

Strategic Infrastructure Overview - ASTI



Building our energy future
**Transforming
electricity
transmission**





Carl Trowell
President,
Strategic Infrastructure

The **right**
regulatory
model



The **right**
supply chain
relationships



Building our energy future
**Transforming
electricity
transmission**



The **right**
delivery
strategy



The **right**
planning
permission

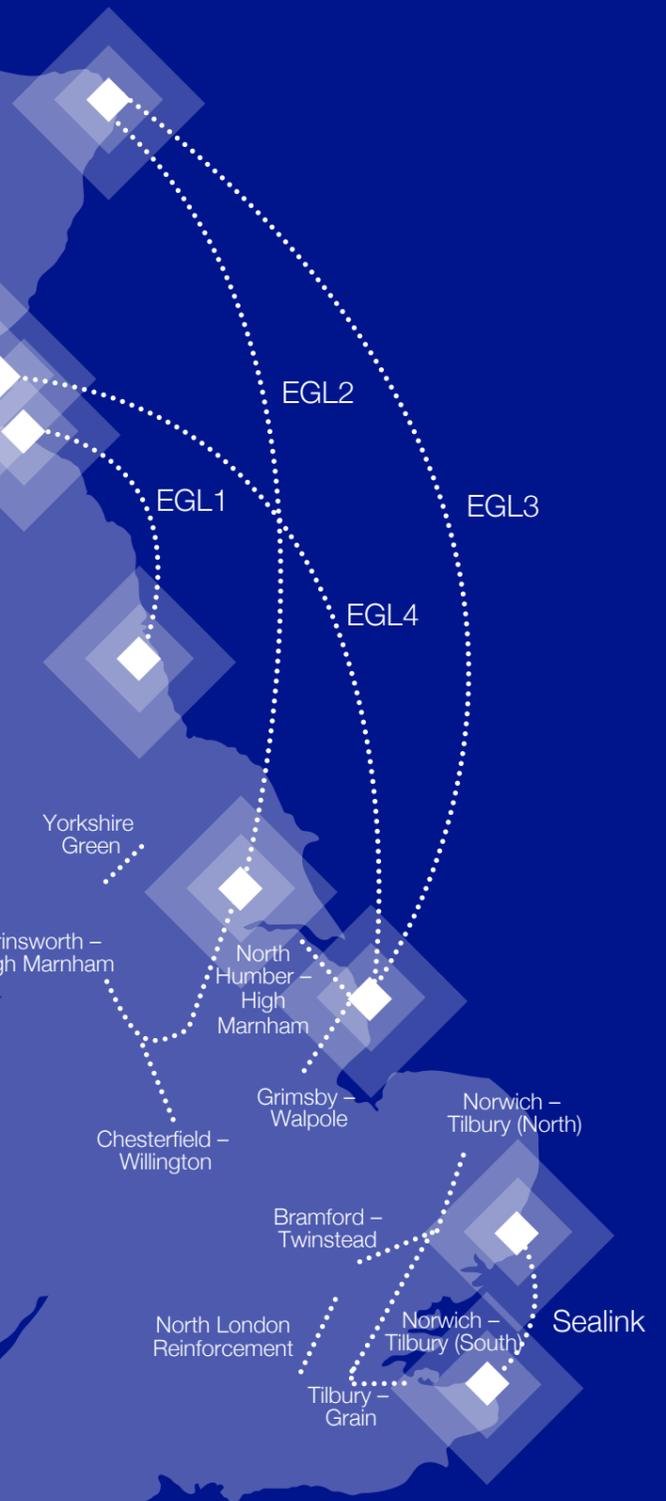
17 ASTI projects in our license



April
2022



December
2022



- Yorkshire Green
- Brinsworth - High Marnham
- North Humber - High Marnham
- Grimsby - Walpole
- Norwich - Tilbury (North)
- Norwich - Tilbury (South)
- Sealink
- Tilbury - Grain
- North London Reinforcement
- Bramford - Twinstead
- Chesterfield - Willington
- Pentir - Trawsfynydd (Cable)
- Pentir - Trawsfynydd (New Circuit)





