
Shell .ai
Hackathon
for sustainable
and affordable energy

## About the challenge

Professional, delivery and operational fleets are a significant contributor to global greenhouse emissions. Fleet owners aspire to achieve net-zero emissions promptly, however, the transition presents a complex dilemma. Balancing the urgency of achieving net-zero emissions with business sustainability and customer satisfaction requires a decision-making framework that considers **factors such as timing, location, and approach.**

**In this hackathon, you will have a chance to develop mathematical models to optimise fleet decarbonisation strategies, to help fleet owners make informed decisions that align with their energy transition objectives and business outcomes.**

By harnessing the power of data and mathematical models, you will navigate the complexities of demand forecasts, dissect emission profiles, and find ways to meet ambitious emission targets. The end game is to develop ingenious solutions that strike a balance between operational effectiveness and environmental impact.

## About the hackathon

Shell.ai Hackathon for Sustainable and Affordable Energy brings together brilliant minds passionate about digital solutions and AI, to tackle real energy challenges and help build a lower-carbon world where everyone can access and afford energy.

| | General Edition | Special University Edition | Special Start-up Edition |
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| **Eligibility criteria** | Open to all individuals and teams of up to 4 members (except Shell employees and contractors) | Open to anyone currently studying at or associated with any university/institute/college (Students, PhD, Postdoc, Technical Assistant, Research Assistant, faculty, etc.) | Open to registered start-ups only (minimum 2 members) |
| **Shortlist and winners** | ○ **Level1** - The participants are invited to develop mathematical models to optimise fleet decarbonisation strategies. 20 Participants with top scores in the private leaderboard (regardless of the edition) will be shortlisted for Level 2.<br>○ **Level 2** - Shortlisted teams will develop a prototype (a "sandbox" demo), based on their solution. The top three finalist will be announced based on the judging criteria.<br>○ **Level 3** - The finalists will pitch their solutions live and the winners will be selected. | ○ **Level1** - The participants are invited to develop mathematical models to optimise fleet decarbonisation strategies. 20 Participants with top scores in the private leaderboard (regardless of the edition) will be shortlisted for Level 2.<br>○ **Level 2** - Shortlisted teams will develop a prototype (a "sandbox" demo), based on their solution. The top two finalists will be announced based on the judging criteria.<br>○ **Level 3** - The finalists teams will pitch their solutions live and the winners will be selected. | ○ **Level 1** - Participants submit a pitch deck detailing their solution. Judges will select shortlisted start-ups, based on the evaluation of the pitching decks.<br>○ **Level 2** - Shortlisted start-ups will develop a prototype (a "sandbox" demo), based on their solution. The finalists (maximum three) will be announced based on the judging criteria.<br>○ **Level 3** - The finalists will pitch their solutions live and the winners will be selected. |
| **Prizes** | 1st prize: 2,500 USD<br>2nd prize: 2,200 USD<br>3rd prize: 2,000 USD | University Edition Winner: 1,500 USD<br>University Edition runner up: 1,000 USD | A chance to receive Proof of Concept funding and develop their products with Shell GameChanger (up to 150k USD) for maximum three start-ups, subject to Shell's criteria and regulations. |