Text to be published for ACT2 projects on our web 23 October 2019

New ACT2 projects selected for funding

In June 2018, a second ACT call was launched inviting proposals addressing R&I targets in the CCUS field as outlined in:

- The SET Plan implementation on CCS and CCU, Action 9
- The Mission Innovation Research priorities

Following a rigorous two stage evaluation process, twelve (12) projects were selected by an independent international panel.

The new ACT2 projects cover a wide range of the CCUS area;

- 6 CO₂ capture
- 3 storage and monitoring
- 1 storage and wells
- 1 storage combined with CO₂ use
- 1 mineralisation

All projects will address outreach, knowledge sharing, and social aspects in addition to their wide technical focus.

The total budget of the 12 projects is €43.6M of which €31.5 M is funded by the ACT consortium; private financing amounts to €1,5M with the remaining coming from matched funding from the projects themselves.

All ACT countries/partners are represented in these projects. Germany, The Netherlands, Norway, UK and USA participate in 6-10 of the projects. France, Greece, Romania, Spain, Switzerland and Turkey participate in 1-4 projects. There are partners from 3-7 countries in each project. Two of the projects (SENSE and SUCCEED) also have partners from countries outside ACT: Australia, Iceland, Italy and Japan.

All the new projects are due to commence this autumn and present their goals and plans in the ACT knowledge sharing workshop in Athens on 6-7 November.

With two successful calls and several projects already delivering interesting results, the ACT consortium has established itself as a new multinational funding scheme for research and innovation dedicated to CCUS. ACT envisages to launch additional calls and expand its network.

The table below shows the projects acronym, their primary activity, the request for funding from ACT and the country partners involved in ACT2. The green boxes indicate the lead country for the specific projects.
<table>
<thead>
<tr>
<th>Projects</th>
<th>Activities</th>
<th>ACT, M€</th>
<th>France (ADEME)</th>
<th>Germany (PtJ)</th>
<th>Greece (GSRT)</th>
<th>Netherlands (RVO)</th>
<th>Norway (RCN and Gassnova)</th>
<th>Romania (UEFISCDI)</th>
<th>Spain (AIE)</th>
<th>Switzerland (DETEC)</th>
<th>Turkey (TUBITAK)</th>
<th>UK (BEIS)</th>
<th>USA (DoE)</th>
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<tbody>
<tr>
<td>AC2COM</td>
<td>Oxyfuel technology in cement production</td>
<td>3,0</td>
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<tr>
<td>ACTOM</td>
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<td>ANICA</td>
<td>Carbonate looping process in cement industry</td>
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<td>DIGIMON</td>
<td>Digital monitoring of CO2 storage projects</td>
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<td>FUNMIN</td>
<td>CO2 mineralisation into anhydrous MgCO3</td>
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<td>LAUNCH</td>
<td>CO2 capture in various industries</td>
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<td>MemCCSea</td>
<td>Membrane systems for CO2 capture and storage at sea</td>
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<td>NEWEST-CCS</td>
<td>Negative emissions in the waste to energy sector</td>
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<td>PRISMA</td>
<td>Sorbent materials for energy efficient carbon capture</td>
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<td>REX-CO2</td>
<td>Reusing existing wells for CO2 storage</td>
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<td>SENSE</td>
<td>CO2 storage sites - ground surface monitoring</td>
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<td>SUCCEED</td>
<td>CO2 storage coupled with geothermal energy deployment</td>
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**Summary:**

Brief descriptions of the new ACT projects are listed below
AC2OCEM
AC2OCEm will conduct pilot-scale experiments and analytical studies to advance key components of oxyfuel cement plants with the aim of reducing the time to market of the oxyfuel technology in the cement sector.

ACTOM
The ACTOM project will work to advance offshore monitoring of stored CO\textsubscript{2} by building a unique web-based toolkit designed to optimize monitoring programs for offshore geological storage sites.

ANICA
The ANICA project will develop a novel indirectly heated carbonate looping (IHCaL) process for lowering the energy penalty and CO\textsubscript{2} avoidance costs for CO\textsubscript{2} capture from lime and cement plants.

DIGIMON
The DigiMon project aims to develop and demonstrate an affordable, flexible, and intelligent digital monitoring early-warning system, for monitoring any CO\textsubscript{2} storage reservoir and subsurface barrier system receiving captured CO\textsubscript{2}.

FUNMIN
The FUNMIN project aims to optimise the process of CO\textsubscript{2} mineralisation into Magnesite (MgCO\textsubscript{3}) by combining simulation and experimental techniques to identify the key factors for catalysing the formation of MgCO\textsubscript{3} under mild, non-hazardous, and non-toxic conditions.

LAUNCH
The LAUNCH project will accelerate CO\textsubscript{2} capture technologies by establishing a faster and more cost effective method to predict and control the degradation of next generation solvents.

MemCCSea
The MemCCSea project will work to develop hyper compact membrane systems for cost-effective and flexible operation of post-combustion CO\textsubscript{2} capture in maritime applications such as on floating vessels used by the offshore oil and gas industry.

NEWEST-CCS
The NEWEST-CCUS project aims to accelerate the deployment of CCS in the European Waste to Energy (WtE) sector and develop guidelines for the selection of robust, fuel flexible technologies resistant to Municipal Solid Waste (MSW) impurities. The project will also and assess the size of the WtE CCS market to create regional roadmaps.

PrISMa
The PrISMa project aims to integrate molecular science and process engineering to develop a technology platform that allows for customized carbon capture solutions to optimal separation for a range of different CO2 sources and CO2 use/destination options.

**REX-CO2**

The REX-CO2 project will develop a procedure and tools for evaluating the re-use potential of existing hydrocarbon wells for CO2 storage to help stakeholders make informed decisions on the potential of certain wells or fields for CO2 storage.

**SENSE**

The SENSE project will utilise new technologies and optimized data processing to develop reliable and cost-efficient monitoring programs based on ground movement detection combined with geomechanical modelling and inversion techniques.

**SUCCEED**

The SUCCEED project will research and demonstrate at pilot scale the feasibility of utilising produced CO2 for re-injection in a geothermal field to maintain and enhance reservoir pressure and improve performance, while also storing the produced CO2 that would typically be vent to the atmosphere under standard geothermal operations.