

# Chris Plester

Sustainability Advisor, National Grid

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# **Building the Natural Grid**

## **Realising value through a Natural Capital approach**

**Chris Plester – Environmental Sustainability Advisor – National Grid**

**Chris White – Senior Environmental Economist – AECOM**





# Undervalued resources to new opportunity

## Traditional view



Non-Operational Estate

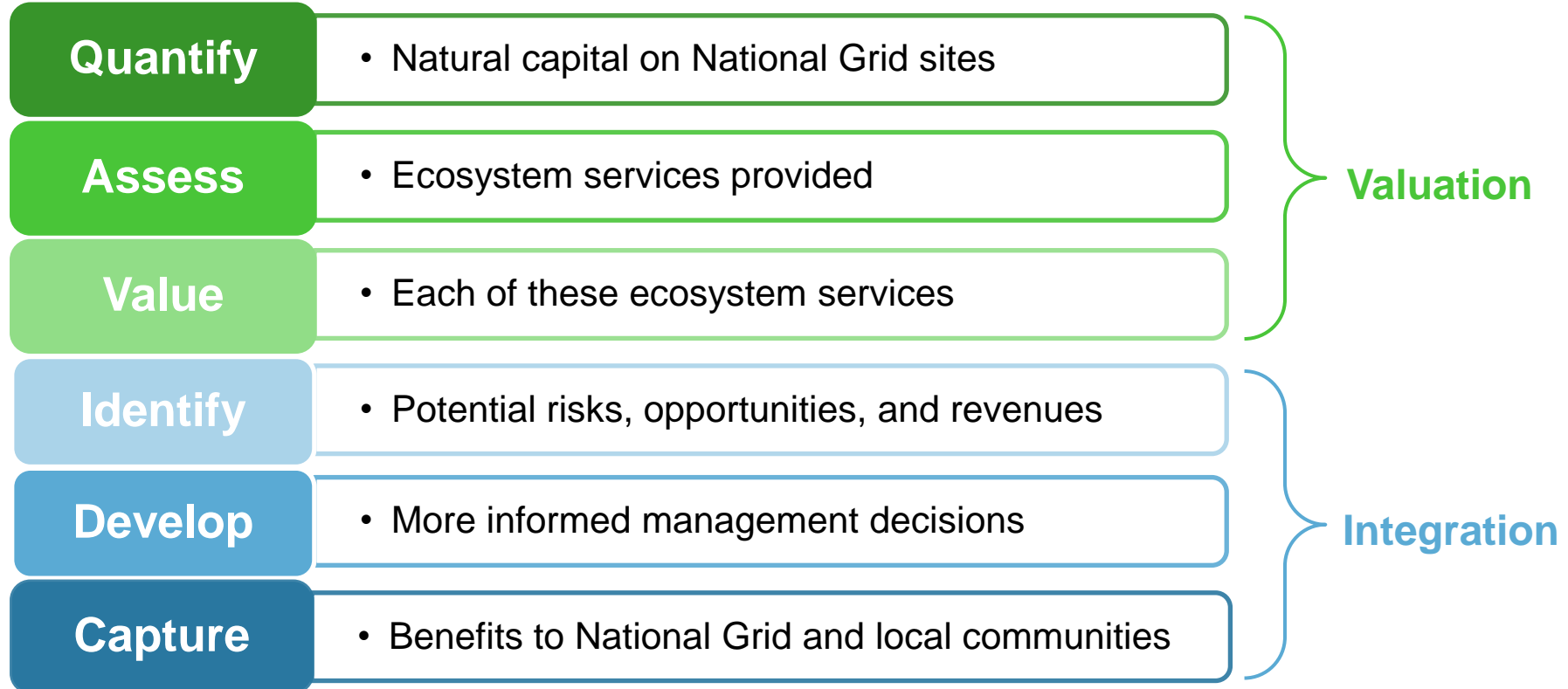
- Management requirements
- Risks
- Costs
- Liability
- Limited return on investment

