ACTOM

Act on Offshore Monitoring

4th ACT knowledge sharing workshop

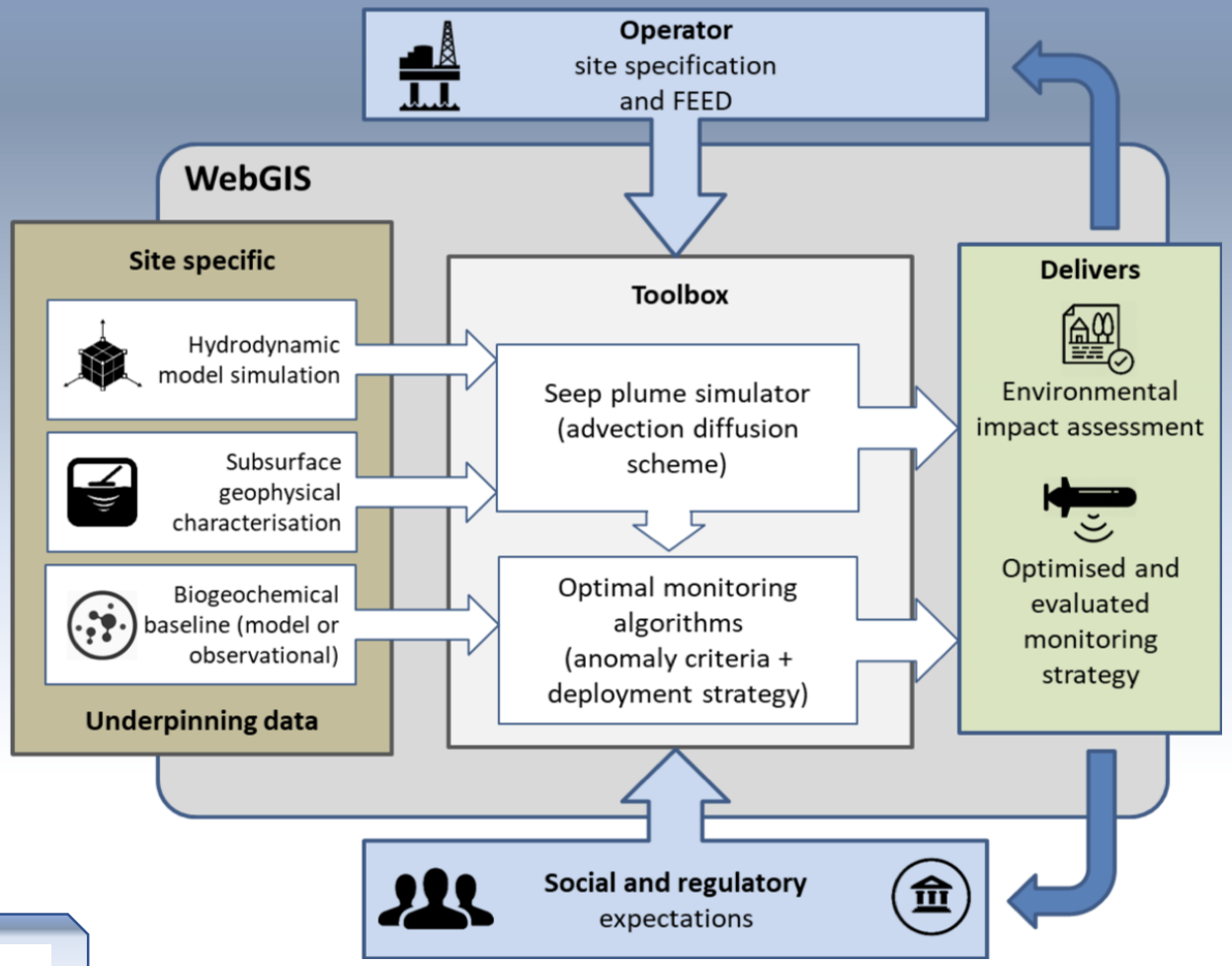
Athens, November 6-7, 2019

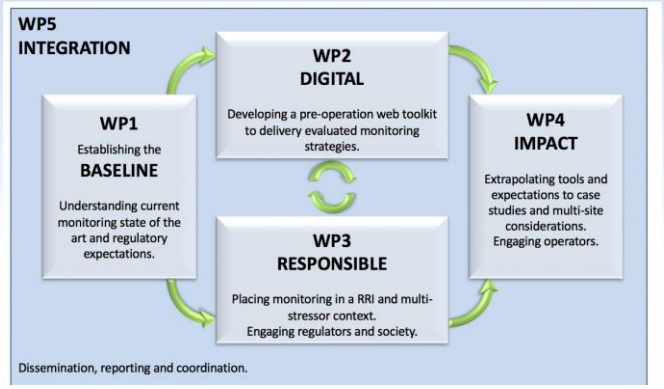
ACTOM

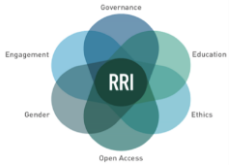
Act on offshore monitoring

- Enable regulators to quantifiably assess that a proposed monitoring strategy delivers an acceptable standard of assurance.
- Enable operators to properly plan, cost and adapt monitoring strategies to site specific circumstances, hence accelerate the planning phase and implementation.
- Enable regulators and operators to communicate to the effectiveness of proposed monitoring strategies to enable informed societal consensus in view of marine spatial planning.

…the primary objective of ACTOM is **to develop internationally applicable capabilities for the design and execution of appropriate, rigorous and cost-effective monitoring of offshore carbon storage, aligning industrial, societal and regulative expectations with technological capabilities and limitations.**







