

DATA MANAGEMENT PLAN TWIN4ECO

OPEN SCIENCE PRACTICES

Twin4ECO create a Data Management Plan and will ensure the application of an open science strategy in compliance with the HE guidelines and aimed at open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process. Twin4ECO will focus on the implementation of the following open science practices:

i) Providing open access to research outputs (e.g. publications, data, software, models, algorithms, and workflows) through deposition in trusted repositories. Following the ‘as open as possible, as closed as necessary’ principle, all beneficiaries will make their results available through full open access venues for peer-reviewed scientific publications (after ensuring IP protection of exploitable results) except when this goes against their legitimate interests, as foreseen in the Grant Agreement. Partners will ensure the provision of open access to publications (Green or Gold open access) and will deposit them in a national RCAAP repository, whilst other solutions such as Open Research Europe, EOSC, Arrow@Tu Dublin (TU Dublin’s Institutional Repository) and Zenodo (<https://zenodo.org>) will also be explored. Twin4ECO will deposit and enable immediate open access to relevant research results of the project in specialized open access journals/platforms.

Additionally, metadata will be open under CC, in line with the FAIR principles and will provide information about the licensing terms and persistent identifiers;

ii) Research output management including research data management

Twin4ECO partners will manage the digital research data generated within the project in line with the FAIR principles and as soon as possible will deposit the data in trusted repositories (e.g. OpenAIRE) and will ensure open access under the Common Creatives licenses (CC BY, CC 0 etc.) or equivalent ones. A Twin4ECO Data Management Plan for generated and collected data will be established by M6 and regularly updated; iii) Measures to ensure reproducibility of

research outputs: Twin4ECO partners will aim to make research work, methodologies, outputs and findings available as soon as possible in the research process through early and open sharing of research and thus, will support reproducibility of TWIN4ECO research outputs. Most outputs will result from project deliverables/reports. Therefore, early and open sharing can be via deliverables that can be made accessible to third parties on the project webpage (e.g. through Zenodo), on a case by case basis as some results may be have privileged access; iv) Publishing using open peer-review: Whenever possible, Twin4ECO partners will consider publishing using open peer review instead of the traditional peer review. To improve the quality of the project's direction, activities and results, while keeping sufficient IPR, all Twin4ECO publications are planned to be open peer-reviewed; v) Citizen, civil society and end-user engagement: Stakeholder engagement approach is adopted by the Twin4ECO project through the design and realization of communication activities and campaigns and the academia-business-policy makers dialogue.

RESEARCH DATA MANAGEMENT AND MANAGEMENT OF OTHER RESEARCH OUTPUTS

Twin4ECO project is expected to generate and manage different datasets. The project DMP (D6.4) will outline a data management policy including data summary (data that will be collected during the project, data to be generated by the project, data storing and sharing, its potential exploitation, curation and preservation); the FAIR data management principles and their application in twin4ECO; allocation of resources; data access and security and ethical aspects of data collection and use. Findability of data/research outputs: The data collected and outcomes generated in the project targeting a wider public will be available on the Twin4ECO website. The discoverability of data will be developed through two channels – project website and social media. Accessibility of data/research outputs: Most of the data produced in the Twin4ECO project will be accessible to all the partners through the collaborative partner space. The access to sensitive raw data collected from stakeholders and primary data generated within the project will be limited to the partners in charge.

Raw data will remain on the databases of partners storing the data. All sensitive data, like the personal data, will be compliant to European GDPR standards (Regulation (EU) 2016/679). Outputs will be deposited in Zenodo when completed, with all material deposited for open access by completion of the project. Interoperability of data/research outputs: To allow data exchange between researchers, institutions, organisations, stakeholders, countries, etc., the project will assure that interoperable formats, like those supported by Microsoft Excel and Microsoft Word, will be used. Both for internal smooth collaboration and for comprehensibility by third parties when accessing the data and files collected and created by Twin4ECO, metadata will be provided. A naming convention for project documents and deliverables is also to be considered. Reusability of data/research outputs: Data of twin4ECO will remain reusable by interested third parties after the end of the project and as soon as possible. In all cases, the consortium members will have authorship of reusable data and documents. If the work conducted is to be published, they should be co-author of the publication.

Dissemination material will be open to reuse by third parties as soon as they are made available on the project website, in downloadable format and free of charge. Scientific publications produced based on the implementation of Twin4ECO will be published with open access according to the Open Research Europe Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020 and Horizon Europe programs. Curation and storage/preservation costs: The resources for making the DMP, updating it throughout the project and monitoring the data management are foreseen in the project budget in the form of PMs allocated to EWI, which is responsible for the data management in the project. The costs arising from long-term preservation of the project outcomes on the project website will be covered by partnering institutions for the data backed-up on their servers.