

Visual Impact Provision

Cotswolds Conservation Board
22 May 2014

Hector Pearson
National Grid
Planning Policy Manager



Our UK network

Our UK network



UK Transmission*

— Scottish electricity transmission system

— English and Welsh electricity transmission system

Approximately 7,200 kilometres (4,470 miles) of overhead line, 1,400 kilometres (870 miles) of underground cable and 329 substations.

— Gas transmission system

Approximately 7,690 kilometres (4,780 miles) of high pressure pipe and 23 compressor stations connecting to eight distribution networks and third party independent systems.

● Terminal

▲ LNG terminal owned by National Grid

△ LNG terminal

↔ Electricity interconnector

↔ Gas interconnector

UK Gas Distribution*

■ Gas distribution operating area

Approximately 131,000 kilometres (82,000 miles) of gas distribution pipeline owned and operated by National Grid.

Principal offices

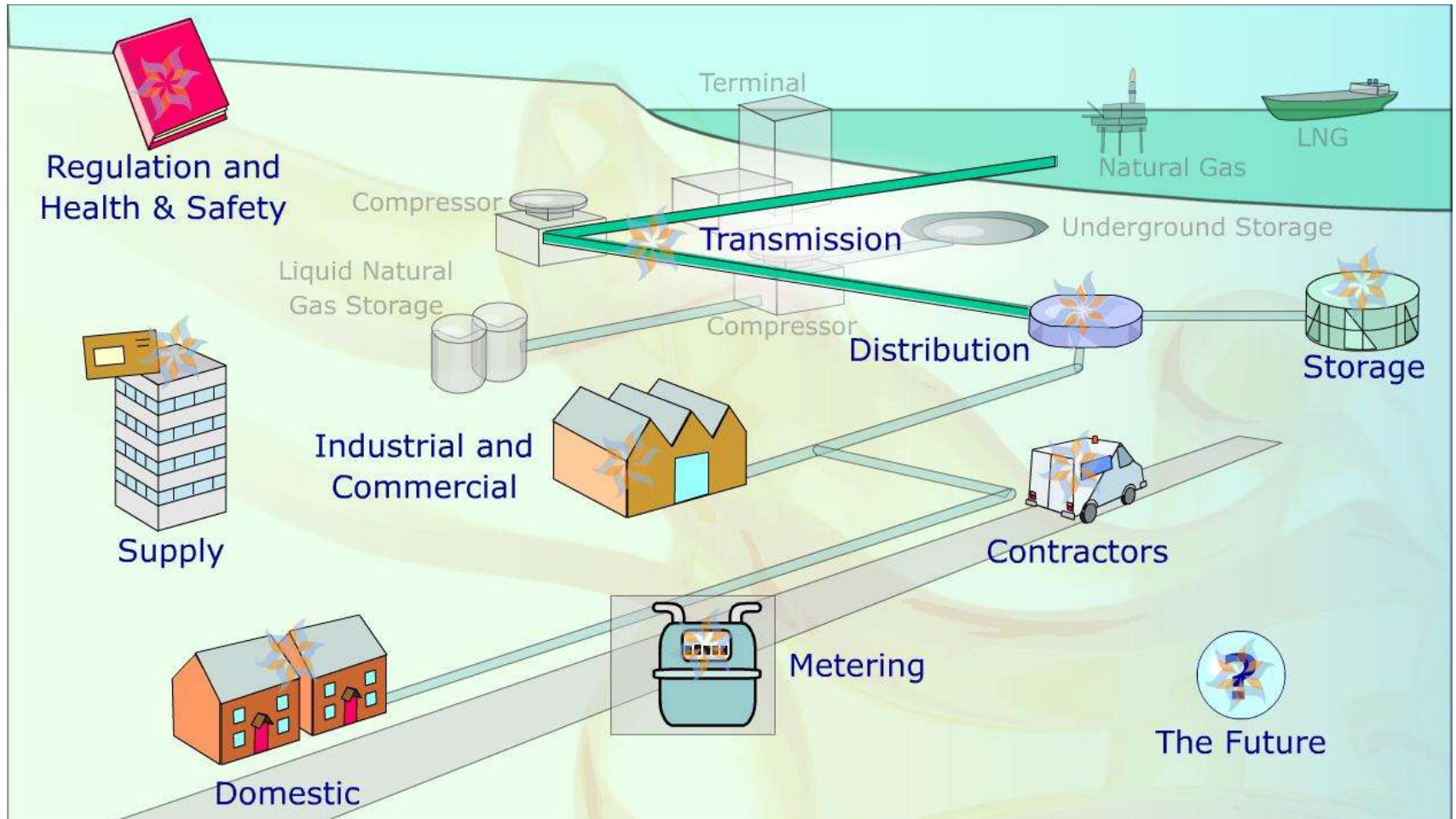
■ Owned office space: Hinkley, Warwick and Wokingham

□ Leased office space: Solihull and London

Leased office space totalling 14,100 square metres (151,700 square feet) with remaining terms of three to 10 years.

