Net Zero Transition: Low Carbon Heat

Learning and development objectives:

- Understand the scale of the challenge to decarbonise the heat sector
- The latest policy and regulatory developments to encourage heat decarbonisation
- Introduction to low carbon heat technologies, including heat pumps, and hydrogen
- The range of pathways to meet net zero heat demand

Session 1 – The challenge and current policy

10 am	**Introduction & welcome** • Tech check! • Aim and objectives
Module 1	**Scale of the challenge** • Scale of our energy demand for heat • Associated carbon emissions • The UK's "gas problem" and off-gas heating fuels • Energy efficiency performance • Consumer behaviour
Break	

Module 2	**Policy and regulation**
	• Overview of the policy landscape
	   o How heat networks are supported
	   o Boiler upgrade scheme and heat pump market mechanism
	   o Green Gas Support Scheme
	   o Energy efficiency schemes – ECO and IETF
	• How heat production, network and consumption are regulated
	• Are we doing enough? Climate Change Committee's view

11.45	**Q&A**
12.00	**What we will cover in future sessions and close**

Session 2 – Low carbon heat technologies

10 am	**Introduction & welcome** • Tech check! • Aim and objectives

	Technologies (1)
	• National Grid Future Energy Scenarios and the role of new(er) technologies
	• Heat networks
	○ What are they?
	○ Current status and deployment
	○ Pros and Cons
	○ Case study
Module 3	• Heat pumps
	○ What are they?
	○ Current status and deployment
	○ Pros and Cons
	○ Case study
	• Thermal storage installations
	○ What are they?
	○ Current status and deployment
	○ Pros and Cons
	○ Case study
Break	
	Technologies (2)
	• Hydrogen boilers/ burners
	○ What are they?
	○ Current status and deployment
	○ Pros and Cons
Module 4	○ Case study
	• 'Green gas' heating systems
	○ What are they?
	○ Current status and deployment
	○ Pros and Cons
	○ Case study
11.45	**Q&A**
12.00	**What we will cover in future sessions and close**