Yorkshire
Green

Brinsworth –
High Marnham

North
Humber –
High
Marnham

Grimsby –
Walpole

Norwich –
Tilbury (North)

Bramford –
Twinstead

Norwich –
Tilbury (South)



Pentir –
Trawsfynydd
(Cable)

Pentir –
Trawsfynydd
(New Circuit)

Brinsworth –
High Marnham

North London
Reinforcement

Tilbury –
Grain

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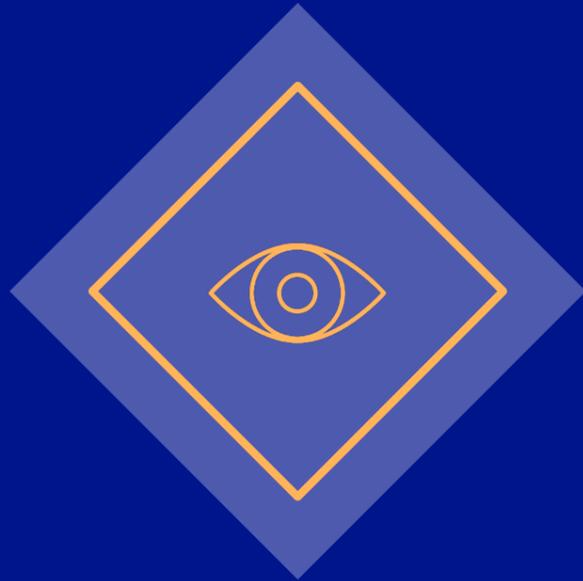


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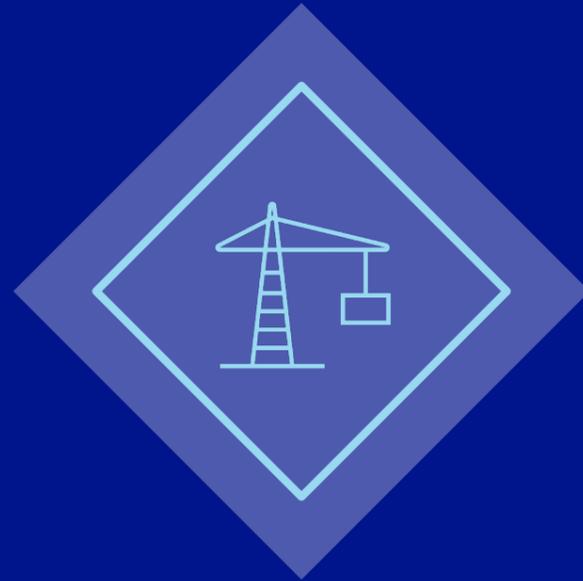


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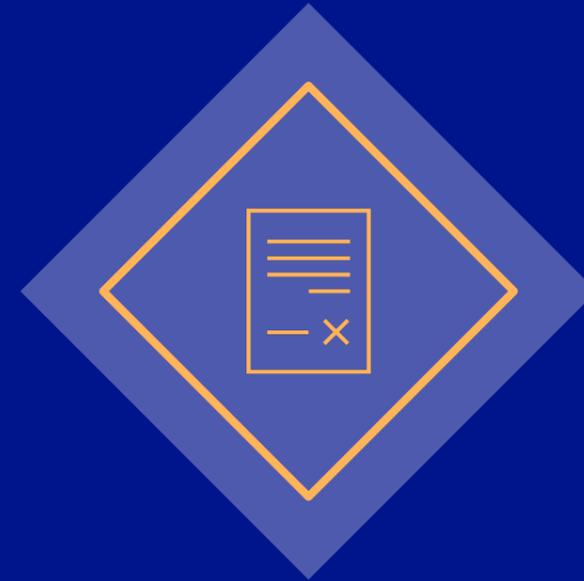
The right regulatory model



Visibility with all **17 projects confirmed**



Pre-construction funding and early construction funding for **up to 20% of project costs**