Universitas Bergensis · PML Plymouth Marine Laboratory · NORCE · Bureau of Economic Geology · Los Alamos National Laboratory · TNO innovation for life · Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee · OCTIO Environmental

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Project integration

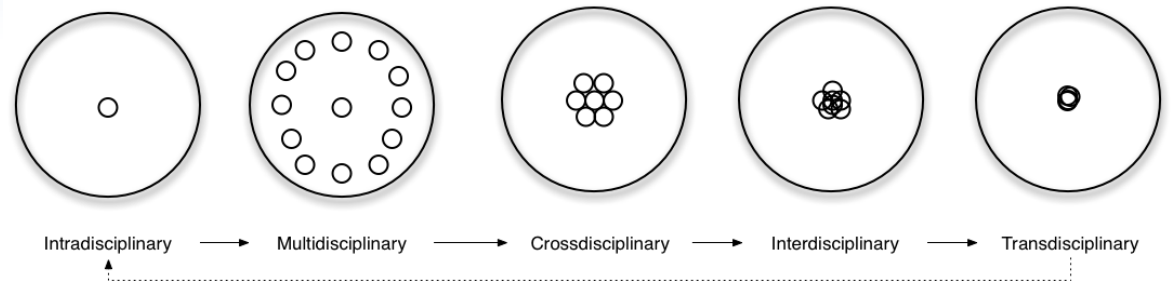
WP1 BASELINE (Abdirahman Omar, NORCE, Sigrid E. Schütz), UiB-Law*: Monitoring the marine environment.* Will survey the regulatory requirements and opportunities and technical limitations laying the foundation for the marine monitoring program. This activity will underpin the other WPs, providing the necessary information on what level of assurance is expected from a monitoring program, alongside the present capabilities of marine measurements and monitoring.

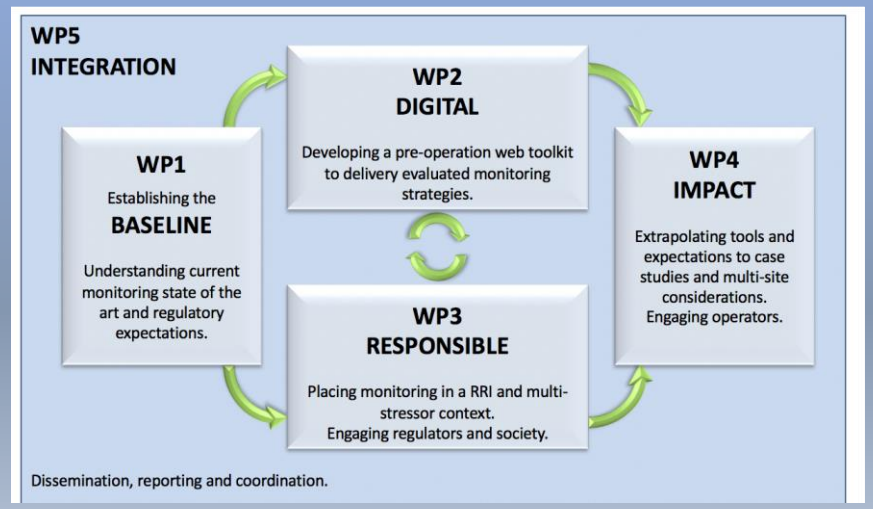
WP2 DIGITAL (Jerry Blackford, PML)*: Design and build of the pre-operational web toolkit.* Will be responsible for building the toolkit based on verified algorithms for detecting weak signals in a highly variable environment and designing monitoring programs.

