



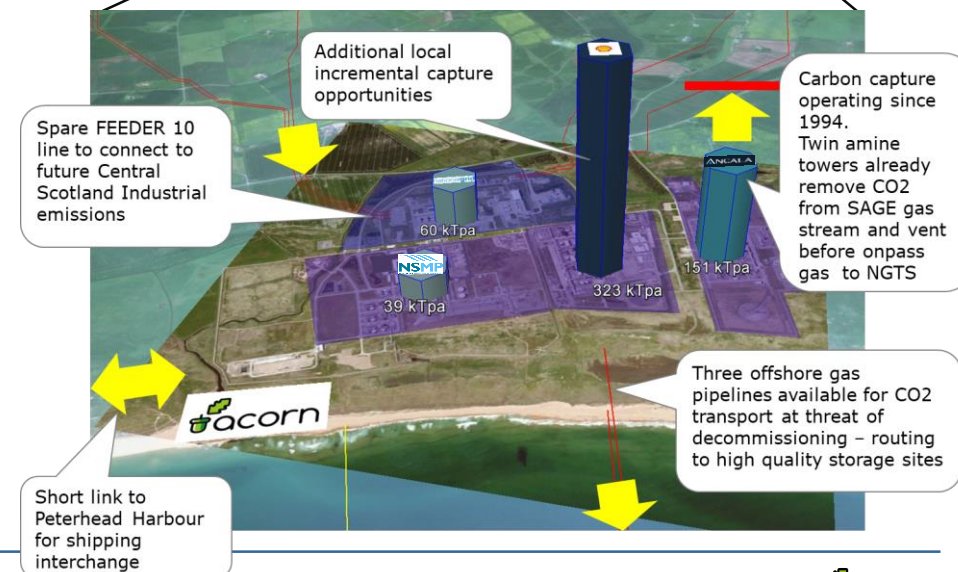
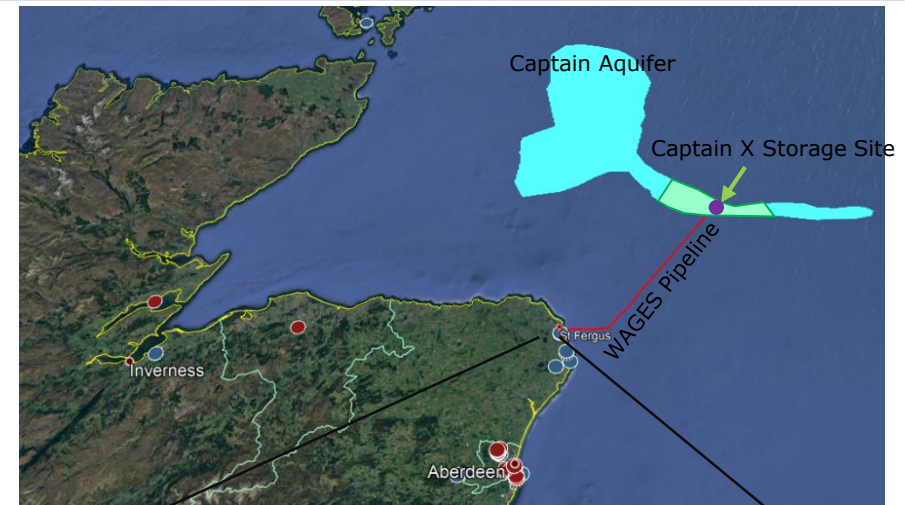
ACT Knowledge Exchange Workshop - Bucharest 24th October 2017



ACT Acorn, project 271500, has received funding from BEIS (UK), RCN (NO) and RVO (NL), and is co-funded by the European Commission under the ERA-Net instrument of the Horizon 2020 programme. ACT Grant number 691712.

