

## Why is this research important?

- ◆ The degradation of chemical absorbents used to capture CO<sub>2</sub> from industrial and energy sectors currently results in higher costs for project developers and creates an economic barrier to delivering CO<sub>2</sub> capture projects.
- ◆ Our aim is to accelerate the uptake of CO<sub>2</sub> capture technologies by supporting the development of novel solvents and establishing a fast-track, cost-effective de-risking mechanism to predict and control the degradation of capture solvents.
- ◆ Our results will be shared with our stakeholders through a range of events, resources and techniques tailored to fit the relevant sector and target audience.
- ◆ Carbon capture and storage (CCS) technology is recognised as an essential route to achieving carbon reduction goals and supporting a global transition to a net zero carbon future.

## What will LAUNCH achieve?

We will deliver the knowledge and tools to allow post-combustion CO<sub>2</sub> capture plants to operate in a more controlled and cost-efficient way. Our capture solvent development programme will also accelerate work on new solvent concepts, which will contribute to bringing down costs. We will:

- ◆ Improve
- ◆ Develop
- ◆ Apply
- ◆ Provide
- ◆ Accelerate



### Innovation front #1: solvent qualification

Protocols and tools for qualifying novel solvents regarding their degradation behaviour; matching solvents to specific flue gases; choosing the best mitigation strategy; 2<sup>nd</sup> and 3<sup>rd</sup> generation solvents qualified through the LAUNCH programme.

### Innovation front #2: technology development

Technologies for controlling degradation incorporated to LAUNCH rigs and tested at pilot scale Re-design of CO<sub>2</sub> capture plants for minimizing degradation.



The three-year LAUNCH project No. 299662, which began in September 2019, is funded through the ERA-NET Accelerating CCS Technologies 2 (ACT2) initiative, established by the European Commission under the Horizon2020 programme for research and innovation.

Funding has been provided by Netherlands Enterprise Agency (the Netherlands); the Federal Ministry for Economic Affairs and Energy (Germany); Gassnova SF (Norway); and the Department for Business, Energy and Industrial Strategy (UK), with extra funding from the US Department of Energy (USA).