

Regions for Sustainable Change

Prioritisation of Actions for a Low Carbon Economy

The PACE Tool



Aim:

To promote an EU wide shift to climate-friendly economies and identify opportunities for, and the costs and effects of, moving to a low-carbon-economy

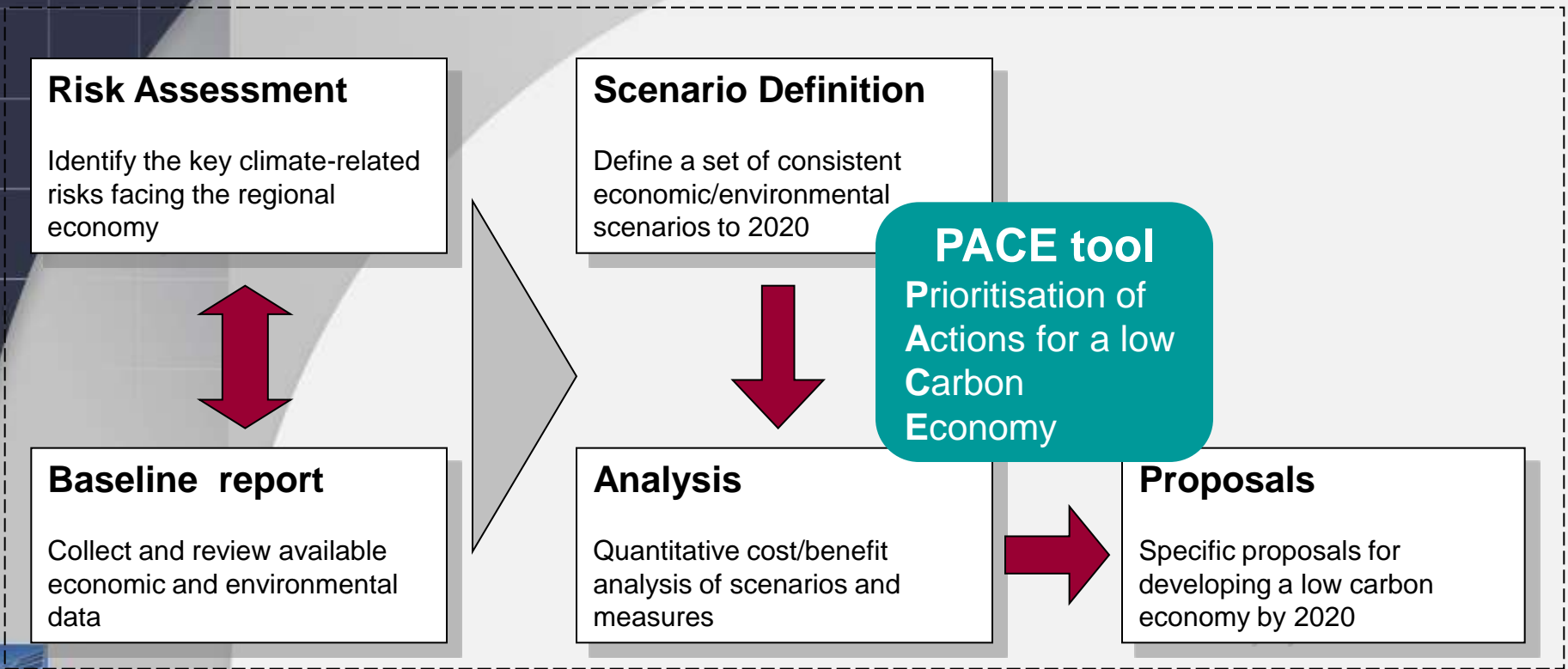
Project Outputs:

- Regional Climate Confidence Index (RCCI)
- Low Carbon Indicators Toolkit
- Discussion and Guidance Paper on SEA and Climate Change
- Building a Low Carbon Economy – A Handbook for European Regions
- **Analysis of the Carbon Emissions-related Aspects of Three European Regions**

www.rscproject.org/



Analysis of the Carbon Emissions-related Aspects of Three European Regions



TRANSFERABLE TOOLKIT

PACE compares a wide range of carbon mitigation measures a region might be considering in terms of **cost effectiveness**, **carbon impact** and **jobs creation**.