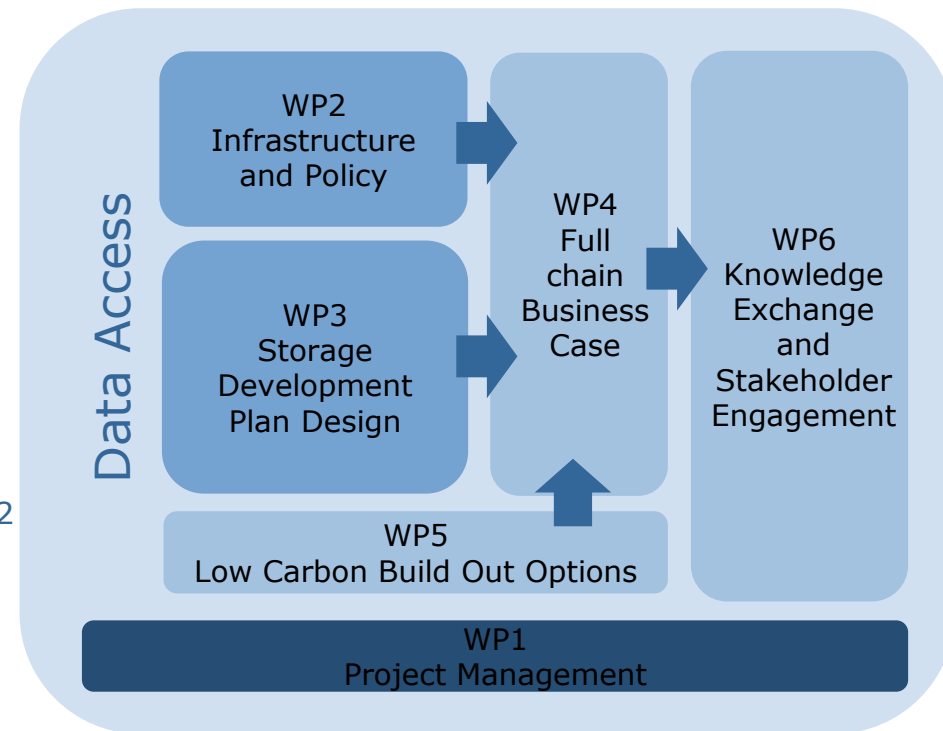
Acorn: a breakthrough project

- Smallest viable full chain Industrial CCS project
 - Existing emissions from St Fergus gas terminals
- Seed infrastructure
 - Re-use opportunities
- Establish a strong build out
 - Multiplicity of transport & storage options
- Build upon work of others
- Significant interest in the project from a wide range of players



Acorn ACT Work Programme

- 19 month, €2.9m project
 - (grant of €2m)
- 5 objectives
 1. Produce a development plan & budget for a full chain ICCS hub
 2. Identify options to increase storage efficiency & drive scientific advancement in this area
 3. Explore build-out options including CO₂ import, H₂ manufacture and CO₂ utilisation
 4. Develop policy recommendations to protect relevant infrastructure from premature decommissioning
 5. Engage with stakeholders to disseminate the lessons and encourage replication & just transition



Project & Kick-off Participants



Overcoming hurdles to CCS

- Create a specification for an ultra-low cost, integrated CCS hub that can be scaled up at marginal cost
- Evolve the Acorn development opportunity from proof-of-concept (TRL3/4) to the pre-FEED stage (TRL5/6)

Subsurface science

- Understanding storage efficiency
- Geomechanics and rock strength
- Site selection & evaluation

Policy recommendations

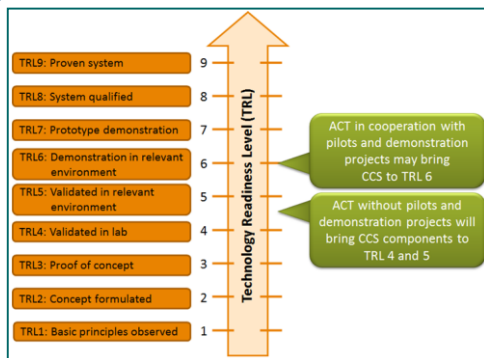
- Just transition to regional decarbonisation
- Decommissioning hydrocarbon infrastructure
- Infrastructure re-use for CO₂ activity

Economic efficiency

- Minimum viable development
- Growth and build out
- Business models

Societal impact

- Perceptions and acceptance
- Replication around the World
- Life-cycle analysis



