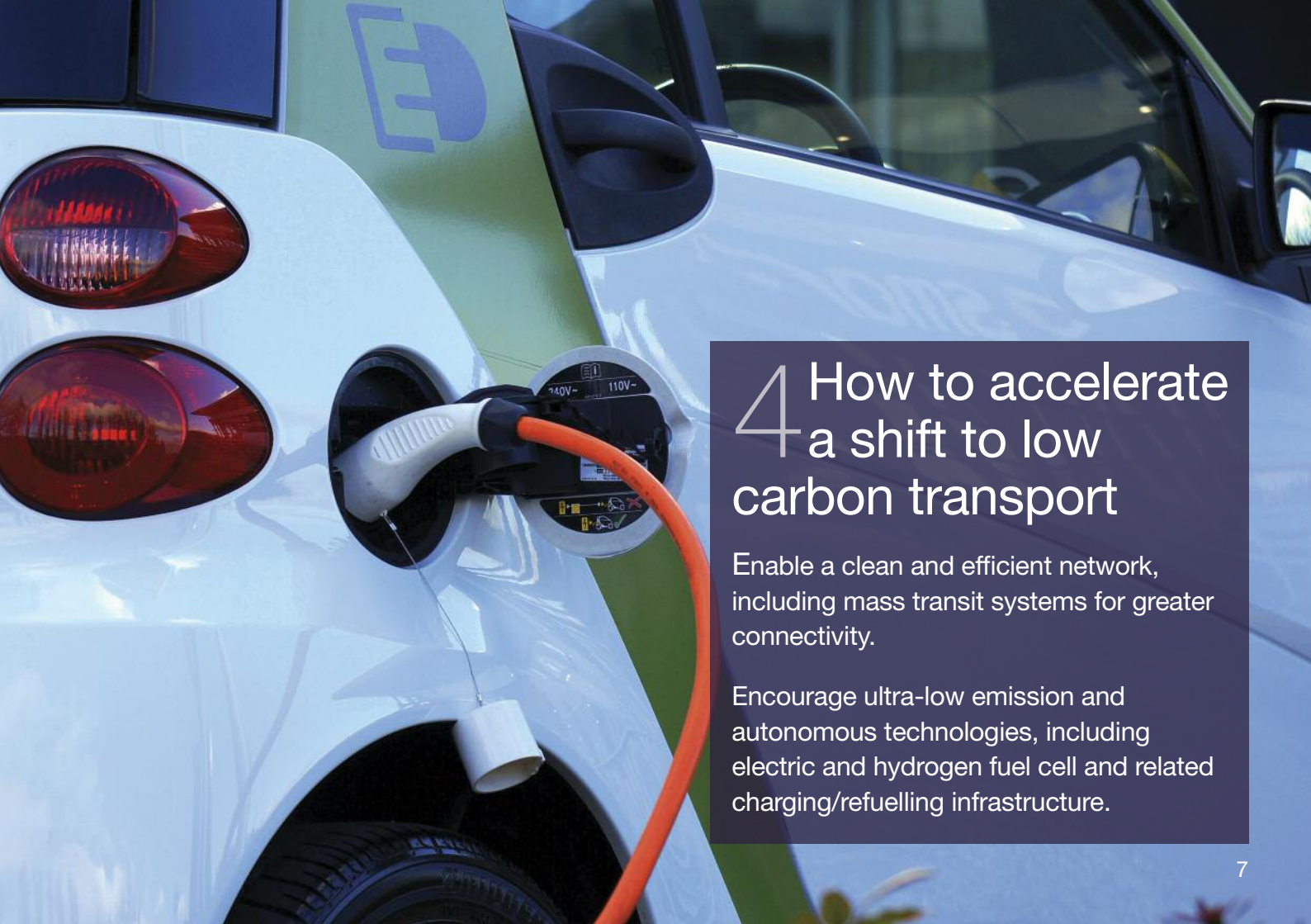
Deploy smart grid technologies, including demand-side response, smart meters and energy storage.



# 3 How to deliver affordable, clean heat and power

Encourage more investment in renewable electricity generation, including solar PV, tidal, combined heat and power, and heat networks.





## 4 How to accelerate a shift to low carbon transport

Enable a clean and efficient network, including mass transit systems for greater connectivity.

Encourage ultra-low emission and autonomous technologies, including electric and hydrogen fuel cell and related charging/refuelling infrastructure.





# 5 How to improve our homes

Local authorities to deliver significant numbers of new affordable housing incorporating high levels of energy and water efficiency and retrofit energy measures to existing homes.



# 6 How to boost productivity across business and industry

Support businesses to grow while implementing decarbonisation and energy efficiency action plans.



# The role of Solent LEP

We have a principal role for economic growth leadership in the Solent. The energy infrastructure contributes to and supports the wider economy and is a key component / factor in unlocking future growth.

To achieve the vision of the Solent region becoming the UK's leading gateway economy by 2050, the LEP will need to secure the commitment of and work in partnership with a wide range of organisations, including the South West Energy Hub.

Drawing on expertise from within the Solent and further afield, there needs to be a collective focus on capability, resources and finance to turn the vision into a reality for the Solent area.

## Putting plans into action

To make this proposition a reality and to support the wider work of the Local Industrial Strategy, a set of strategic areas for heat and power generation to be explored across the Solent are set out:

- Smart Ports
- Solar
- Hydrogen
- Transport
- Wind



# Our action plan seeks to develop the following:

## SMART PORTS

**Maritime technology:** The ports of Southampton and Portsmouth offer a significant strategic opportunity for the clean energy sector. Already its 2,000 roof-mounted solar panels make Southampton's Ocean Terminal the UK's first carbon-neutral cruise terminal.

There is scope in both Southampton and Portsmouth to develop emission-reducing technologies for vessels at sea and in port, and to achieve more on-shore industrial automation.



## WIND

**Offshore potential:** The Solent has a rapidly growing off-shore wind sector with major companies such as MHI Vestas Off-shore Wind investing in the Solent, building on its existing workforce and supply chain strengths. Further sector potential is anticipated with a new round of seabed leasing by the Crown Estate.

## SOLAR

**Sun power:** In 2015, 11% of the energy generated in the Solent came from renewable sources. Recent developments such as Newlands Solar Farm in Fareham, generating energy to power 5,500 homes per year, and the Cadland Estate in Fawley, providing enough electricity to power around 1,000 homes, are contributing to this figure.





## HYDROGEN

### **Smart grid technology:**

There is scope to extend the Isle of Wight's smart grid combining energy storage, real-time network management, demand-side response and smart meters.

Ambitions include a hydrogen electrolyser to create a supply of transport fuel for the local bus fleet and private car owners.



## TRANSPORT

**On the move:** Integrated mass transit systems and electric vehicle charging infrastructure are key to accelerating the shift to low carbon transport across the Solent. We will encourage the development of liveable places where people can walk and cycle to their destinations, while the potential for water transport will also be explored.

Feasibility studies will be needed to assess specific project opportunities and sources of funding.



## Working in partnership

To read the Solent Heat and Power Strategy and Action Plan to 2050, visit [www.solentlep.org.uk](http://www.solentlep.org.uk)

If you have any comments or questions, or would like to partner on specific activities, talk to us at [info@solentlep.org.uk](mailto:info@solentlep.org.uk)



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