Key Features

- Quantitative **cost/benefit analysis** of measures
- Draws on **relevant** and **robust** data
- Uses evidence from **existing** regional/national/international impact studies
- Always compares the measure with the **reference case**



Cornwall's Measures	Short Title
50 MW of deep geothermal plant	RE.Geo
'Easy' energy efficiency in all suitable domestic properties	EE.Easy
'Hard' energy efficiency in 10,000 hard to treat properties	EE.Hard
25,000 domestic photovoltaic installations	RE.PV.Dom
20,000 domestic ground source heat pumps	RE.GSHP
50 MW of wave power	RE.Wave
Replacement of 2% of private vehicles with electric vehicles	TR.Elec
40 small/medium anaerobic digestion installations	RE.AD
200 MW of photovoltaic parks	RE.PV.Park
5 community district heating networks	RE.DH

Key Results for Cornwall

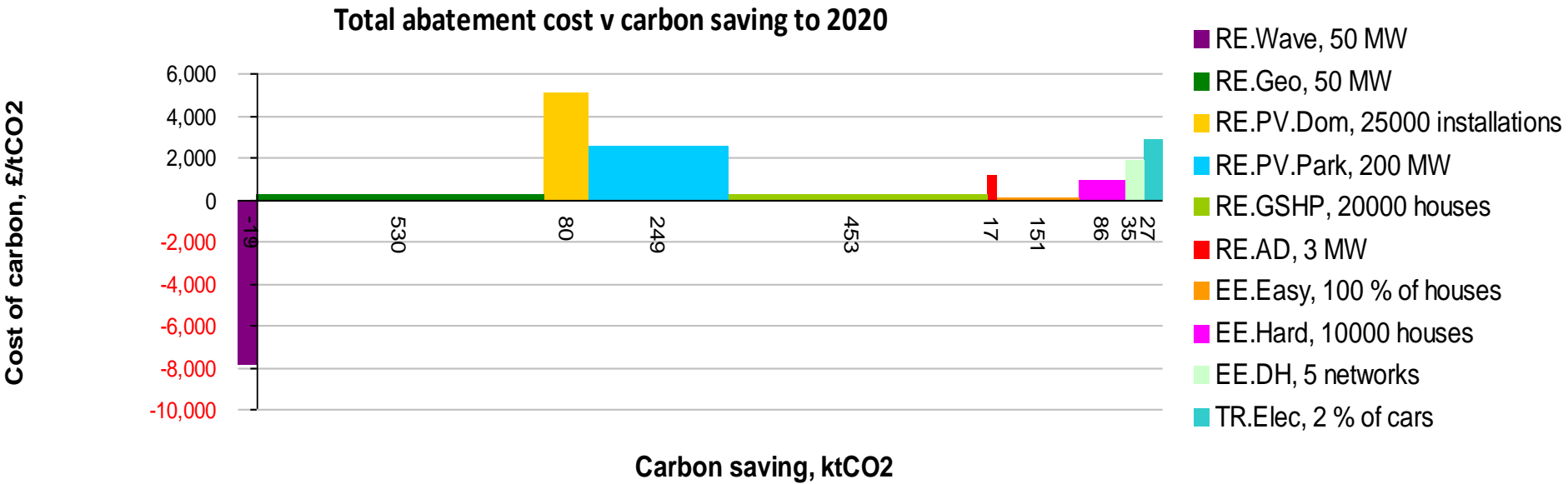
PACE Dashboard

Measure	Include	Evidence quality	Start date	Completion date	Scale	Units	Earliest start date	Build time
RE.Wave	<input checked="" type="checkbox"/>	 	2015	2022	50	MW	2015	2
RE.Geo	<input checked="" type="checkbox"/>	 	2011	2020	50	MW	2010	3
