## SMART4ENV



WELCOMING
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Dear reader,

Welcome to the fifth issue of the SMART4ENV newsletter! We are thrilled to continue the journey towards with you, sharing the latest updates, inspiring stories, and impactful initiatives from our project

### In this issue, you will read about

- SMART4ENV Stakeholder Focus Groups
- O Joint development of Multidisciplinary
  Research Agenda of TUBITAK MAM for
  SES
- UNIVPM Winter School and Workshop
- BETA TC Mobility and On-Site Training Programs
- Dissemination and Communication Events
- Next steps

We are looking forward to connecting with you on our social media platforms and discussing any questions and topics that may occur.



















#### Stakeholder Focus Groups

Stakeholder focus group meetings were conducted for each research avenue (water/wastewater, agricultural water, air and marine) of SMARTENV project to identify the barriers and possible solutions for utilization of smart environmental solutions. The groups involved Turkish representatives from national authorities, universities, enterprises and cooperatives associated with the project's four research avenues. The focus groups took place at different times in November and December in 2024. Each focus group addressed significant barriers and discussed on how to overcome the significant barriers. The proposed solutions provided a strategic framework to cope with the obstacles.









# Joint development of Multidisciplinary Research Programme of TUBITAK MAM for Smart Environmental Solutions

SMART4ENV partners jointly worked on finalizing the Multidisciplinary Research Programme of TUBITAK MAM for SES

The initial phase involved creating and disseminating an online questionnaire through an online platform, followed by organizing focus groups to delve deeper into the barriers and challenges for SES and the necessary skills for the smart environmental solution sectors. The culmination of these efforts is a comprehensive report that consolidates the description of the research programme catalogue with definitions, approaches, and structures for scientific capacity. The programme will:

- Identify the strategy that the TUBITAK MAM researchers will follow in the context of their future research.
- Focus on the cross-cutting topics of the research programme

The programme, as well as the reports of the activities of "Upscale the capacity of experienced researchers (ERs) and Early-Stage Researchers (ESRs) Work Package generated Deliverable 2 of the Project named "Consolidated report of Research Programme Catalogue, summer schools, workshops and MOOCs organized"



















The 4th "Winter School" of SMART4ENV project was held in Ancona (Italy), at the Università Politecnica delle Marche (UNIVPM) from 27th to 31st of January 2025 and was titled 'Consequences of climate change addressed through SES applied to water and wastewater management for increased resiliency and efficiency, and IT solutions or current/circulation models for coastal management".

The workshop held in Ancona, entitled "SESW2: Providing successful examples of eco-innovations to deliver a digital and circular transition in urban and industrial water cycles and coastal management", aimed to present experiences and develop practical activities.



























## BETA TC Mobility and On-Site Training Programs **Mobility**

The second mobility programme of the project took place in the city of Vic, Barcelona, Spain from April 7th to April 10th of April, 2025.

The activities of the programme was carried out as lectures; laboratory classes as well as visits to pilot plants. The highlight of the mobility program was the attendance to ERIAFF Conference 2025 and working groups during which SMART4ENV researchers met with experts, public institutions, research centres, and representatives of leading companies in the sector.

The next phase of the mobility program will be held in hybrid mode and focus on the stakeholder meetings and case studies.



























#### **On-Site Trainings**

BETA TC researchers was in TUBITAK MAM between the 10th and 14th of February, 2025 for the onsite training programs of SMART4ENV.

The first two days of the training program delved into Precision Agriculture for Nitrate Monitoring in Soil with course presentations. In the third day, the focus was to gain hands-on experience in conducting field surveys using UAVs, collect data with cameras and to collect soil and plant samples for field validation.

The last two days were devoted to data processing and analysis.

The presence of researchers in Vic represented a unique opportunity to exchange ideas, to assess the progress made, discuss emerging technologies, and share best practices to improve the capacities.



























#### Dissemination and Communication Events

#### Conferences

As part of our ongoing commitment to engage with the wider community, we have presented 2 of our works in Environmental Education Congress on 10th -12th of February, 2025 in Antalya, Turkiye.

Also, on World's Water Day of 22nd of March, we have participated in the' Water Efficiency Summit' event organized by the Ministry of Agriculture and Forestry and the Zero Waste Foundation in Istanbul.



#### Workshops COMSAT Workshop

A high-level online training workshop on "Zero Waste" was held at TÜBİTAK MAM together with the Commission on Science and Technology for Sustainable Development in the South (COMSATS). Scientists, engineers, policy makers and practitioners from COMSATS member countries came together and more than 100 participants in total discussed the innovative solutions and policy frameworks needed for the transition to zero waste and a circular economy. Two presentations were made from the studies carried out within the scope of the SMART4ENV project, titled "Non-Contact Measurement Methods of the Sludge for the Purpose of Dewatering Process Control" and "Identification and Reporting of Beach Litter from Drone Images Using AI"

















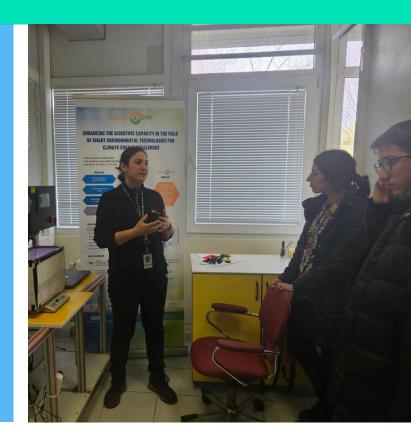




#### TUBITAK Science and Technology Week

TUBITAK brought science together with all segments of society by organizing an intensive event program within the scope of Science and Technology Week from March 8-14. The events appealed to different age groups and areas of interest and aimed to increase interest in science and technology and strengthen the scientific awareness of the society.

As part of the programme, we have hosted different groups of high school students in TUBITAK MAM laboratories, disseminate SMART4ENV project as well as explaining the role of digital transformation for climate change challenges





#### Next Steps

- 14th IWA International Conference on Instrumentation, Control and Automation (ICA) in Oslo, Norway
- Mobility Program to NMBU and SITES
- On-site trainings of UNIVPM

Register on our MOOC Platform (if you haven't already)

Don't forget to follow us on social platforms: <a href="https://www.smart4env.com">www.smart4env.com</a>









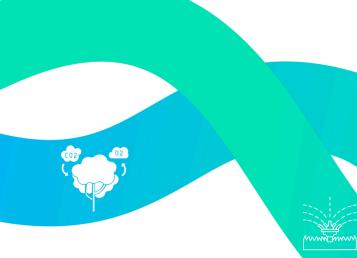






















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