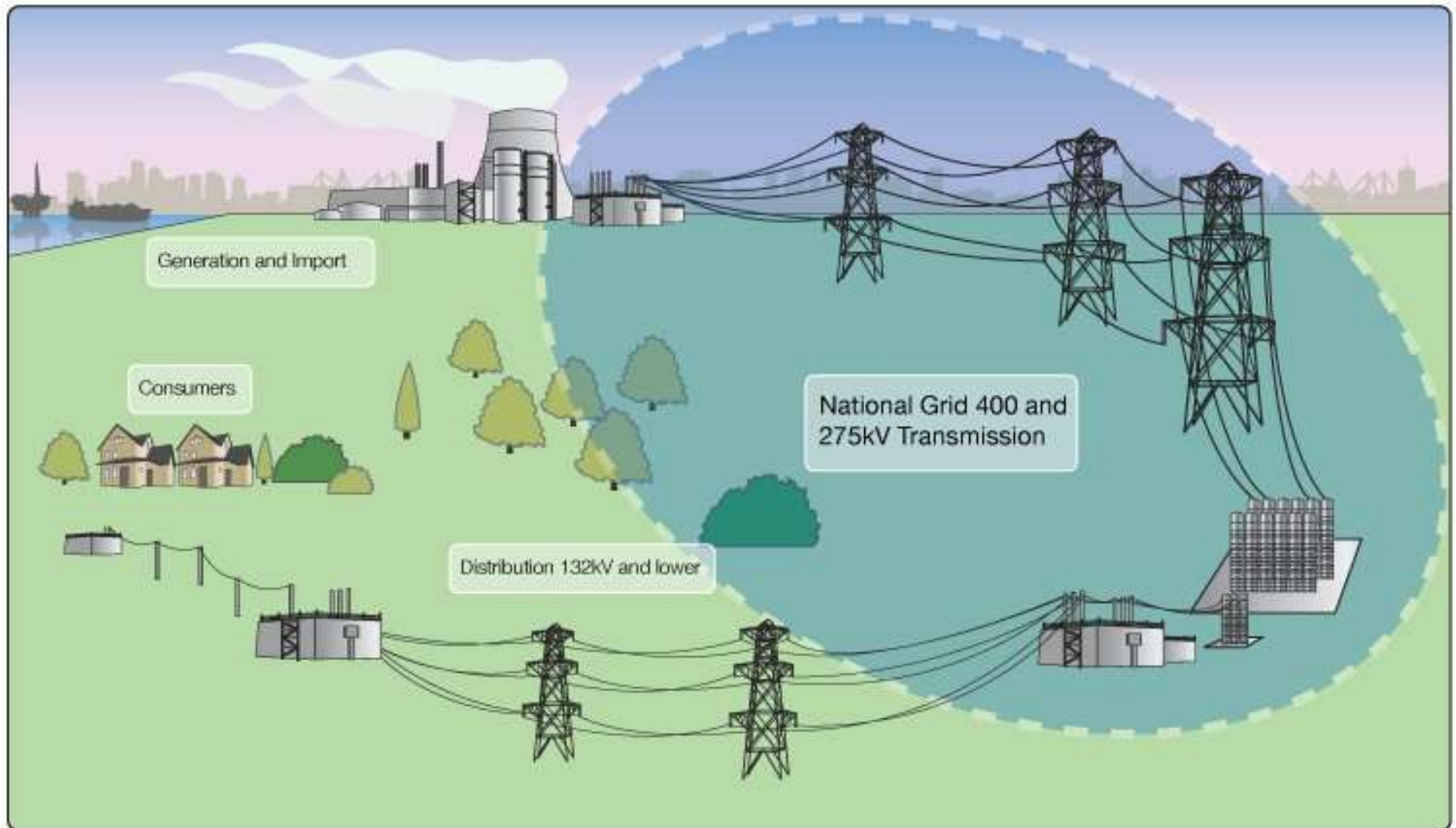
The gas system - from generator to consumer

nationalgrid



The electricity system - from generator to consumer

nationalgrid



National Grid electricity transmission network



- Covers England & Wales
- 84 major power plants connected (~85GW installed capacity).
- Peak demand ~60GW (daily cold winter)
- 400,000 and 275,000 Volt transmission lines
- 7,200 km of overhead line, 750 km of underground cable and 337 substations at 244 sites.
- The largest centre of demand is around London.