## Natural Capital view



- Prioritised action
- Identify key dependencies
- Operational efficiencies
- Shared benefits
- Value creation / Positive return

# Approach













THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF  
 ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

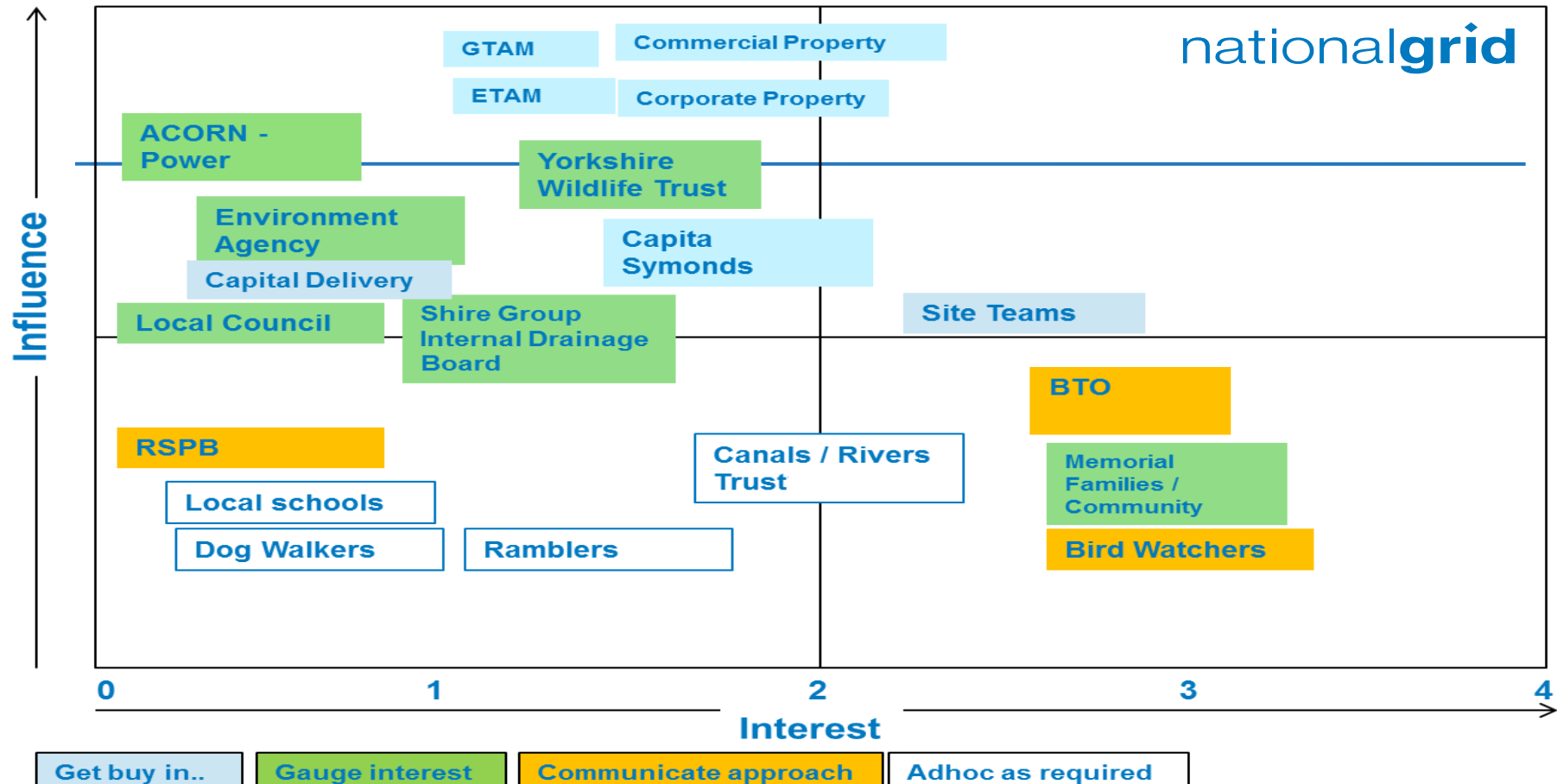




Assess

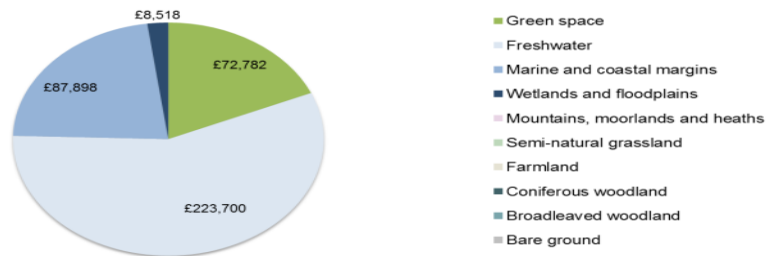
Valuation Report:		National Grid		
		Baseline	Scenario 1	Scenario 2
Provisioning Services				
	Food	£0	£0	£256,794
	Water	£156,332	£156,332	£156,332
	Timber	£0	£0	£0
	Energy	£0	£0	£0
Regulating Services				
	Carbon	£61,940	£14,329	£116,845
	Air Quality	£0	£0	£0



