

# Floorplan Day 1: Sustainability

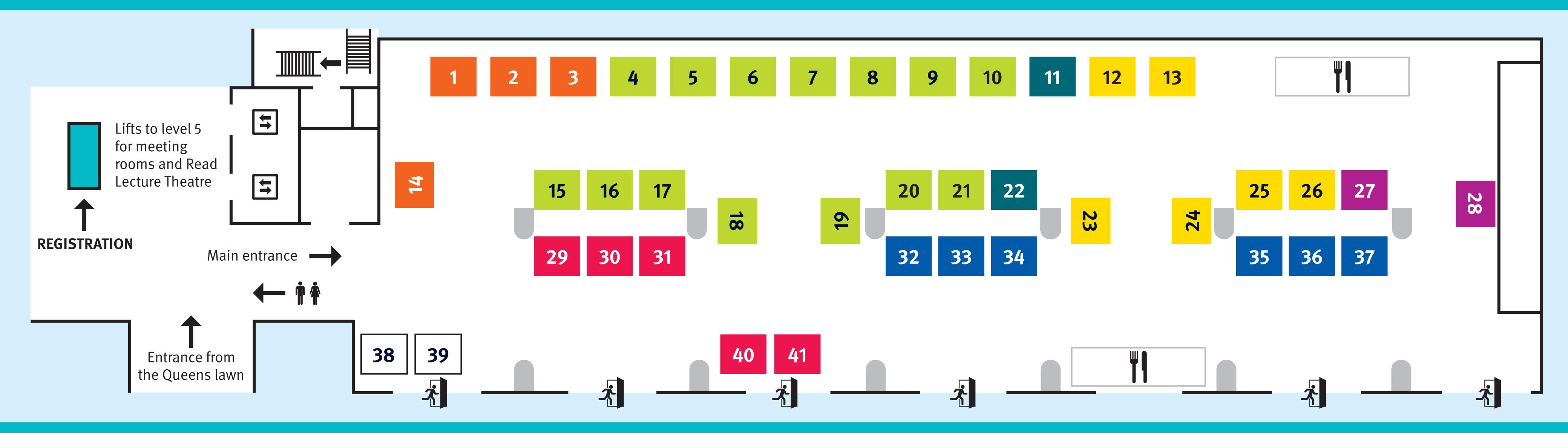












## ZONE 1 – SOCIAL ENTERPRISE

- **Cambridge** The Cambridge Centre for Resilience and Sustainable Development
- **UCL** EDRAF
- **UCL** Ground X
- Cambridge The Cambridge Centre for Natural Material Innovation



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# **ZONE 2 – ENERGY AND FUELS**

- **Oxford** OxReGen: rotary renewable generation
- Imperial Enhanced Light Extraction from Light Emitting Diodes Utilizing a Nanoparticle Meta Grid
- 6 Cambridge Single-Vessel Green Ammonia Production
- Imperial Low power nanomagnet storage and computing
- 8 Cambridge H2Upgrade: Hydrogen from industrial waste
- Oxford Carbon dioxide conversion to biofuels by hodopsin photosynthesis
- 10 UCL Carbon Recycling Technology (CART) Plastic to Fuel
- 15 Oxford Electrochemical production of hydrogen
- **16** Oxford Solar powered hydrogen production
- Oxford Solar powered ammonia efficient & sustainable synthesis
- Imperial Organometallic-functionalized interfaces for
- 19 Oxford Small scale energy harvesters power from motion
- UCL Re-usable and self-poled piezoelectric 20 nanocomposite films with exceptional energy harvesting and water remediation capability
- Imperial IonMembrane Technologies: Next-generation ion exchange membranes for energy applications

# ZONE 3 – VERSATILE NEW TECHNOLOGIES

- 11 Cambridge Electronic nose
- 22 UCL Ultrasound and Acoustic Emission Techniques

### **ZONE 4 – WASTE REDUCTION**

- 12 UCL NH3 Slip Catalysis
- UCL Upcycling Waste PTFE to Metal Halides
- Imperial PET plastic upcycling into clean H2 and valuable chemicals
- **Cambridge** Upcycling Waste Plastics with Sunlight
- 25 Imperial Self-disinfecting appliances
- 26 Oxford Upcycling waste plastics into high-value fuels

#### **ZONE 5 – CONSTRUCTION**

- Imperial Seratech an Imperial spinout company: manufactured cementitious materials for sustainable, net-zero infrastructure
- Imperial High-strength anticlogging permeable concrete pavement

# ZONE 6 – MATERIALS

- mperial Method for lignin-based carbon fibre production
- **UCL** Cyanobacteria Engineered Living Material
- Cambridge Charged materials for CO2 capture
- Cambridge Phase engineering of 2D materials
- mperial DyeRecycle an Imperial spinout company: giving dyes and colours a second chance using green chemistry

#### ZONE 7 - BATTERIES

- **Cambridge** Mixed oxide coatings on NMC Li-ion batteries
- Oxford Advanced fluoride-based materials in lithium-ion
- 34 Cambridge High energy density lithium-sulfur batteries
- Oxford Sprayed graded electrodes for battery design and optimisation
- **UCL –** Scalable, solution processed solid electrolyte film for advanced batteries
- 37 Oxford Machine learning to better predict battery health
- 38 Mishcon de Reya LLP
- 39 Meet the TTOs