Strategic Innovation Fund Round 1 Alpha Phase: innovation projects approved for funding.

1) Energy networks with projects approved

Network type	Lead project partner	No of approved projects
Electricity transmission	Scottish Hydro Electric (SHE) Transmission Plc	2
	SP Energy Networks (SPT)	3
	National Grid Electricity Transmission Plc (NGET)	2
Electricity system operator	National Grid Electricity System Operator (NGESO)	1
Gas transmission	National Grid Gas Transmission (NGGT)	4
Gas distribution	Scotland Gas Networks and Southern Gas Networks (SGN)	4
	Northern Gas Networks Limited (NGN)	1
	Cadent Gas Limited (Cadent)	1

2) Summary of projects approved

Network type	Project number, title and description	Lead applicant	Initial net funding required		
Challenge area: Whole System Integration					
Electricity transmission	INCENTIVE - Innovative Control and Energy Storage for Ancillary Services in Offshore Wind Technologies for managing offshore wind generation	SHE	£380,606		
	Network-DC Connecting offshore wind to DC networks in coastal communities	SHE	£423,476		
	SCADENT - SuperConductor Applications for Dense Energy Transmission Using high temperature superconductor cables to transmit energy	NGET	£449,000		
Electricity system operator	Crowdflex Consumer participation in energy network flexibility services	NGESO	£499,919		
Gas transmission	HyNTS Compression Compression of hydrogen for use in energy networks	NGGT	£499,898		

Challenge area: Data	and Digitalisation		
Electricity transmission	Predict4Resilience Using weather data to forecast network faults and risks	SPT	£499,999
	Eye in the Sky - Utilising satellite data to improve grid resilience in emergency Using satellite data to improve grid resilience in emergency	NGET	£395,769
Gas transmission	HyNTS Pipeline DataSet Monitoring of hydrogen pipelines	NGGT	£454,090
Gas distribution	Predictive Safety Interventions Using data and AI to prevent safety incidents	SGN	£411.086
	Gas System of the Future "Digital twins' to help manage gas networks	SGN	£494,925
	Intelligent Gas Grid Using weather data and AI to monitor and control gas networks	SGN	£491,075
	Thermal imagery analysis Identifying gas losses in hydrogen networks	NGN	£469,356
	Digital Platform for Leakage Analytics Reducing gas network leaks	Cadent	£445,571
Challenge area: Heat			
Electricity transmission	HEAT BALANCE Large-scale thermal storage for heat pump flexibility	SPT	£499,116
Gas transmission	HyNTS Protection Protecting hydrogen pipes from wear and tear	NGGT	£443,195
Gas distribution	Velocity Design with Hydrogen Using hydrogen in gas distribution networks	SGN	£462,320
Challenge area: Zero	Emission Transport		
Electricity transmission	A Holistic Hydrogen Approach to Heavy Duty Transport (H2H) Energy options for decarbonising the rail system	SPT	£401,864
Gas transmission	HyNTS Deblending for Transport Applications Blending hydrogen for transport refuelling stations on the network	NGGT	£313,398

For more information see www.ofgem.gov.uk/sif