Development of an Innovative Insulation Fire Resistant Façade from the Construction and Demolition Waste

DEFEAT

INTEGRATED/0918/0052

DELIVERABLE D2.5

DATA MANAGEMENT PLAN

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

DELIVERABLE INFORMATION

Deliverable No	D2.5	
Deliverable Title	Data Management Plan	
Work Package and Task Number	*Work Package 2*	*Task 2.4*
Participants:	☒ PA5 - STRATA ☒ HO – FRC ☒ PA1- UCY ☒ PA2 - PLC ☒ PA3 - NETIATIS ☒ PA4- RECS ☒ PA6 – OSEOK ☒ PA7 - PWD ☒ PA8 - DoE ☒ FO1 - KUL	

Sign off	**Name**	**Date Approved**
Originator	STRATAGEM ENERGY Ltd	
Work Package leader	STRATAGEM ENERGY Ltd	
Technical Manager	RECS - Dr Konstantinos Sakkas	
Coordinator	FRC - Dr Nicolaides Demetris	

Dissemination Level [1]		
PU	*Public*	X
CO	*Confidential, only for members of the consortium (including the Commission Services)*	

[1] Enter a cross (X) in the appropriate cell.

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

DISCLAIMER

This document contains the description of the DEFEAT project findings, work and products. Certain parts of it might be under partner Intellectual Property Right (IPR) rules. Therefore, prior to using its content please contact the consortium coordinator for approval. E-mail: d.nicolaides@frederick.ac.cy

Should you feel that this document harms in any way the IPR held by you as a person or as a representative of an entity, please do notify us immediately: d.nicolaides@frederick.ac.cy.

The authors of this document have taken all available measures in order for its content to be accurate, consistent and lawful. However, neither the project consortium as a whole nor the individual partners that implicitly or explicitly participated in the creation and publication of this document hold any sort of responsibility that might occur as a result of using its content.

The content of this document is the sole responsibility of the DEFEAT consortium and can in no way be taken to reflect the views of the European Union.

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

List of Contents

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

List of Tables

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

1. Project Summary

The management of Construction and Demolition Waste (CDW) in Cyprus faces several challenges and appears to be underperforming, as well as there is a lack of recycling technologies to be applied in this type of waste, in order to increase the salvage value of the building. In addition, over the last decade, the construction activities in Europe were accelerated, as well as the rehabilitation activities for energy saving, as a general need to facilitate accommodation. Even though the construction works are ongoing, only in the recent years the safety of such infrastructures has gained increasing attention, particularly the issue of fire. Towards this end, the scope of the DEFEAT project is the innovative separation and transformation of CDW into an innovative insulation fire resistant facade.

The DEFEAT project will develop in pilot scale, and through detailed experimental study, an innovative separation method of CDW, as well as a composite material generated also from the CDW, which will gain low thermal conductivity, satisfactory mechanical properties and at the same time will be fire resistant. Initially, a novel method will be utilized for the optimization of the separation of the CDW, in order to receive "Clean" materials after the CDW collection. On this purpose, the technology of image processing will be applied to optimize the separation process. As a result, both recycled concrete aggregates and also the raw material that will be used for the development of the insulation and fire-resistant composite for building applications will be obtained. For the latter, the technology of geopolymerisation will be applied. The optimization of the material density will be achieved by chemical and mechanical methods, while the production will be held by a conventional method and 3D-printing. In addition, the final products will be evaluated in terms of thermal, mechanical, fire resistance properties, as well as financial cost, to allow for their full market potential and uptake within 3 years after the end of the project. At the end of the project, an attempt will be carried out in order to establish a framework for utilizing CDW as a raw material in the building industry.

The social, economic, environmental, and scientific impacts of the project are summarized below:

Social impacts

- Utilization of waste and return to the production cycle as a high value-added material in the context of the circular economy.
- Developing products that have an impact on the building sector and benefits society.

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

- Decrease of a waste with a simultaneous positive impact on the environmental footprint created by the deposition so far.

Economic impacts

- Stimulate the economy by introducing new materials in the building material sector that increase competition and lead to lower prices.
- Developing innovative materials by leveraging a number of companies wishing to mass-produce and sell them, creating growth conditions for the economy.
- Creating Net Added Value by investing and launching a high value-added product line and creation of a suitable environment for the further development of innovative building materials (geopolymers) by companies in Cyprus.

Environmental impacts

- Low energy consumption for the development of geopolymers since the curing temperature is ambient.
- Low energy consumption for the waste separation
- Reduced CO2 emissions compared to the cement and concrete industry.
- The utilization of a waste for the production of an innovative product and the elimination of the relevant environmental impacts is related with the environmental and societal progress in Europe.

