

Sustainable Commercial Model for Networks (SCM)

LCNI 2014 Conference

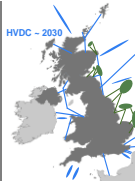


George Cobb

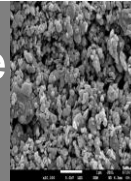
Sustainability Accountant

Reliability & Availability

The National HVDC Centre (MTTE)



Nano-composite Insulation



Asset Prognostics



MASC



Transformer Intrascopes



Dynamic Line Rating



New Transmission Structure



Insulated Cross-Arms



Sustainable Commercial Model



Safety, Health & Environment

Connections & Capacity

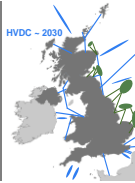
Customer & Social Obligations

Transmission Project Portfolio

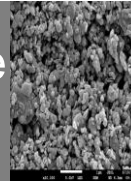
Reliability & Availability

Connections & Capacity

The National HVDC Centre (MTTE)



Nano-composite Insulation



Asset Prognostics



MASC



Transformer Intrascopes



Dynamic Line Rating



New Transmission Structure



Insulated Cross-Arms



Sustainable Commercial Model

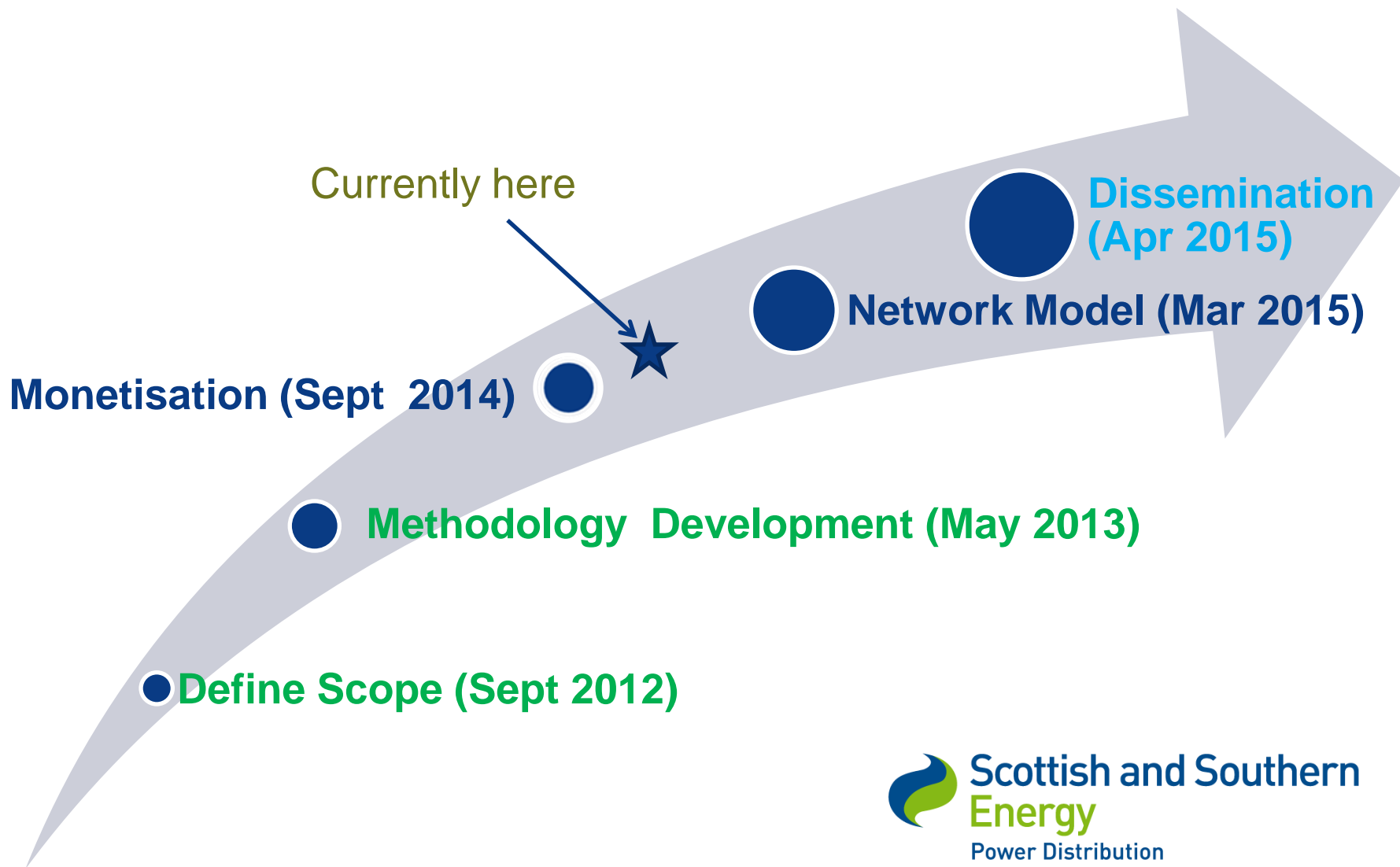


Safety, Health & Environment

Customer & Social Ob

Transmission Project Portfolio

Sustainable Commercial Model Project Timetable



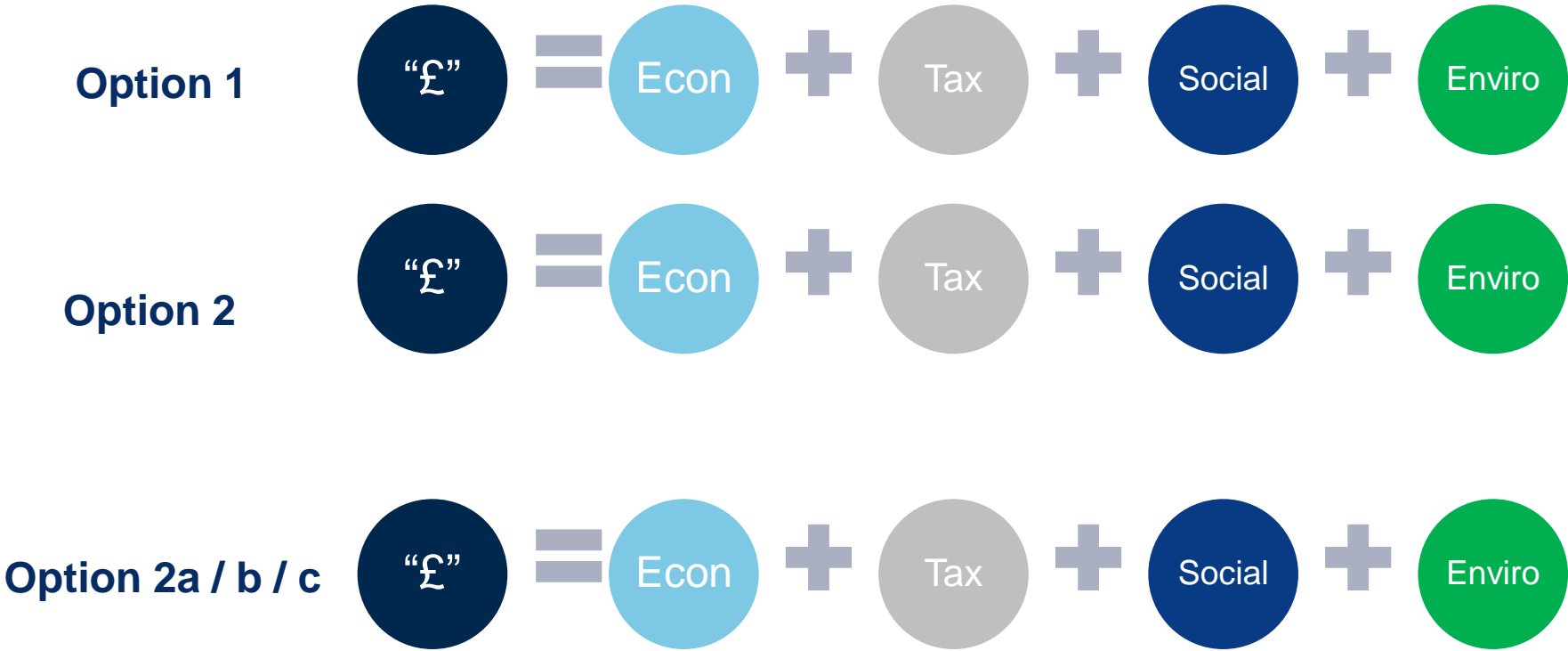
Traditional Commercial Model



Sustainable Commercial Model for Networks "SCM"