The future energy challenge

Sustainability



15% of all energy to come from renewable sources by **2020**



Affordability



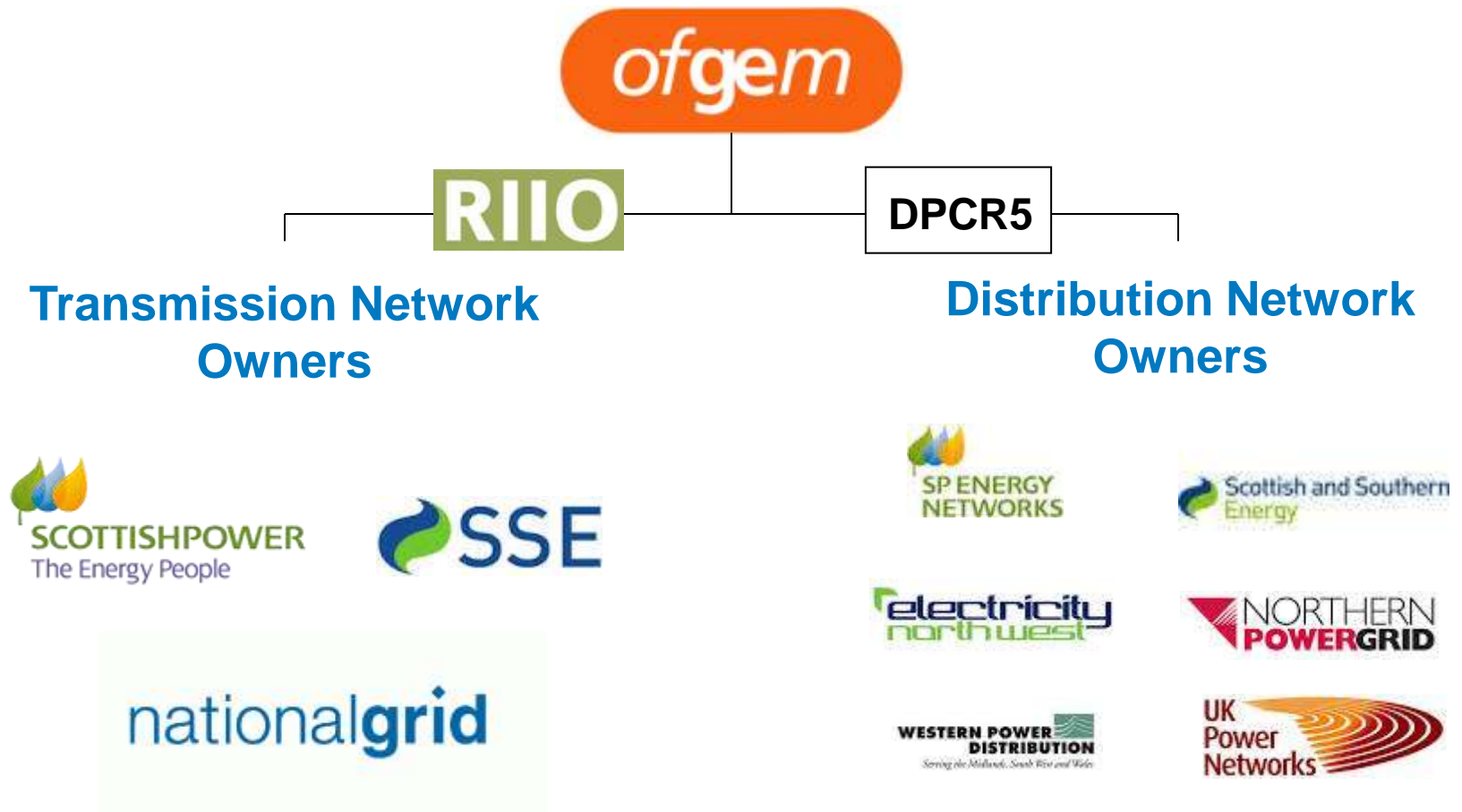
80% reduction in CO₂ emissions by **2050**



Security of supply



We are a regulated industry



Background to the allowance

- Started back in 2005 with the Distribution Network Operators
- The allowance provided money to underground existing infrastructure (electricity poles and lines) in National Parks and AONBs
- Following on from the success of this scheme, Ofgem, under the new RII price control included a similar allowance for Transmission Owners.

Background to the allowance

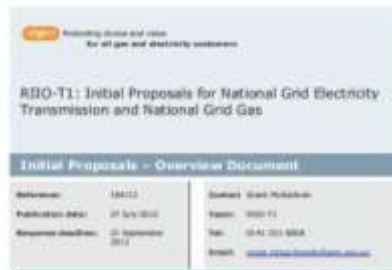
DPCR4/5

Network
Regulation
The RIIO model

=

£500m

ofgem



Special Condition 6G

Sets out the procedure which transmission owners (TOs) need to follow, in order to apply for funding under the allowance.