Scientific impacts

- Developing of know-how and transferring it to the industrial level in the recovery of construction waste materials through the production of recycled aggregates and development of composite fire-resistant insulation material as well as on the waste separation.
- Training of scientists and staff in an interdisciplinary environment related to materials engineering.

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

2. Glossary of Terms

Acronym	Meaning
CDW	Construction and Demolition Waste
DMP	Data Management Plan
RIF	Research and Innovation Foundation
EU	European Union
HO	Host Organization
IPR	Intellectual Property Rights

2.1 Definitions

Words beginning with a capital letter shall have the meaning defined either herein or in the Rules or in the Grant Agreement related to the Project.

- **Project** refers to the DEFEAT project funded from the Research and Innovation Foundation Programmes, for Research, Technological Development and Innovation – RESTART 2016 – 2020.
- **Metadata** is data that describes other data. Meta is a prefix that in most information technology usages means "an underlying definition or description". Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier.

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

3. Description of Work

The purpose of this document is to set the Data Management Plan (DMP) for the DEFEAT project. It contains guidelines which will include an analysis of the main elements of the data management policy that will be used by the DEFEAT consortium with regards to all the data that will be generated by the project. Moreover, the DMP covers the following aspects:

- Description of the data to be collected/created
- Standards/methodologies for data collection and management
- Ethics and Intellectual Property (IP) concerns or restrictions
- Plans for data sharing and access
- Strategy for long-term preservation

The DMP is a living document which will be updated if necessary as the project evolves. The DMP reflects the current state of the discussions, plans and ambitions of the DEFEATs partners, and will be updated as work progresses. New versions of the DMP will be created whenever important changes to the project occur due to the inclusion of new data sets, changes in consortium policies or external factors.

The first version of the DMP was delivered in Month 6 of the project when the first data sets were identified. In Month 36 the last version of the DMP will be prepared to present the last updates.

3.1 Purpose of the Data Management Plan

The increasing for data is a well-known phenomenon while the use and re-use of data to derive new scientific findings is more or less stable. This does not imply that the data currently unused are useless - they can be of great value in the future. The prerequisite for meaningful use, re-use or recombination of data is that they are well documented according to accepted and trusted standards. Those standards form a key pillar of science because they enable the recognition of suitable data. To ensure this, agreements on standards, quality level and sharing practices have to be negotiated. Strategies have to be fixed to preserve and store the data over a defined period of time in order to ensure their availability and re-usability after the end of DEFEAT project. Additionally, the description of the data that will be collected will be explained, the restrictions due to intellectual property will be notified, the plans for data share and access.

Ευρωπαϊκή Ένωση
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

The purpose of the Data Management Plan (DMP) is to:

- Support the data management life cycle for all data that will be collected, processed or generated by the Project,
- Provide an analysis of the main elements of the data management policy which will be used by the partners with regard to all the datasets which will be generated by the Project,
- Provide detail and guarantee about the preservation of the data collected during the Project, as well as any results derived from the associated research,
- Provide detail on how the DEFEAT consortium plans to address the Ethical issues (if any) related to data which will be collected during the Project timeframe,
- Create a document which explains the management of data collected during the Project.

The DMP is not a static document, but will be enriched during the evolution of the project. New versions of the DMP will be created whenever important changes to the project occur. Thus, whenever the generation of data from the partners during the project are valuable will also be included. The DMP would need to be updated at least by the mid-term and final review to fine-tune it to the data generated and the uses identified by the consortium since not all data or potential uses are clear from the start.

3.2 Target Audience

The DMP will be oriented to the below participants using the data and data produced:

- DEFEAT project's participant organisations.
- The Cyprus Research and Innovation Foundation.
- Local ethics committee.
- Partners' personnel and stakeholders interested in the project.

3.3 Overview of the DMP

This document describes the lifecycle, responsibilities and review processes and data management policies of research data produced in DEFEAT project. The DMP reflects the current status of

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

discussion within the consortium about the data that will be produced. It is not a fixed document but evolves during the lifespan of the project.

The DMP contains details on:

- A brief description of data types which will be collected during the DEFEAT project, explaining the procedures used to collect or create them.
- Copyright and IPR issues.
- Ethical issues related to data storage, persons authorised to see/use them and how long they are kept; managing ethical concerns that include the anonymisation of data; procedures used to obtain the consent requested to allow data sharing and reuse.