Sustainable Commercial Model for Networks



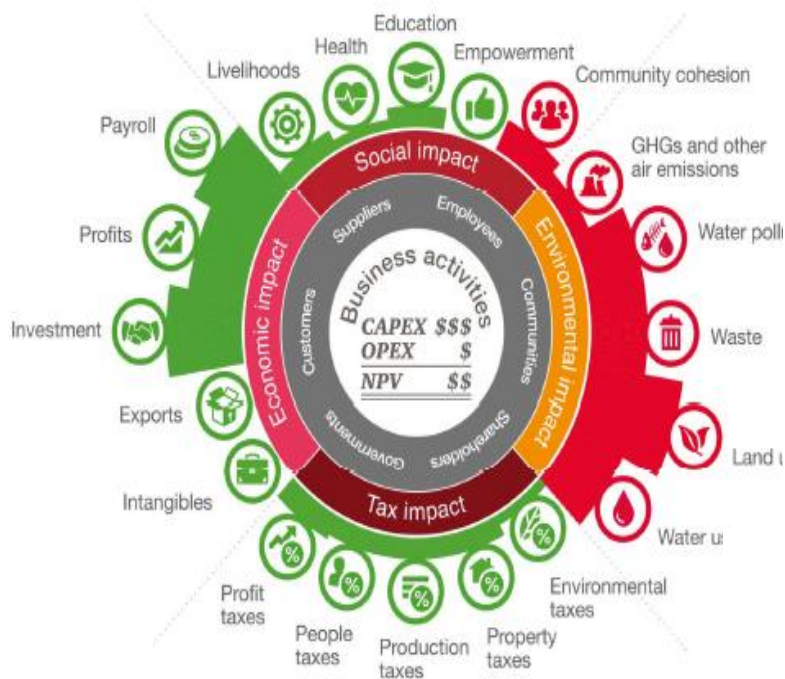
Project Total Impact Cost Benefit Analysis (CBA) (Example)

	Total Project Cost	Stakeholder Engagement			
	£m	Total Impact £m	Economic Impact £m	Social Impact £m	Environmental Impact £m
Planning	20	10	10	0	0
Civil Works	50	50	20	10	20
Over Head Line	300	250	350	(50)	(50)
Substations	70	30	80	(20)	(30)
Mitigation	80	400	100	150	150
Reinstatement	30	110	50	40	20
Total	550	850	610	130	110

Value = £300m of additional Benefit to Society

But could this be more from a reduction in **negative impacts ?**

Project Total Impact Management Measurement (TIMM)