Earlier **supply chain contracting**



Delay and **cost protections**



◆◆◆ Used early construction funding mechanism

◆◆◆ Started construction one year early

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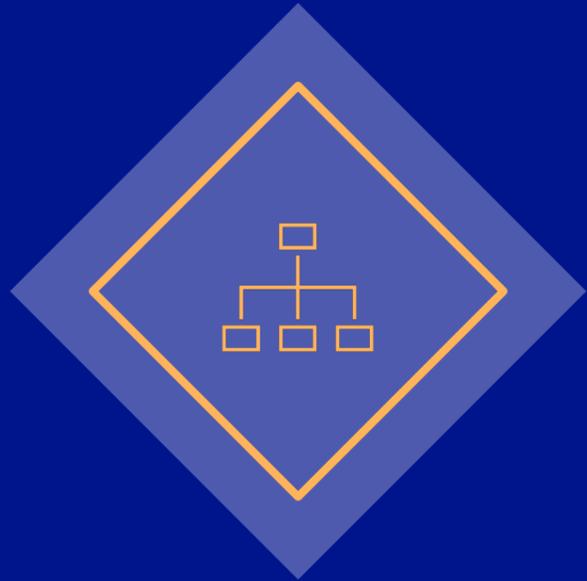


The **right**
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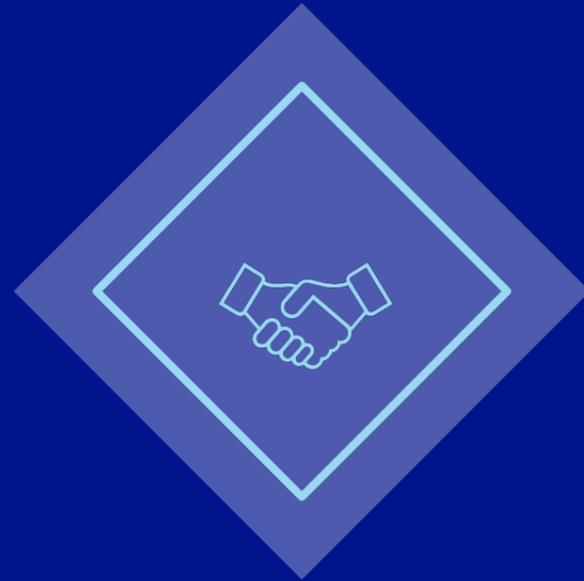


The **right**
planning
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The right delivery strategy



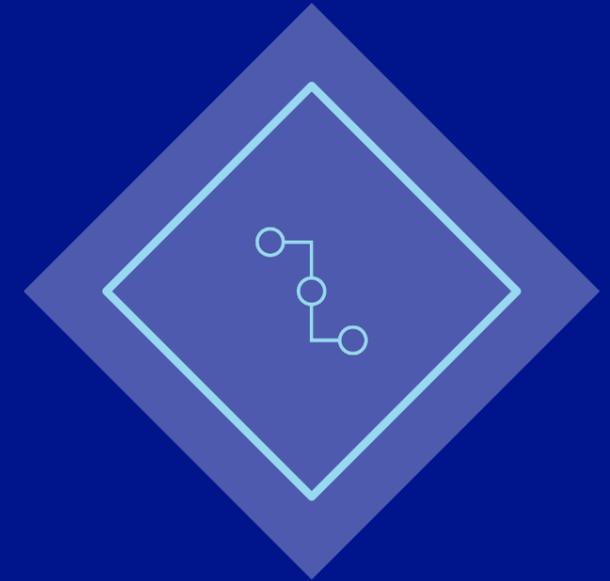
Established
the **Strategic
Infrastructure division**



Partnering
through JVs



Delivery
Waves 1 & 2



Early **supply chain
engagement**

The right delivery strategy

Our 6 most advanced ASTI projects

Wave 1

With earliest required delivery dates

11 ASTI projects

Wave 2

Further innovation in project design, consenting, construction and supply chain



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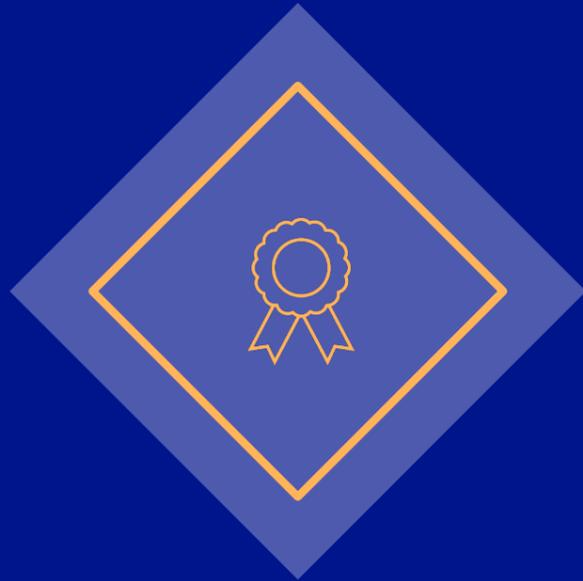