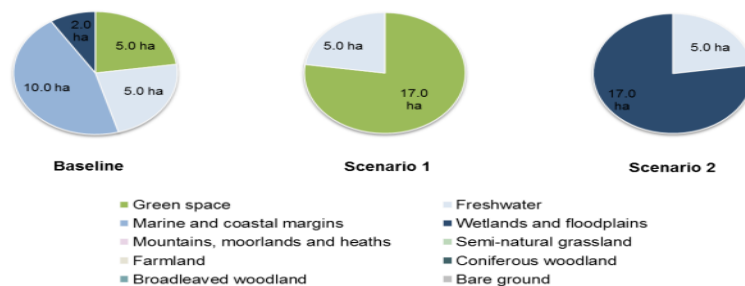


Identify

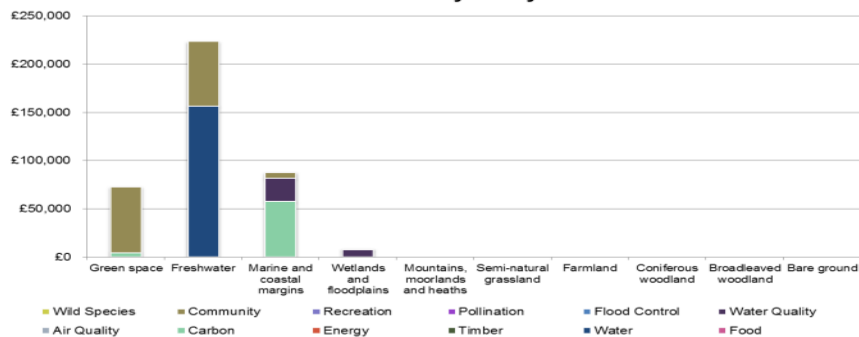
**Baseline Habitat Values**



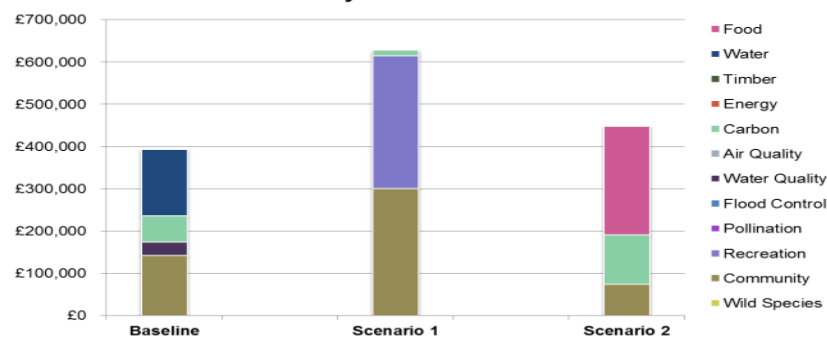
**Natural Capital Stocks**



**Baseline Habitat Values by Ecosystem Service**



**Ecosystem Service Flows**

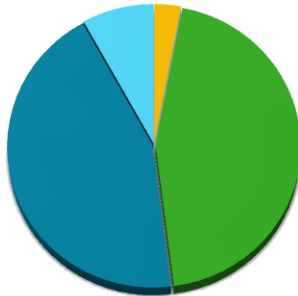




Capture



# Case Study- Thorpe Marsh

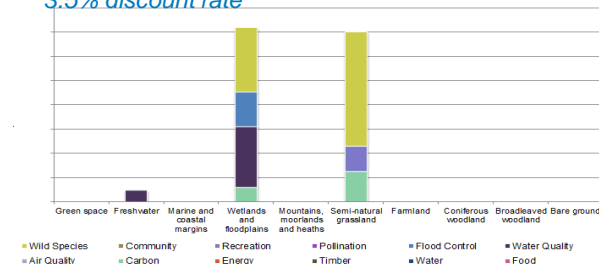


- Green space
- Freshwater
- Marine and coastal margins
- Wetlands and floodplains
- Mountains, moorlands and heaths
- Semi-natural grassland
- Farmland
- Coniferous woodland
