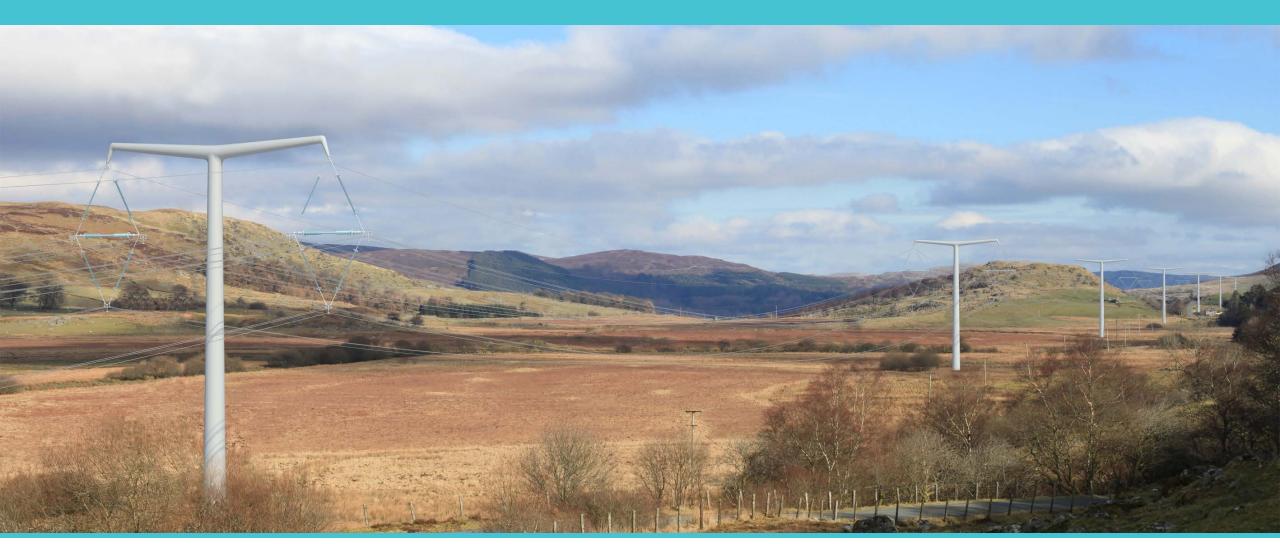
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## **National Grid**

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### **UK** - Regulated

342 UK transmission substations



342

overhead line



7,200

**7,200 km** of UK



618 above-ground UK gas installations -pressure gas pipe



**7,660 km** of UK high



**US** - Regulated

**377** US transmission substations



3.6m

gas distribution

customers across

**US** distribution substations

**14,219 km** of US overhead line



Global – Non-Regulated

2 Interconnectors and **3** in development



15,800 km of sub-sea high-

voltage direct cable

**GrainLNG** 20% of UK gas capacity



Over gas meters

### National Grid - Ventures

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### **Venture Investing Focus**

#### **Smart assets**

Smart grids, asset load management/peak shaving, plant virtualization, storage integration, industrial security, asset maintenance, microgrids

#### Smart car, home & cities

Connected car & home, Responsive charging, distributed storage, fleet management, devices management, prosumer integration



#### Intelligent operations

Smart metering, advanced analytics, supply/demand matching, asset inspection & monitoring, risk & compliance, incident response, customer interaction, blockchain

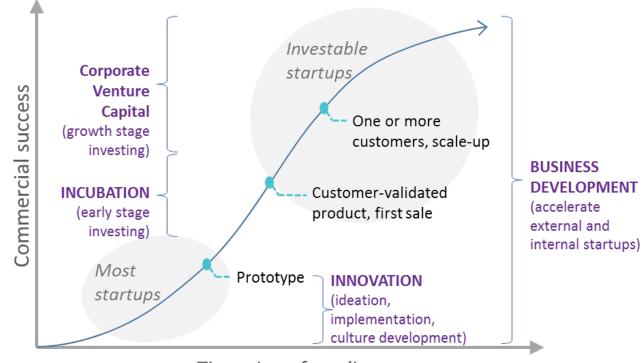
#### **Smart enterprise**

Big Data/Analytics, SaaS, Cloud Infrastructure, AI, Cyber-Security, Mobility, Datacenter SW

#### **Energy management**

Energy efficiency & management system, responsive devices, Access mgmt & fraud detection, remote energy control, virtualization, Software Defined solutions, energy trading

### How are we set up



Time since founding

**Technology or Application Strength** 

## AI – Enabling Technologies

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### **Structured Systems Data**



- ✓ Profiling power usage / analytics DSR options
- ✓ Identifying alternative solutions PV

### **Human Language**



- ✓ Chatbot customer interface services
- ✓ Data interface solutions

### **Real Time Data**



- ✓ Local / micro grid predictive grid management
- ✓ Supply / Demand energy forecasting
- ✓ Energy storage / mobility simulation and system reserve capability

### **Consumer Behaviour**



- ✓ Customer specific tariffs auto switching
- ✓ Energy efficiency product selection and optimisation

### <u>Human – Multi Spectrum Vision</u>



- ✓ Data interface & classification solutions
- ✓ Multi-vision (IR, Ultra Violet, Lidar, visual interpretation) asset inspection analysis
- ✓ Maintenance, repair and replace prediction

#### **Real Time decision Support**



- ✓ Real time engineering augmented assistant
- ✓ Digital simulation and risk evaluation predictive assessment
- ✓ System wide grid balancing support

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