The **right**
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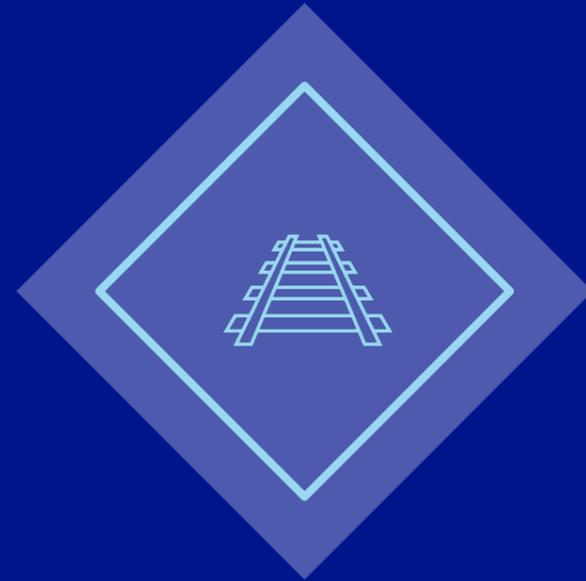
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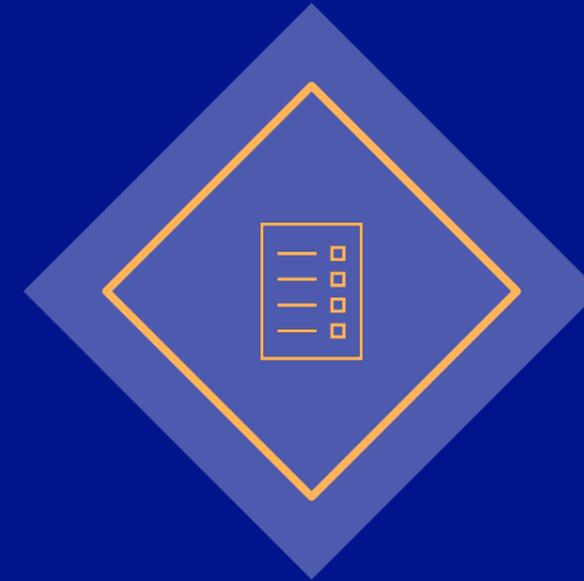
The right planning permissions



Consenting
'Centre of Excellence'