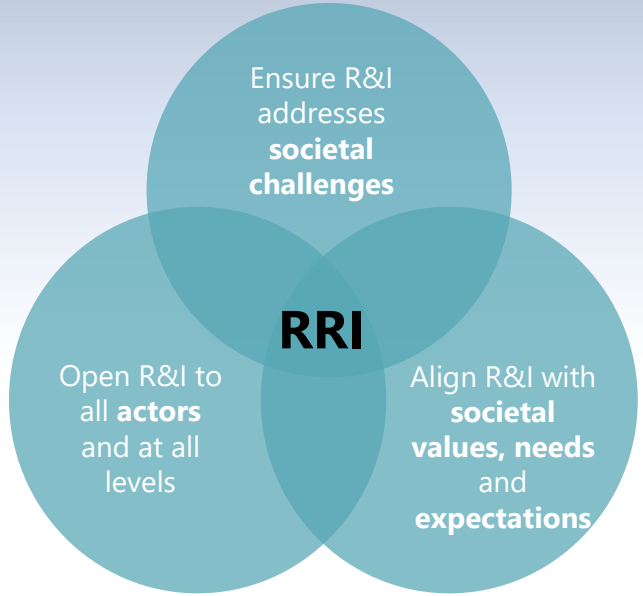
WP3 RESPONSIBILITY (Dorothy Dankel UiB-BIO, Sigrid E. Schütz, UiB-Law)*: Responsible CCUS monitoring process*. Will study how the monitoring program can be used to communicate risks and benefits of subsea storage, and as a tool for public engagement through the Responsible Research and Innovation (RRI) framework.

WP4 IMPACT (Sarah Gasda, NORCE)*: Scenarios and site studies.* Will utilize the web toolkit built in WP2 and the knowledge learned in WP3 to study policy scenarios and demonstrate the toolkit on the P18 and Smeaheia storage sites as well as study sites in the Gulf of Mexico.

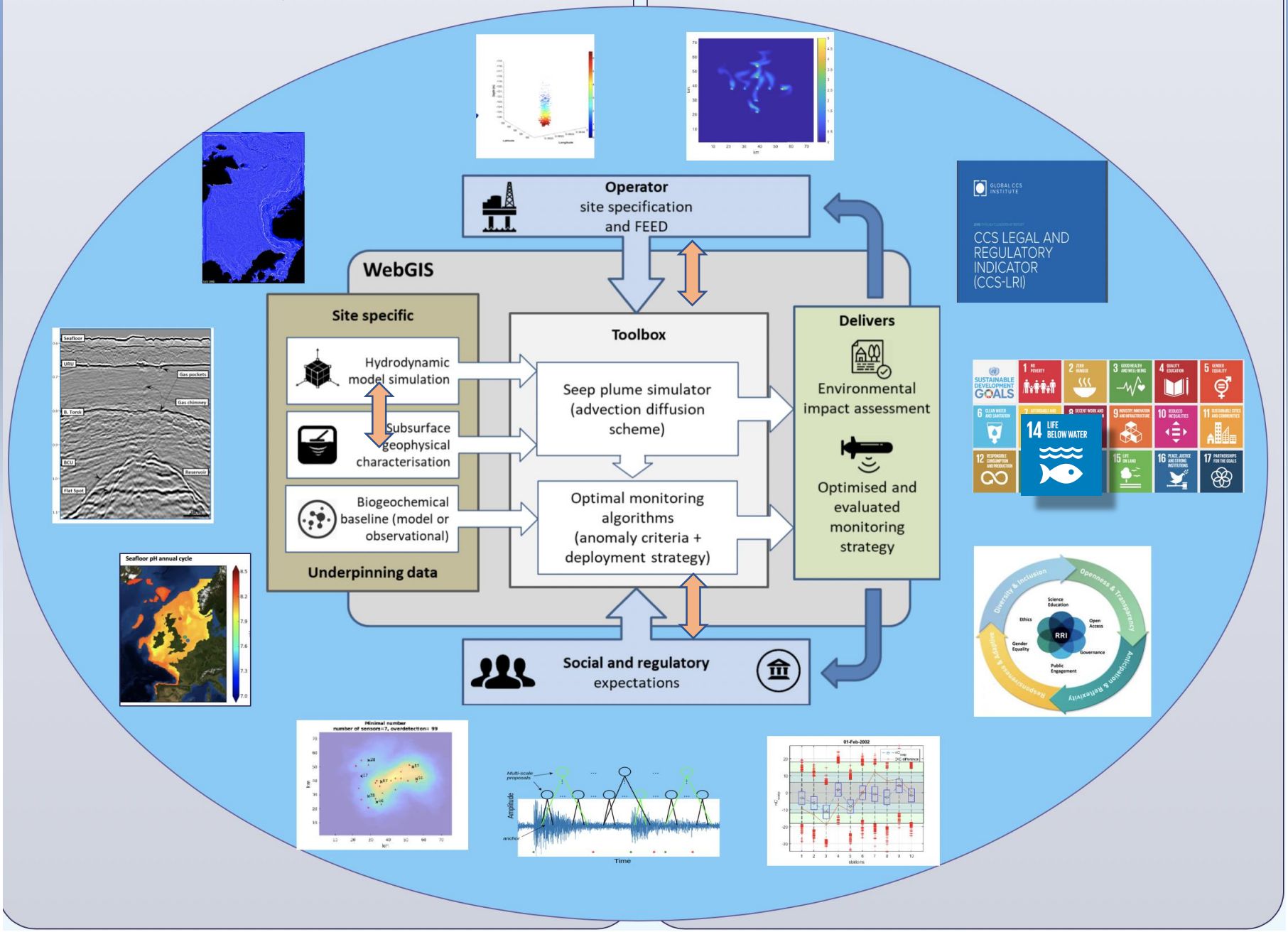
WP5 INTEGRATION (Guttorm Alendal, UiB-MATH)*: Dissemination, reporting and coordination.* Assure easy communication in this highly cross-disciplinary project, both in the core project group, in the extended collaboration group, and beyond the project. Responsible to periodic reporting to ACT.