RE.PV.Dom	<input checked="" type="checkbox"/>	 	2011	2020	25,000	installations	2010	1
RE.PV.Park	<input checked="" type="checkbox"/>	 	2011	2020	200	MW	2010	1
RE.GSHP	<input checked="" type="checkbox"/>	 	2011	2020	20,000	houses	2010	1
RE.AD	<input checked="" type="checkbox"/>	 	2011	2020	3	MW	2011	1
EE.Easy	<input checked="" type="checkbox"/>	 	2011	2020	100	% of houses	2011	1
EE.Hard	<input checked="" type="checkbox"/>	 	2011	2020	10,000	houses	2011	1
EE.DH	<input checked="" type="checkbox"/>	 	2011	2020	5	networks	2010	2
TR.Elec	<input checked="" type="checkbox"/>	 	2011	2020	2	% of cars	2011	1

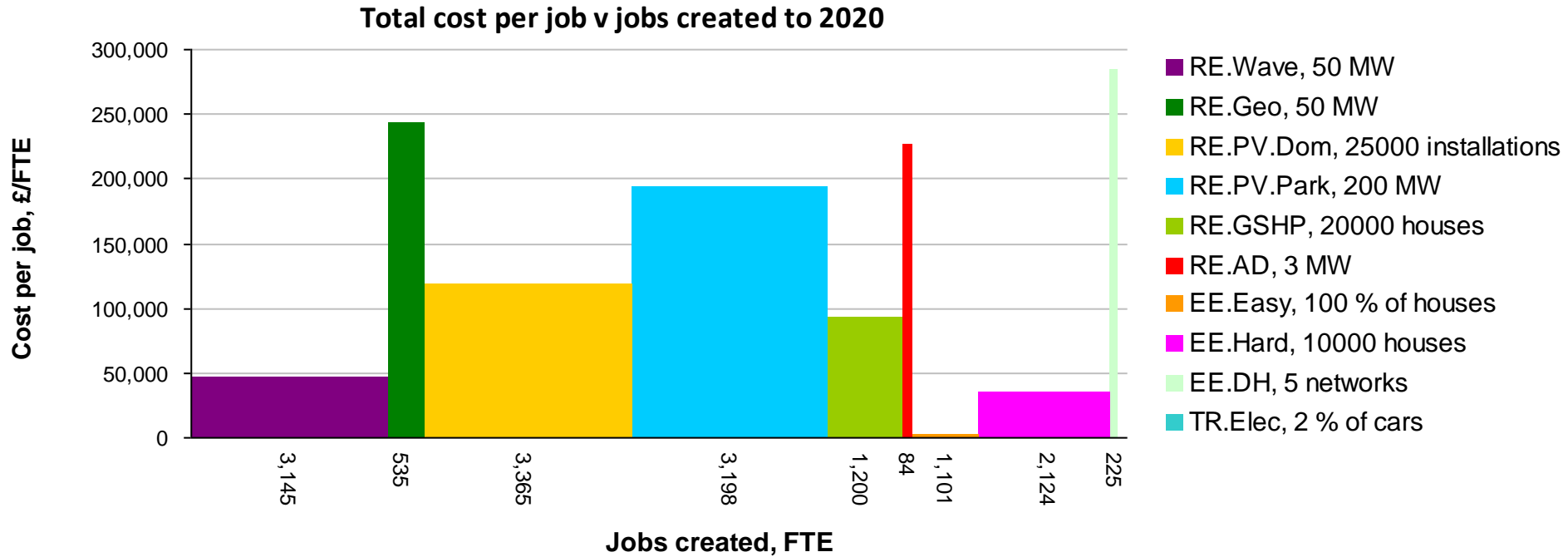
Impact to 2020

Measure	Include	QoE	Total impact to 2020				
			Net cost (NPV) £m	Carbon savings ktCO2	Cost of carbon £/tCO2	Jobs created FTE	Cost per job £/FTE
RE.Wave	TRUE		149	-19	-7,874	3,145	47,315
RE.Geo	TRUE		131	530	246	535	244,231
RE.PV.Dom	TRUE		401	80	5,050	3,365	119,300
RE.PV.Park	TRUE		620	249	2,485	3,198	193,819
RE.GSHP	TRUE		112	453	248	1,200	93,469
RE.AD	TRUE		19	17	1,143	84	226,670
EE.Easy	TRUE		3	151	21	1,101	2,819
EE.Hard	TRUE		77	86	890	2,124	36,066
EE.DH	TRUE		64	35	1,819	225	284,109
TR.Elec	TRUE		78	27	2,890	0	