Prior to making any requests, TOs have to:

- submit a Policy to Ofgem for approval, setting out our objectives for delivering outputs, engaging with stakeholders, prioritising and assessing proposals etc.

The process for applying for funding is:

- TOs makes a request to Ofgem to determine allowed expenditure on a specific Output, including a specification, supporting evidence, forecast costs, feasibility analysis and programme.
- Ofgem determines whether the Output is a) consistent with our Policy, and b) economical and efficient.

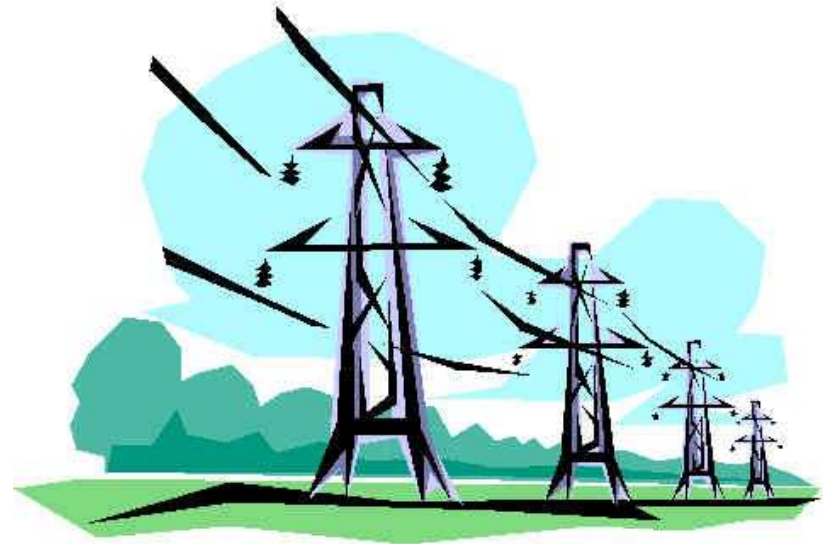
Visual Impact Provision

Is National Grid's approach to securing funding under the allowance.

It applies to:

