

Virtual Energy System online conference agenda

Time	Topic	Speaker/s	Duration
9:30am	Welcome message	Joshua Visser, Stakeholder Engagement workstream lead, Virtual Energy System, ESO	5 mins
9:35am	Panel session: What do we mean by the “future GB Energy System?” <i>The energy system is evolving and will need to respond to many changes whilst helping achieve net-zero. This session will outline some of the context for the future energy system:</i> <ul style="list-style-type: none"> - How do we see the whole energy system operating? - What role will digital play in monitoring real world challenges? - What are the issues in a future energy system? - Who will be the players of the future energy system? - What role will consumers play in this world? 	Moderator: - Norma Dove-Edwin, CIO, ESO Panellists: - Doug Cook, Head of Strategy, Ofgem - Laura Sandys, Chair, Energy Digitalisation Taskforce - Eric Brown, Chief Technology Officer, Energy Systems Catapult - Niko Louvranos, Commercial Lead – Energy, 5G, AI - Digital Catapult	40 mins
10:20am	What is the vision for the GB Virtual Energy System? <ul style="list-style-type: none"> - What is a digital twin? And what do we mean by the Virtual Energy System? - How would the Virtual Energy System interact with the physical Energy system? - How could the Virtual Energy System help GB achieve net zero? - How would the Virtual Energy System be developed? - How it will work as a whole system / across industries? 	Matthew Wright, Head of Strategy & Regulation, ESO Carolina Tortora, Head of Digital Transformation & Innovation Strategy, ESO	30 mins

10:50am	Virtual Coffee break	Everyone	15 mins
11:00am	<p>What is a National Digital Twin, what can it deliver and how does it link with the GB Virtual Energy System?</p> <p><i>A National Digital Twin will enable us to make better decisions for better outcomes.</i></p> <ul style="list-style-type: none"> - Find out about the National Digital Twin and how will enable sharing of data across organisations and sectors. - Hear about the guiding principles (The "Gemini Principles") already proposed - Find out about the technical work to connect digital twins - Hear about how the socio-technical factors are vital to connecting digital twins - Discuss how interactions between different industries can help drive Digital Twin innovations - Explore how connected digital twins can help us solve some of the greatest challenges of our generation 	<p><i>Alexandra Bolton, Executive Director, Centre for Digital Built Britain (CDBB)</i></p> <p><i>Alex Luck, Department for Business, Energy and Industrial Strategy</i></p>	20 mins
11:20am	<p>How could regulation enable a Virtual Energy System?</p> <ul style="list-style-type: none"> - Hear what digitising the energy system could mean for energy network companies – and those that interface with them - Discover how regulations might evolve to regulate shared digital assets including the GB Virtual Energy System - Find out how the industry could incentivise digital investments over asset-based ones - Discuss how risks associated with digital assets are being considered and could be accounted for 	<i>Doug Cook, Head of Strategy, Ofgem</i>	20 mins
11:40am	Shared Q&A on National Digital Twin and how regulation could enable a Virtual Energy System	<ul style="list-style-type: none"> - <i>Alexandra Bolton, CDBB</i> - <i>Alex Luck, BEIS</i> - <i>Doug Cook, Ofgem</i> 	20 mins

12:00pm	Virtual Lunch	Everyone	1 hour
1:00pm	<p>Panel session: What would the benefits be of creating the GB Virtual Energy System?</p> <p><i>The Virtual Energy System needs to be beneficial to a multitude of players. This session will outline what benefits might be for:</i></p> <ul style="list-style-type: none"> - Asset owners and operators - Safety and security of system, security of supply - Financial savings and educational benefits - Energy innovators - Net Zero benefits - Society as a whole 	<p>Moderator: <i>Alec Waterhouse, Head of Modelling, Department for Business, Energy and Industrial Strategy</i></p> <p>Panellists:</p> <ul style="list-style-type: none"> - <i>David Richardson, Head of Innovation, UKRI</i> - <i>Alastair Martin, Chief Strategy Officer, Flexitricity</i> - <i>Graham Campbell, Scottish Power Electricity Networks</i> - <i>Simon Evans, Digital Energy Leader, Arup</i> 	45 mins
1:45pm	<p>Why collaboration will deliver true value from the Virtual Energy System</p> <p><i>Building the GB Virtual Energy System will require industry collaboration at an unprecedented scale. Cooperation will be key for everyone to benefit from a true digital representation of the physical energy system. In this presentation,</i></p> <ul style="list-style-type: none"> - Hear how the Virtual Energy System plans to foster collaboration in the industry - and beyond - Discover what lessons we can apply from other industry-wide collaborations - Find out what other industries will help enable the Virtual Energy System 	<i>Richard Dobson, Practice Manager - Data Systems, Energy Systems Taskforce</i>	30 mins
2:15pm	Virtual Coffee break	Everyone	
2:30pm	Developing Use Cases for the Virtual Energy System	<i>Nina Klein, Use-Case workstream co-lead, Virtual Energy System, ESO</i>	20 mins

	<p><i>As the GB Energy System becomes more interconnected, new Use Cases are being developed - as part of the Digital Twin programme - to address market changes.</i></p> <ul style="list-style-type: none"> - Hear about plans to improve the ESO's dispatcher - Learn more about how the ESO plans to understand more about consumer dynamics - Discover what the ESO is planning to do to help model future network changes - Hear how the Virtual Energy System will connect different energy digital twin use cases together 		
2:50pm	<p>A common framework – what needs to be defined for the Virtual Energy System to start to develop?</p> <p><i>The GB Virtual Energy System plans to foster innovation and development - not stifle it. But it's important that different pieces of the Digital Twin are compatible and adhere to a Common Framework. During this presentation, hear about:</i></p> <ul style="list-style-type: none"> - Why a common framework is needed - What the framework will cover - What some of the technical principles are likely to be - When a draft framework can be expected 	<p><i>Jonathan Barcroft, “Common Framework” workstream lead, Virtual Energy System, ESO & Simon Evans, Digital Energy Leader, Arup</i></p>	20 mins
3:10pm	<p>Getting involved in the Virtual Energy System</p> <p><i>The success of the GB Virtual Energy System will rely heavily on getting everyone involved. We want your input, feedback and engagement on this programme.</i></p> <ul style="list-style-type: none"> - We will launch our initial input survey for you to comment on the overall programme - Hear how you can get actively involved in the Virtual Energy System going forward 	<p><i>Joshua Visser, Stakeholder Engagement workstream lead, Virtual Energy System, ESO</i></p>	20 mins

3:30pm	Conference closing address	<i>Fintan Slye, Executive Director, ESO</i>	15 mins
4:00pm	Conference close		