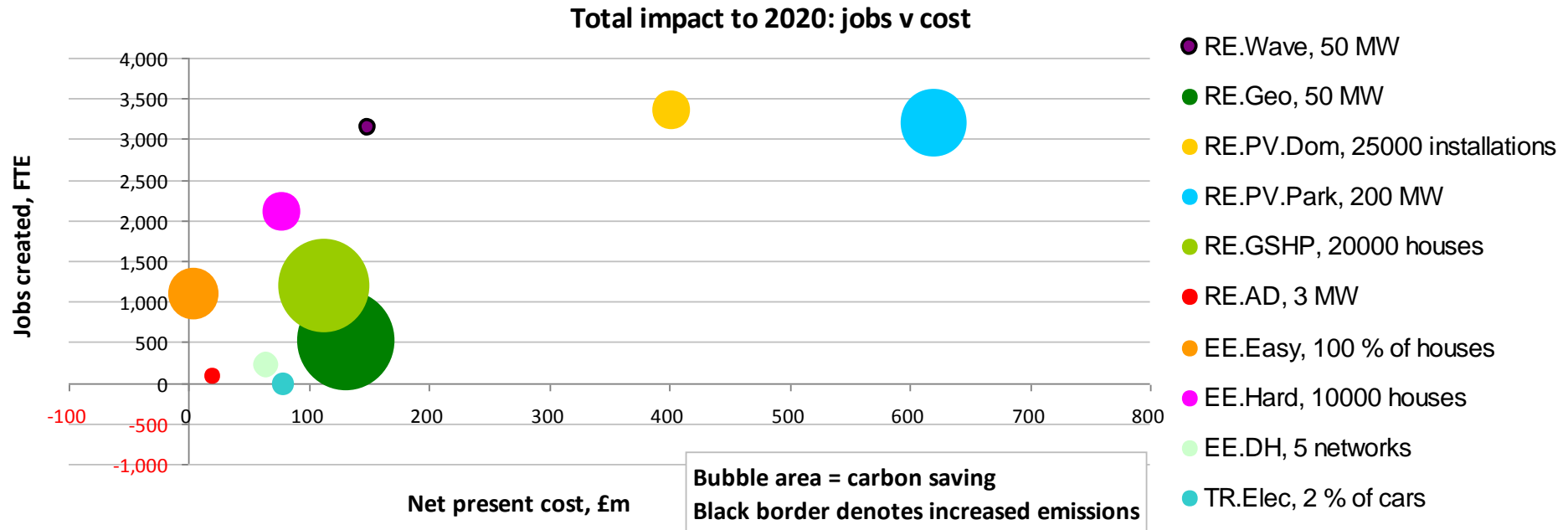
Total abatement cost v carbon saving to 2020



Total cost per job v jobs created to 2020



Total impact to 2020: jobs v cost



A Transferable Tool

- The PACE Tool is designed with transferability at its heart.
- 'Empty' PACE Tool and guidance manual serve as a guide to other regions
- Solid measure 'library' for regions to use as a template.

Testing Transferability

- The tool is being tested by two RSC partners:
 - Hungary (on national level)
 - Bulgarian Ministry of Regional Development (for the 6 NUTS-2 regions).
- Results to be presented on the RSC website by end 2011.

www.rscproject.org/

Lisa Goodall
Project Delivery Officer
Cornwall Development Company

tel. +44 (0)1209 617009

e. lisa.goodall@cornwalldevelopmentcompany.co.uk

w. www.rscproject.org/