ACTOM is supported through the ACT ERA NET Cofund, funded by RCN (Norway), Gassnova (Norway), BEIS (UK), RVO (Netherlands), and DoE (USA).



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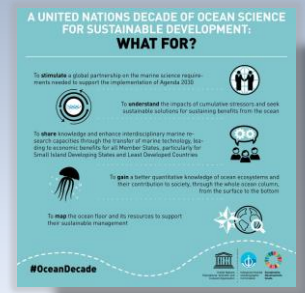
Dissemination

Responsible research and innovation is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation.

- The toolbox will be a tool to demonstrate assurance modelling and quantify risks associated with offshore storage of CO2 to a heterogeneous audience.
- Active in CCS fora
  - International: IEAGHG networks, GHGT15, ACT knowledge sharing workshop
  - National: Climit days, NPDs storage forum, UKCCS, EAGE,…
- Other ACT projects
- Field specific meetings and publications
  - Geosciences EGU, AGU….
  - Environmental sciences, ASLO,…
  - Marine Spatial Planning,
- A cross-disciplinary manuscript.
- Webinars and videos.
- An RRI session in an international meeting.



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CLIMIT

NORCE

Bergen CCUS Seminar 2019

CCUS and the Net-Zero Society

3 – 4 December 2019

Preliminary program and registration

https://bergenccus.w.uib.no

International Workshop on Offshore Geologic CO_2 Storage

STEMM-CCS

Save the date!

4th International Workshop on Offshore Geologic CO_2 Storage
and
STEMM-CCS Open Science Meeting

11-12th February 2020, Bergen, Norway

We are very pleased to announce that there will be a 4th International Workshop on Offshore Geologic CO_2 Storage in February 2020, hosted by the STEMM-CCS project at the University of Bergen. This workshop will look at how to develop CCS projects with offshore storage. It will address and build on the recommendations and topics raised at the 3rd workshop to update on and take forward offshore storage.
The report and the presentations from the 3rd workshop are available at http://documents.ieaghg.org/index.php/s/jMxFmo9MaH3ltgS and http://www.beg.utexas.edu/gccc/research/goi respectively.

In conjunction with the workshop, the STEMM-CCS open science meeting will share key results, technological developments and experiences from four years of intensive research into the environmental monitoring of offshore CO_2 storage. The aims of the STEMM-CCS project included producing new tools and techniques for environmental monitoring in the offshore CCS arena (including CO_2 emission monitoring, quantification and assessment), delivering best practice, cost effective methodologies and tools for baseline environmental monitoring, and generating new knowledge of the reservoir overburden by direct investigation of natural geological and manmade features. A key part of the project was the demonstration of the new tools and techniques at an offshore site in the North Sea where CO_2 was injected into the sediments in order to create a simulated leak. Presentations will highlight the challenges in conducting a two-vessel offshore experiment involving a wide array of cutting-edge marine technology, including a remotely operated vehicle (ROV), an autonomous underwater vehicle (AUV) and numerous pieces of specialist equipment deployed at the seafloor.

Tim Dixon (Chair of the International Steering Committee)
Katherine Romanak (Co-chair of the International Steering Committee)
Douglas Connelly (STEMM-CCS Coordinator)

GCCC Gulf Coast Carbon Center

ieaghg

carbon

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http://www.stemm-ccs.eu/OSM-IOW

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