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# The European Project TWINN2SET

## NEWSLETTER #02 – July 2024



The second Year of TWINN2SET was a very productive and efficient period as many of the basic objectives of the project were accomplished.

The TWINN2SET project will provide a coherent network which will strengthen interactions between members of the consortium, will enable the newly established FORTH/IG to participate in the European R&I process on Energy Transition and increase the international visibility of FORTH/IG through the following activities:

- Strengthen FORTH/IG's interactions and technical expertise in Geothermal Energy, CCS and Underground Hydrogen Storage.
- Raise the scientific profile of FORTH/IG staff, especially early-career researchers, through training and mentoring by internationally leading counterparts. This includes the development of soft skills through dedicated workshops on topics such as gender aspects, responsible research and innovation to the hydrogen economy at system level.
- Contribute to the training of the new generation of future human capital and reskill current professionals by re-orienting existing scientific knowledge to be applicable in

the energy transition, through dedicated, industry-driven Massive Open Online Courses (MOOCs) in geothermal energy and properties of geological storage formations.

- Raise the international visibility of FORTH/IG, through joint contributions to international conferences and membership in important industry associations.
- Increase FORTH/IG's ability for competitive funding through dedicated training on strategic mapping of international funding opportunities, proposal preparation and grants management.
- Enable collaboration between the partners of the consortium through joint case studies in hydrogen geo-storage, geothermal energy and CO<sub>2</sub> sequestration.

#### The FORTH/IG has already participated in several conferences:

- 13th FORTH Retreat 2022, Heraklion Crete, Greece, July 2022
- 8th Balkans Energy Summit Athens, Greece, 1<sup>st</sup> and 2<sup>nd</sup> of March 2023
- Energy Norway 2023, March 13<sup>th</sup> to 15<sup>th</sup> (UiS), Session: "*Subsurface storage opportunities*", invited talk, given by Dr. S. Bellas
- 2nd International Conference on Raw Materials and Circular Economy (RawMat), Athens, August 2023, presentation given by Dr. S. Bellas (Session B3 "*Energy and CO<sub>2</sub> storage*")
- Energy Norway 2024, April 15<sup>th</sup> to 17<sup>th</sup> (UiS), with the presentation "A COMBINED EXPERIMENTAL AND COMPUTATIONAL STUDY ON THE EFFECT OF THE OPERATIONAL MODES AND PARAMETERS ON THE FORMATION AND DECOMPOSITION OF CARBON DIOXIDE HYDRATES", given by Dr. Anastasios Labropoulos (FORTH/IG)

#### Other Activities

The FORTH/IG published the first paper with acknowledgement on TWINN2SET and an article in Innovation News Network in November 2023:

- <https://www.innovationnewsnetwork.com/twinn2set-twinning-to-sustainable-energy-transition/39883/>

Field trips are also an important tool of increasing the staff knowledge regarding the research part of the project (CCS, Underground Storage of H<sub>2</sub> and geothermal energy) as visits in places of interest in Greece and one visit in France are organized.

## TWINN2SET: The 2nd Project Meeting

### Chania, Crete (24-27/09/2023)



The 2nd Project Meeting of Twinning to Sustainable Energy Transition (TWINN2SET) took place in Chania, at the premises of FORTH/IG during 24-29/09/23. There was a strong turnout from the all partners involved: the University of Stavanger, the IFP Energies Nouvelles (IFPEN), and the Institute of Geoenergy - FORTH.

[Read more here](#)

## The 1st Twinn2set Geological Field Trip Chania, Crete (27/09/2023)

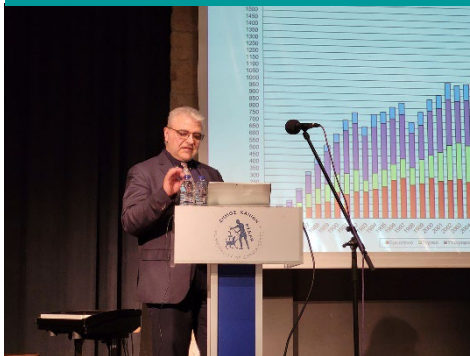


The first geological field trip was organized as part of the the 2nd Project Meeting and took place in Chania on 27th of September 2023. The field trip was organized by Dr. Spyros Bellas (Principal Researcher of FORTH/IG) and aimed to increase knowledge of the sub-surface and explore potential reservoir sites.

The idea behind, is that in the Energy Transition period towards a Net Zero Era, geology and petroleum geology skills can be very useful for a number of actions that are of great importance to minimize the carbon footprint and reach the decarbonization goal.

[Read more here](#)

## Twinn2set: Workshop on Citizen Engagement Chania, Crete (28/09/2023)



During the 2<sup>nd</sup> Project Meeting a Workshop on Citizen Engagement (task 3.3) was held on the 28<sup>th</sup> of September coinciding with the 40<sup>th</sup> Anniversary celebration of FORTH. The event also featured an art exhibition & a cultural event on Energy Transition & Climate Change).

[Read more here](#)

## TWINN2SET: The 2nd Technical Meeting, IFPEN, France (January 30<sup>th</sup>)



The 2nd Technical Meeting of TWINN2SET took place on January 30<sup>th</sup>, 2024, at IFPEN in France. During the meeting, a detailed discussion on the following subjects was held:

- the progress of TWINN2SET engagements,
- the upcoming project review meeting, work package 2 “*Building research excellence of the IG/FORTH*”,
- work package 3 “Virtual technical training, development of soft skills & visibility” and last but not least,
- the research part of TWINN2SET.

[Read more here](#)

## The 2nd Twinn2set Field Trip: Dunkirk, France (February 2024)



On day 4 of the 2nd Technical Meeting, a field trip at the DMX CO<sub>2</sub> capture unit in Dunkirk was organized. The 3D project is funded by Horizon 2020 and the consortium consists of 11 European partners. The project delves into CO<sub>2</sub> capture technologies from industrial activities.

[Read more here](#)

## The 2nd TWINN2SET Workshop in Open Science: “Reproducibility of results” Stavanger, Norway (16/03/2024)

The project Workshop was held at the University of Stavanger on March 16th. This was the 1st Workshop on Open Science with focus on the reproducibility of results, in order to exchange knowledge and best practices on energy transition among the participated scientists, to openly communicate the targets and results of the various research teams from Norway (NORCE, UiS), Brazil (UNICAMP) and Greece (FORTH/IG) and try to find potential synergies

- Attendees:
  - ✓ 6 persons from INTPART
  - ✓ 3 persons from TWINN2SET
  - ✓ 10 persons from SAC/NCS2030

## The 1st Twinn2set Summer School: Chania, Crete (1-5/7/2024)



The first TWINN2SET Summer School on Energy Transition took place in the 1st week of July 2024 in Chania, Crete. The summer school included a series of lectures, workshops and lab tours. The event was organized by FORTH/IG in collaboration with the Technical University of Crete. A Certificate of attendance was issued to all the 35 (online & on-site) participants.

[Read more here](#)