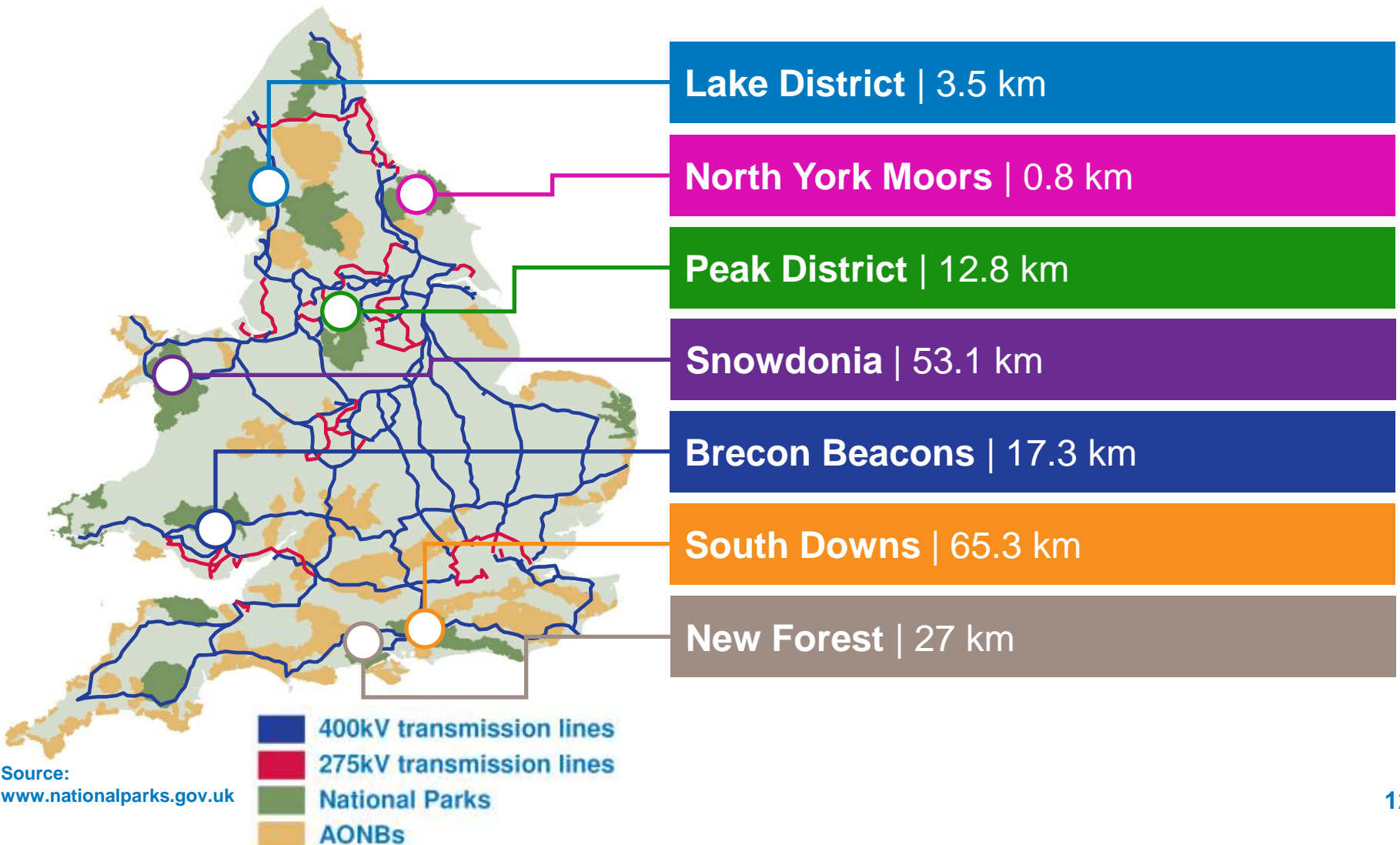


National Parks & AONBs

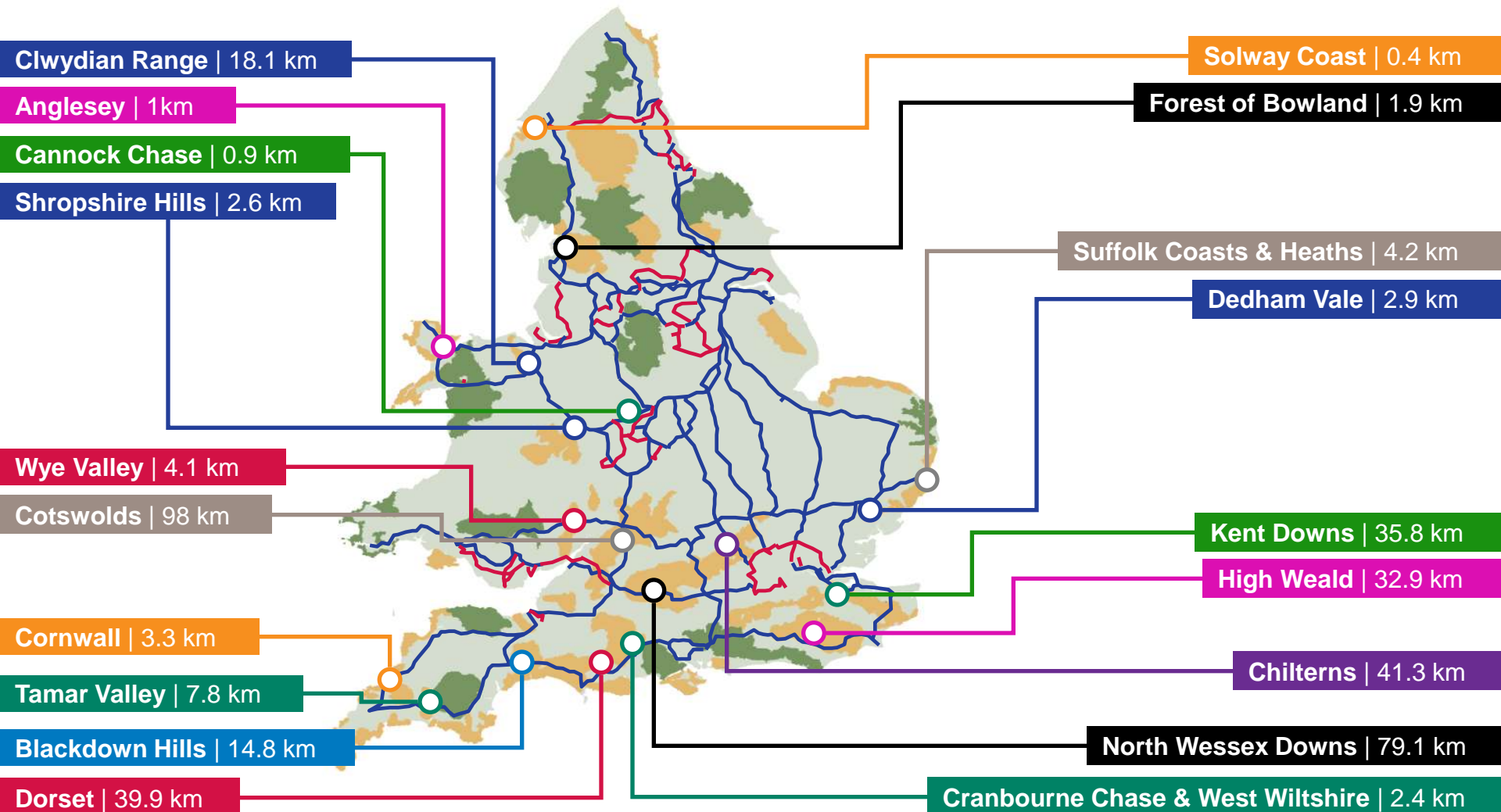


Existing lines only

Our lines in National Parks



Our lines in AONBs



Lines in National Parks and AONBs

National Park	OHL (km)	Cables (km)
Brecon Beacons	17.3	-
Dartmoor	-	-
Exmoor	-	-
Lake District	3.5	-
New Forest	27	-
North York Moors	0.8	-
Northumberland	-	-
Peak District	12.8	5
Pembrokeshire Coast	-	-
Snowdonia	53.1	-
South Downs	65.26	-
The Broads	-	-
Yorkshire Dales	-	-
TOTAL	179.76	5

AONB	OHL (km)	Cables (km)
Anglesey	1	-
Arnside and Silverdale	-	-
Blackdown Hills	14.8	-
Cannock Chase	0.9	-
Chichester Harbour	-	-
Chilterns	41.3	-
Clwydian Range / Bryniau Clwyd	18.1*	-
Cornwall	3.3	-
Cotswolds	98	-
Cranbourne Chase & W Wilts	2.4	-
Dedham Vale	2.9	-
Dorset	39.9	-
East Devon	-	-
Forest of Bowland	1.9	-
Gower (Gwyr)	-	-
High Weald	32.9	-
Howardian Hills	-	-
Isle of Wight	-	-
Isles of Scilly	-	-
Kent Downs	35.8	6.2
Lincolnshire Wolds	-	-
Llyn (Lleyn)	-	-
Malvern Hills	-	-
Mendip Hills	-	-
Nidderdale	-	-
Norfolk Coast	-	-
North Devon	-	-
North Pennines	-	-
North Wessex Downs	79.1	2.85
Northumberland Coast	-	-
Quantock Hills	-	-
Shropshire Hills	2.6	-
Solway Coast	0.4	-
South Devon	-	-
Suffolk Coasts & Heaths	4.2	-