Planning and
consenting is on track



Advocating for further
planning reforms

❖ **324**
Consultation
events

❖ **23,000**
Attendees

❖ **43,000**
Pieces of
feedback

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The Great Grid Partnership

Design & Consenting Partners



Joint Venture

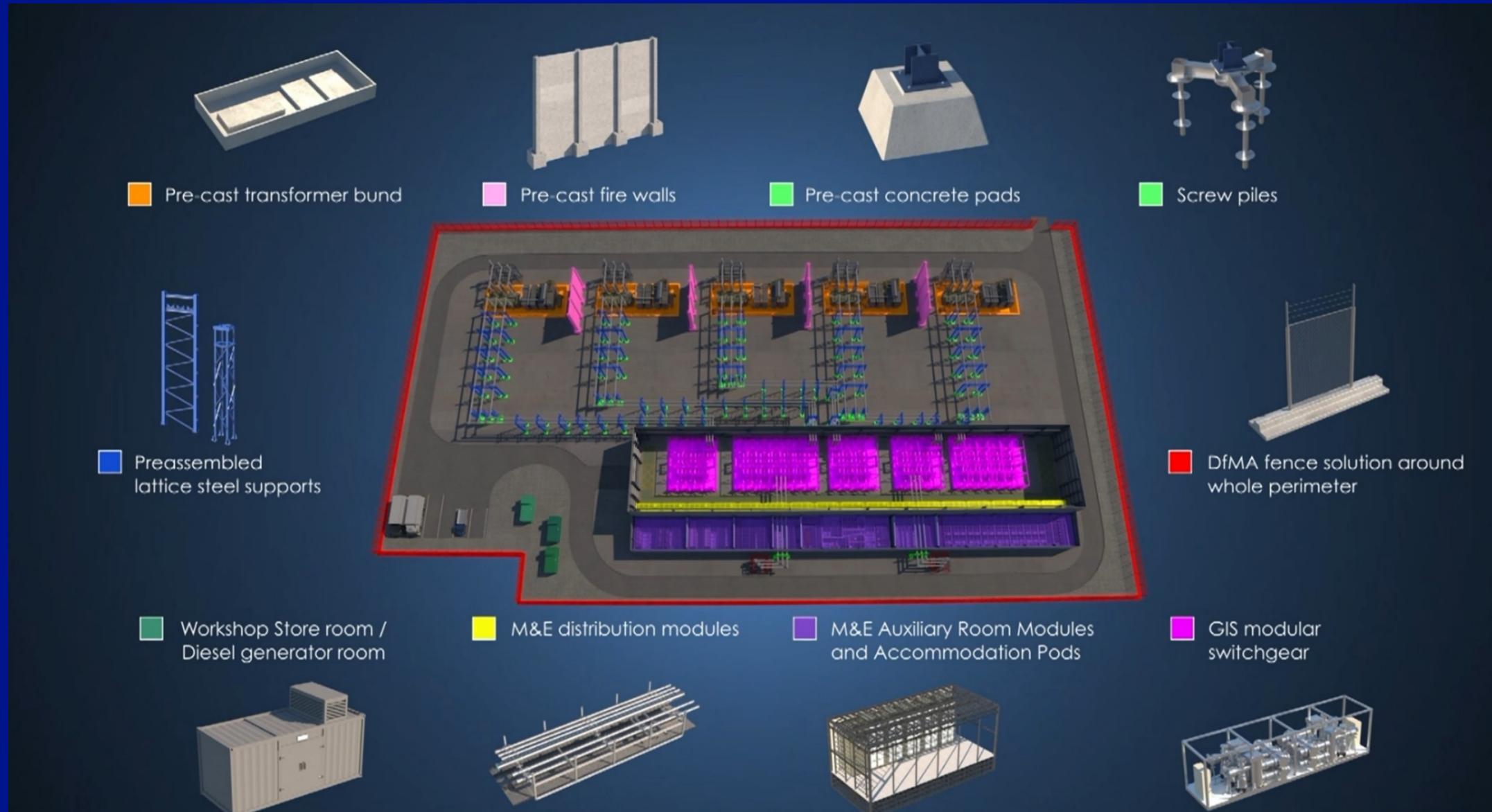


Construction Partners



WORLD-CLASS INFRASTRUCTURE

GGP Standardised Substation



HVDC Framework

Cables Partners

Joint Venture



HELLENIC
CABLES



JAN DE NUL



Cable & System



Prysmian
Group

taihan



Sumitomo

Converters Partners



GE VERNOVA



Hitachi Energy



MITSUBISHI
ELECTRIC

SIEMENS
energy

HVDC Framework projects



Wave 1 projects



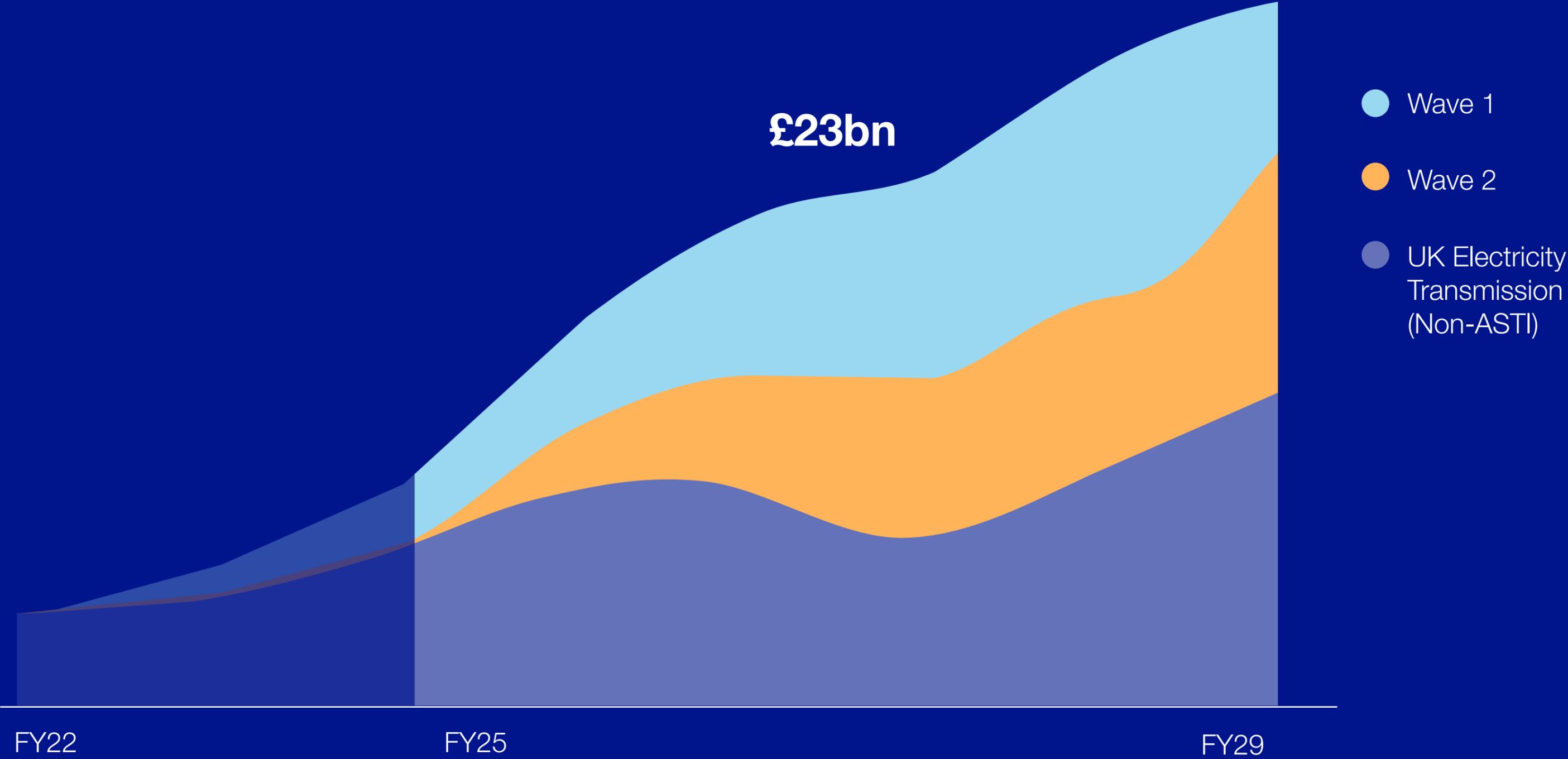
Wave 1

Project	Type	Description
EGL1	Offshore HVDC Link	2GW HVDC link from Torness (Scotland) to South Hetton (England).
EGL2	Offshore HVDC Link	2GW HVDC link between Peterhead (Scotland) & Drax (England).
Yorkshire Green	New Onshore Circuit	Onshore reinforcements consisting of new infrastructure and updates to existing infrastructure from Osbaldwick-Norton overhead line circuit to Monk Fryston
Bramford – Twinstead	New Onshore Circuit	Onshore reinforcements consisting of ~11km underground cables and 18km of overhead line in Essex.
North London Reinforcement	Uprating Existing Onshore Circuit	Uprating of 275kV circuits to 400kV and various substation upgrades.
Tilbury – Grain	Uprating Existing Onshore Circuit	Construction of a new cable tunnel & install associated cables underneath the Thames, including two headhouses. Includes uprating ~27km of existing overhead line.

Wave 1 Projects

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UK Electricity Transmission investment





national**grid**