Knowledge Exchange

○ Dissemination

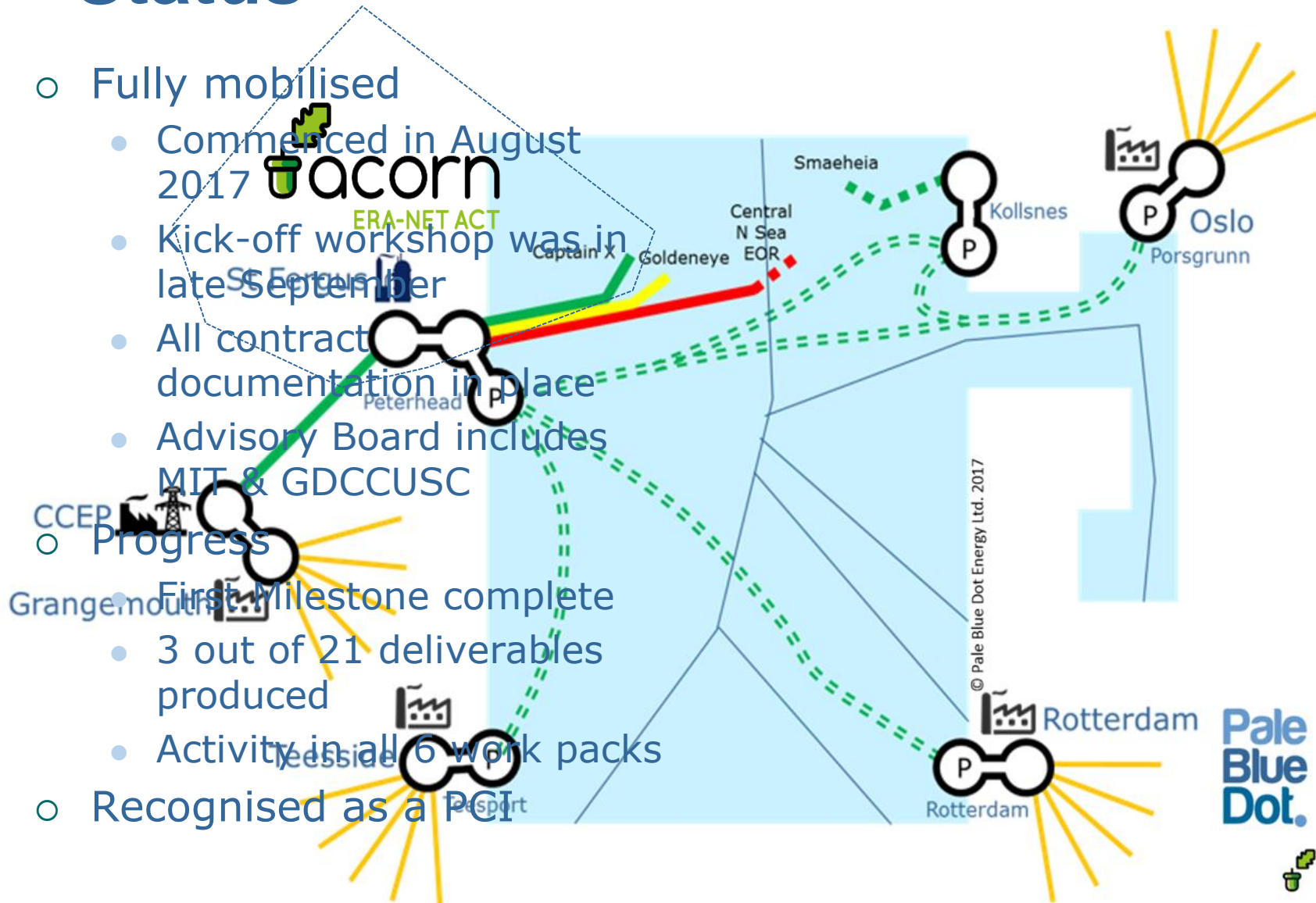
- Scheduled - stakeholder workshops, interviews & events
- Adhoc - GCCSI, CATO & others in the future
- Sharing research outputs
 - Various channels, including; project website, vlog, news letter, long term data storage, targeted media engagement, social media & final report dissemination event

○ Collaboration opportunities with other projects

- Storage site selection workshop
- Site risk assessment workshops
- H₂ economy & CCS
- Societal acceptance

Status

- Fully mobilised
 - Commenced in August 2017
 - Kick-off workshop was in late September
 - All contract documentation in place
 - Advisory Board includes MIT & GDCCUSC
- Progress
 - First Milestone complete
 - 3 out of 21 deliverables produced
 - Activity in all 6 work packs
- Recognised as a PCI



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