Surrey Hills	-	-
Tamar Valley	7.8	-
Wye Valley	4.1	2.5
TOTAL	391.40	11.55

VIP in numbers

571 km

7%

Approx: £1.6m per OHL/km

£16.7m per UGC/km

Undergrounding the Cotswolds

AONB = £1.6bn

What have we been doing?



July to Sept 2013 – We held an 8 week public consultation on the draft policy for using the provision



Sept to Dec 2013 – We analysed the responses and managed to reflect most of the comments in the revised version



Sept to Dec 2013 – Developed a landscape assessment methodology to provide greater clarity around how decisions would be made



Dec 2013 – We submitted the final policy to Ofgem for review

Feb 2014 – Ofgem published a supportive response and consultation is opened

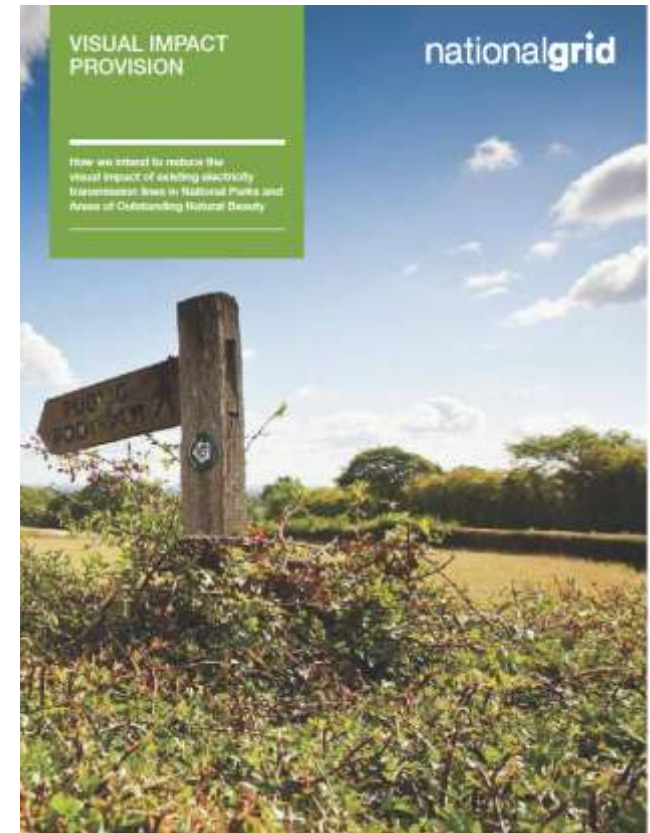
March 2014 – Ofgem confirm the policy fulfils its purpose and support its implementation without any changes

Our Approach

Our Policy

The policy document sets out our plans for using the allowance. These include:

- setting up an independently chaired Stakeholder Advisory Group to help National Grid set the priorities for spending the £500m;
- substantial engagement with organisations and communities not on the advisory group; and
- decision making based on a series of Guiding Principles.