- Broadleaved woodland
- Bare ground

ESS Considered	Baseline
Carbon	✓
Water Quality	✓
Flood Control	✓
Recreation	✓
Wild Species	✓

**Baseline Value Circa  
£170,000K**

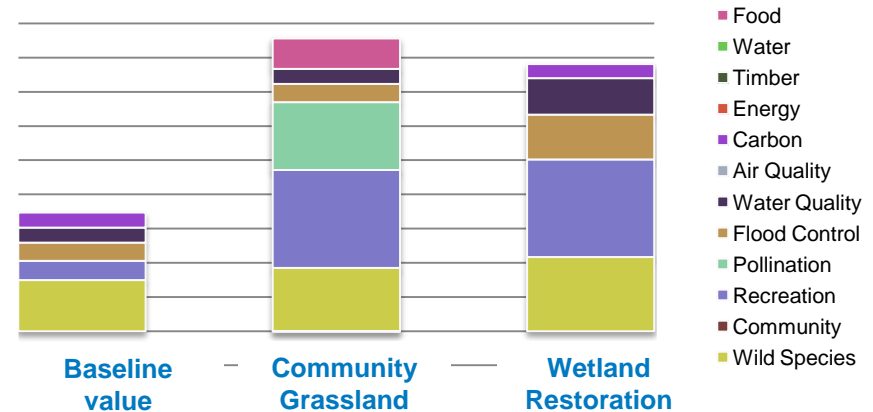
*Values are estimated over a 30 year asset life using a 3.5% discount rate*



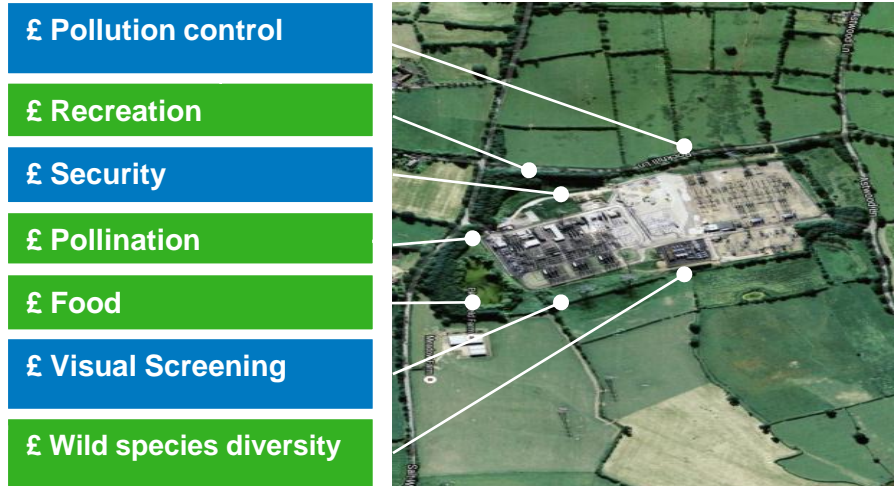
# Natural Capital investment



- Scenario development
- Stakeholder engagement
- Project development / proposal
- Business case including Natural Capital values
- Natural Capital Benefit : Cost Ratio of 8:1
- Delivering shared values & benefits