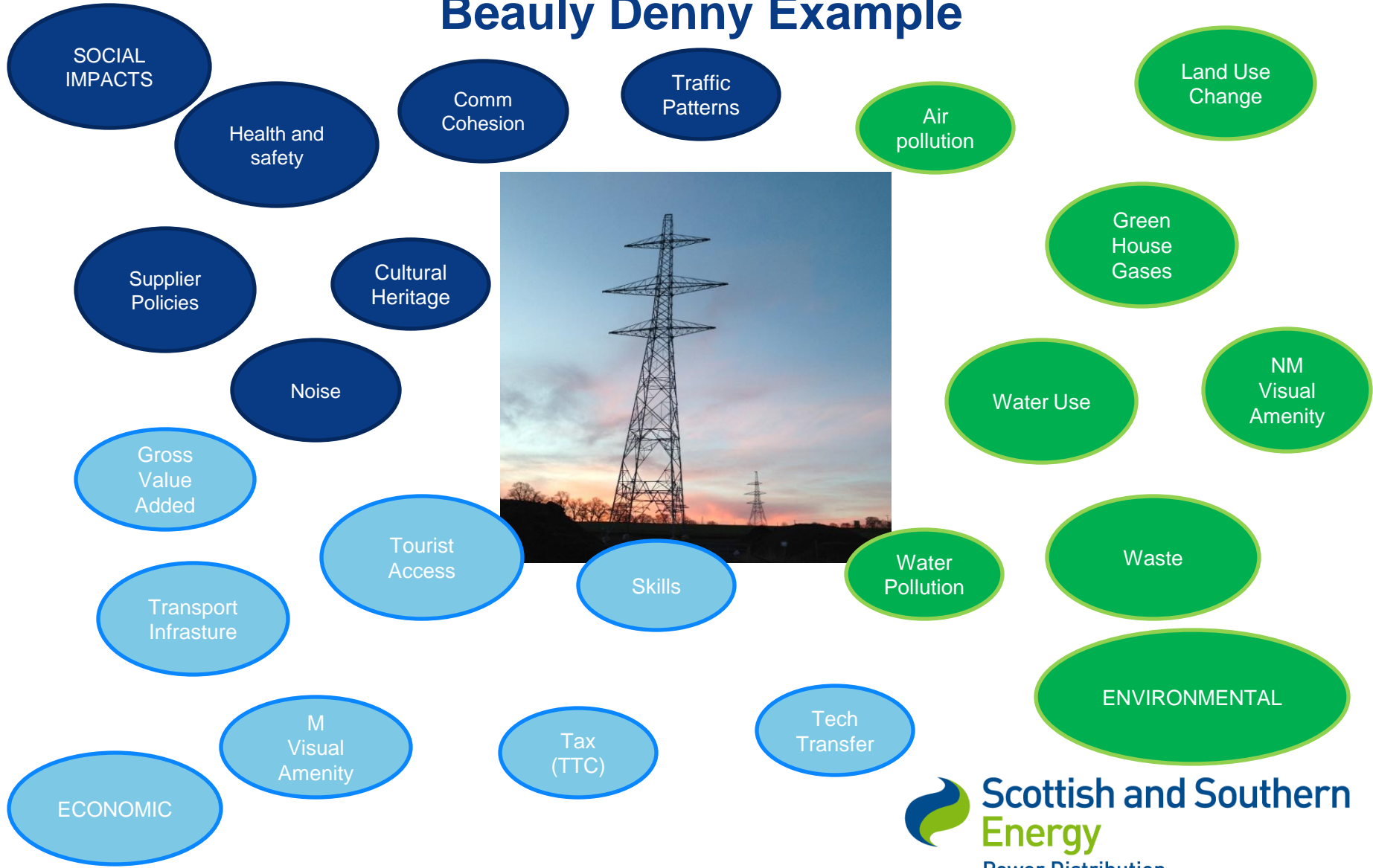
Option 1



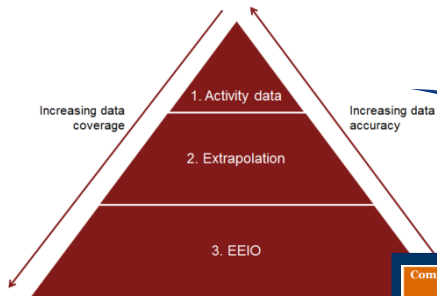
Option 2

(c) 2013. PricewaterhouseCoopers LLP. All rights reserved

Sustainable Commercial Model: Beauly Denny Example



Sustainable Commercial Model: Greenhouse gases - How did we do it?



Company	Emissions from direct combustion	Emissions from purchased electricity	Other upstream emissions	Emissions to date	Future emissions	Beatty-Denny only
SHE Transmission	✓		✗	✓	✓	✓
Balfour Beatty Utility Solutions	✓	✓	✗	✓	✓	✓
Balfour Beatty Civil Engineering	✓	✓	✗	✓	✓	✓
Other suppliers	✗	✗	✗	✗	✗	✗



So what are the benefits of doing all this?

Benefits to Network Operators

- Communicate impacts and value to key stakeholders (regulator and wider public).
- Provide a holistic approach to internal project planning.
- Work through the planning system with greater efficiency for strategic infrastructure projects.
- Contribute faster to a lower carbon energy network.

“Overall build infrastructure that is economically efficient while making sure negative impacts are minimised and positive impacts maximised for both the environment and society”.