The Stakeholder Advisory Group



NATIONAL PARKS WALES
Britain's breathing spaces



Guiding principles

Prioritise proposals which...



Landscape Assessment Methodology

Alongside the policy, we have published a Landscape and Visual Assessment methodology which, we propose to use as the basis for prioritising landscape impacts.

A shortlist of the worst affected areas will be taken forward for further assessment, to look at the potential for undergrounding the line or section of line.

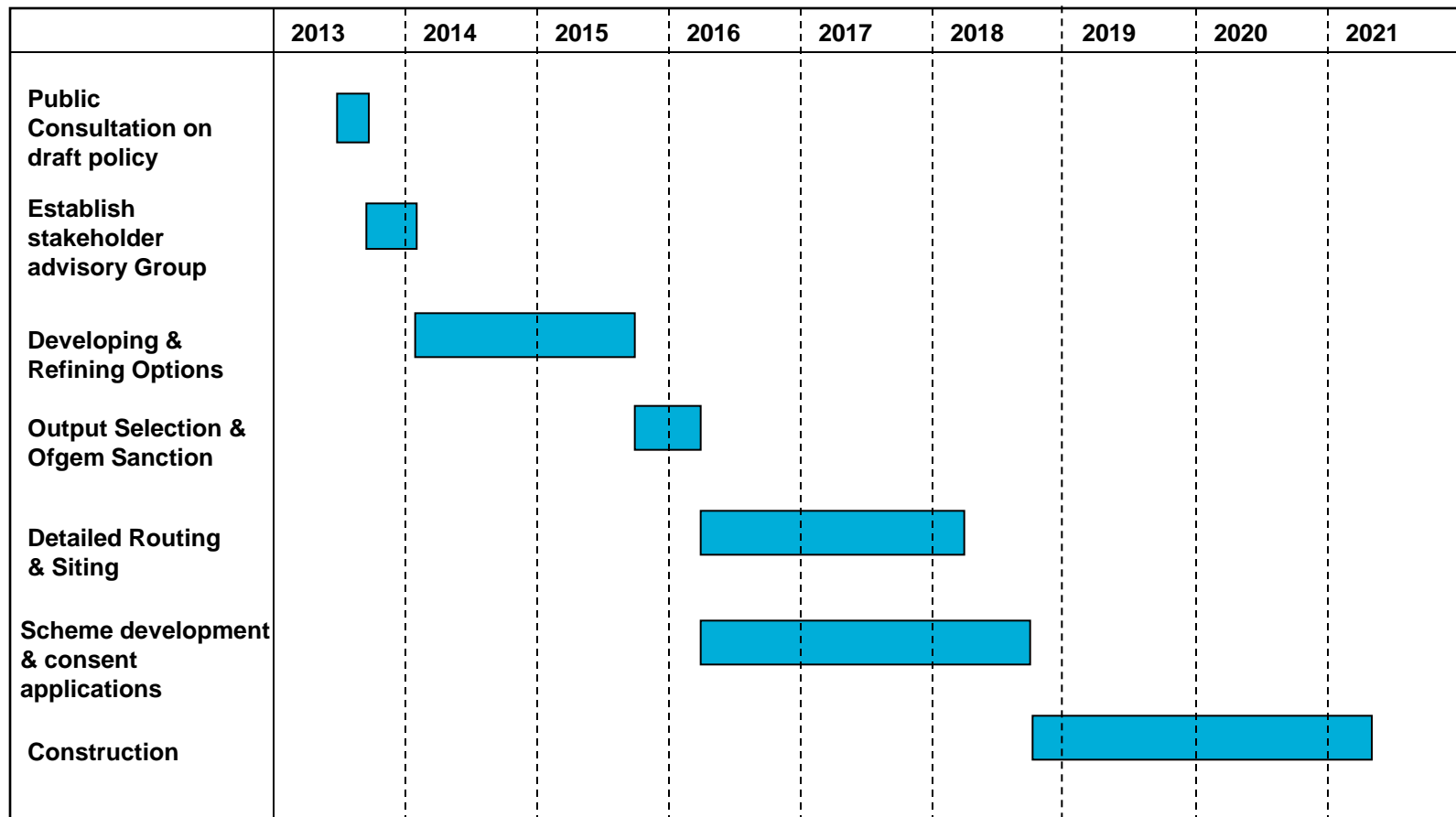
For the rest, less intrusive mitigation options such as tree screening will be considered.