# A new view of our assets



## Carbon

Value growth: £50M to £125M

- Total of ~330,000 tCO<sub>2</sub>(e)
- 10k tCO<sub>2</sub>(e) each year
- Value ~ £500k each year

- Supports better decisions
- Delivers a positive return on investment
- Protects and enhances the natural environment
- Builds positive relationships with communities & stakeholders
- **Good for business**

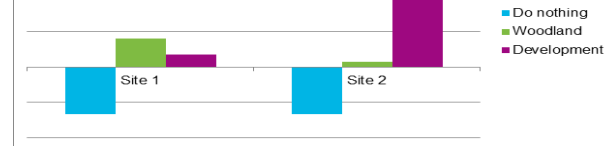


# Looking forward

- Natural Capital approach deployed across our business
- Build a more complete picture of our Natural Capital portfolio & value
- Expand the tool / approach
- Collaborate with new partners
- Better understand the public & private returns
- Integrate into future network development



Forestry Commission



# A Nationwide Opportunity

## Electricity transmission:

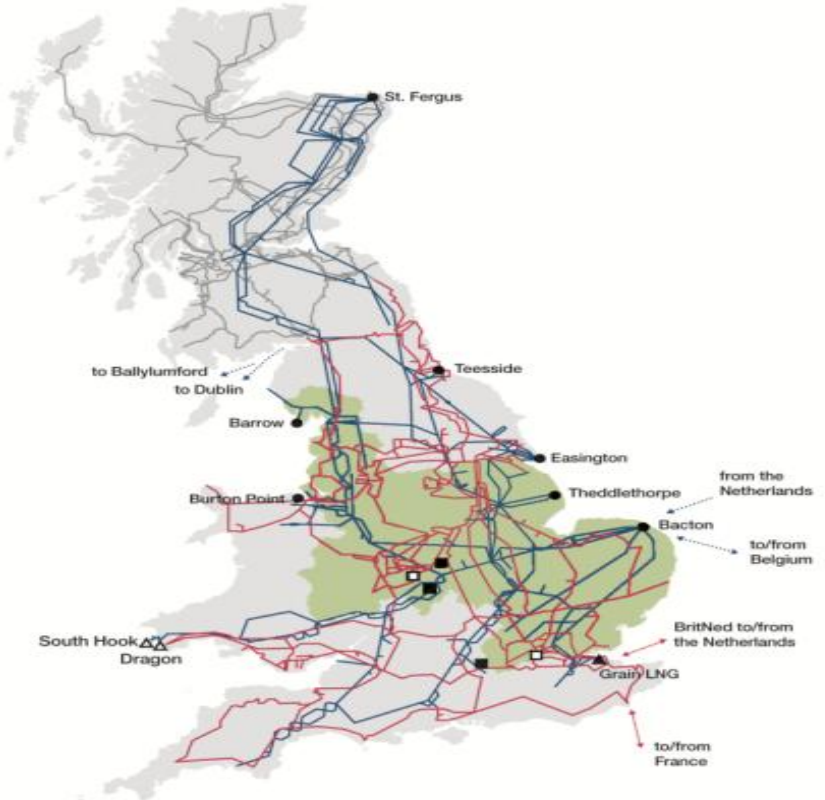
- 7,200 km overhead line
- 1,400 km underground cable
- 329 substations

## Gas transmission:

- 7,660 km high pressure pipeline
- 23 compressor stations

## Legacy landholdings:

- 645 former industrial sites



# Thank You

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