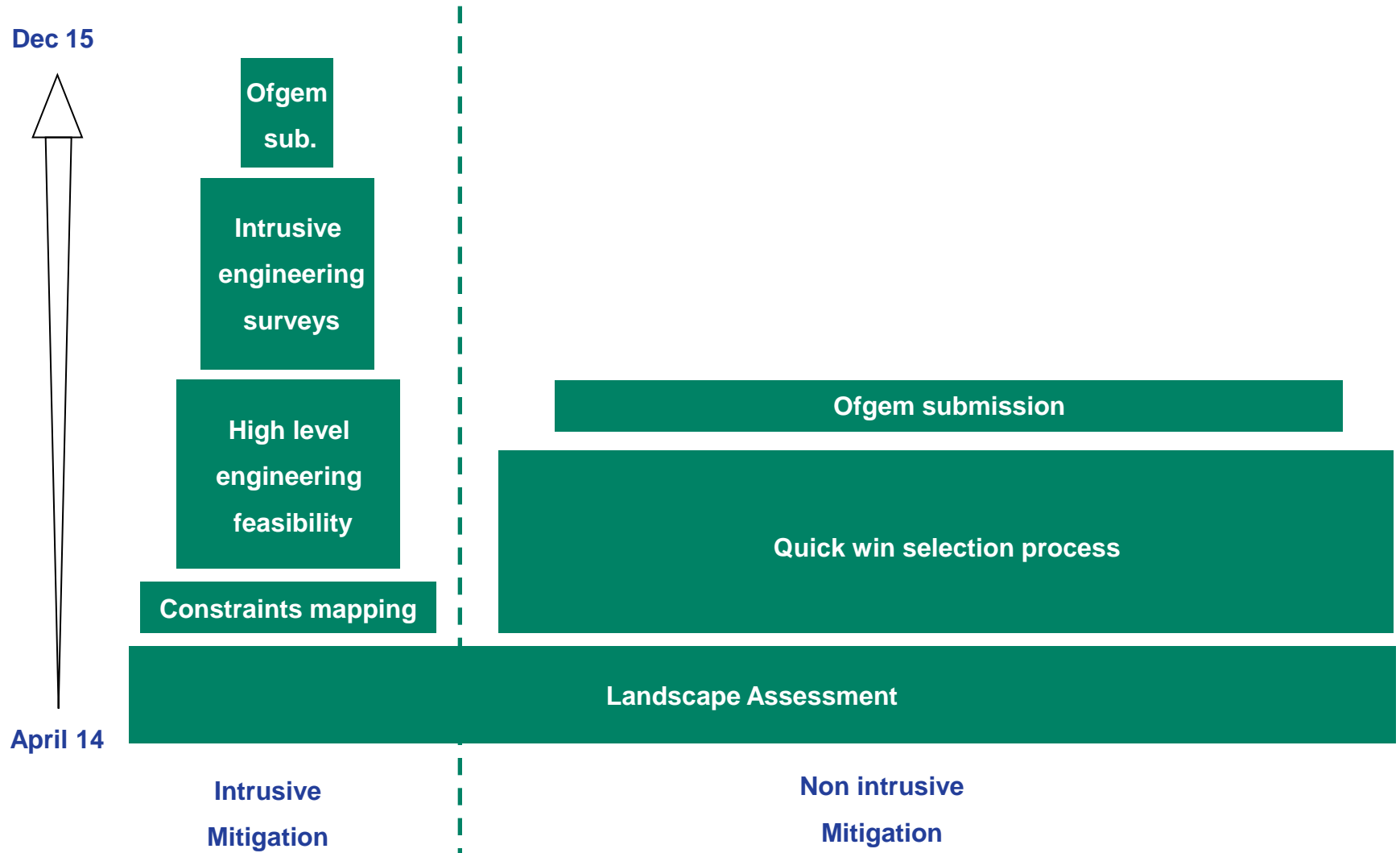
Current Activities

- Carys Swanwick appointed to develop and oversee the landscape and visual assessment work
- first Stakeholder Advisory Group meeting held in London on the 1 & 2 April
- landscape consultancies LUC and Gillespies have been appointed to conduct the landscape and visual assessment field work – due for completion mid July
- second Stakeholder Advisory Group is planned for the 24 & 25 July
- final report and results from the landscape assessment work are due in October

Long term programme



Project selection



What can the fund be spent on??



What can the fund be spent on??



Questions