3.4 Partners' involvement in the project

Each partner has a unique role in the project and therefore the data generated for the DEFEAT project will be gathered from all the partners. Each partner's role is presented on the table below:

Table 1. Role of each partner in the project

HO - Frederick Research Center	Coordinator of the project, Responsible for the dissemination and exploitation activities. Knowledge management, IPR Management, Data analyzing of the CDW, Supervising the properties engineering for the production, Supervising the pilot production and application, Commercialization activities, Development of framework for CDW reuse promotion in Cyprus.
PA1 - University of Cyprus	Contribute to the dissemination activities. Validation of the materials. CDW characterization, CDW separation, Material characterization
PA2 - Latomia Pharmakas	Contribute to the dissemination activities. Pilot production.
PA3 - Netiatis	Contribute to the dissemination activities. Data analyzing of the CDW. CDW separation.
PA4 - RECS Civil Engineers & Partners	Contribute to the dissemination activities. Responsible of the LCA analysis. Responsible for the material design.
PA5 - Stratagem Energy	Responsible to the dissemination activities. Responsible for the Exploitation. Assist in the LCA analysis. Contribute to the Business Plan Management.
PA6 - OSEOK	Contribute to the dissemination activities. Data analyzing of the CDW.
PA7 - PWD	Contribute to the dissemination activities. Development of framework for CDW

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	reuse promotion in Cyprus.
PA8 - DoE	Contribute to the dissemination activities. Development of framework for CDW reuse promotion in Cyprus.
FO1 - KU Leuven	Contribute to the dissemination activities. Responsible for the material design.

4. Data sets

4.1 Defining research data

One definition of research data is: "*the recorded factual material commonly accepted in the scientific community as necessary to validate research findings*."[2]. Research data covers a broad range of types of information and digital data can be structured and stored in a variety of file formats. Note that properly managing data (and records) does not necessarily equate to sharing or publishing that data.

Another definition for Research Data according to "Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020" is: *information, in particular facts or numbers, collected to be examined and considered as a basis for reasoning, discussion, or calculation. In a research context, examples of data include statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings and images. The focus is on research data that is available in digital form. Users can normally access, mine, exploit, reproduce and disseminate openly accessible research data free of charge."*[3]

Some examples of research data that will be developed during DEFEAT project include:

- Documents (text, Word), spreadsheets, presentations
- Laboratory notebooks, field notebooks, diaries
- Questionnaires, transcript, codebooks
- Several raw data from characterizations performed in different formats
- Spectra, diagrams, graphs

[2] Office of Management and Budget (OMB), Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (OMB CIRCULAR A-110) https://www.govinfo.gov/content/pkg/CFR-2012-title2-vol1/pdf/CFR-2012-title2-vol1-part215.pdf (Accessed on 18/08/2020)

[3] European Commission, H2020 Programme Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020, March 2017 (Accessed on 27/08/2020)

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

- Test responses
- Slides, artefacts, specimens, samples
- Collection of digital objects acquired and generated during the process of research
- Database contents (videotapes, audiotapes, text, images, photographs, films)
- Models, algorithms, scripts
- Contents of an application (input, output, logfiles for analysis software, simulation software, schemas)
- Methodologies and workflows
- Standard operating procedures and protocols

In addition to the other records to manage, some kinds of data may not be sharable due to the nature of the records themselves or due to ethical and privacy concerns. As defined by the Office of Management and Budget (OMB), this refers to:

- preliminary analyses,
- drafts of scientific papers,
- plans for future research,
- peer reviews, or
- communications with colleagues

Research data also do not include:

- Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and

- Personnel and medical information and similar information the disclosure of which would constitute an unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

The following research records may also be important to manage during and beyond the life of a project:

- Correspondence (electronic mail and paper-based correspondence)
- Project files
- Grant applications

Ευρωπαϊκή Ένωση
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

- Ethics applications
- Technical reports
- Research reports
- Signed consent forms

4.2 Datasets

The specific Data Sets for the DEFEAT project need to be identified and described with the contribution of all project partners. A short description of the data, which will be generated in the research project (e.g. samples, physical collections, software, curriculum materials and other materials to be produced during the course of the project) must be provided. Additionally, an estimation of the amount of data and content of the data (if possible) must be included.

For this reason, the following tables will be filled by the task leaders in order to collect information regarding data sets according to the following template.

Table 2. Template of Data set description

Task x.x.	
Data Set Reference & Name	
Data Set Description	Description, Source of data, creation of data,
Standards	Word document, Excel Workbook, design etc.
File name (s) containing the data sets	
[File Name #1]	PU ☐ CO ☐
[File Name #2]	PU ☐ CO ☐
[File Name #3]	PU ☐ CO ☐
Metadata	Data characteristics
Data Sharing	Data derives from…, Data shared with..., Use of data by…
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials … first level of storage and backup. e.g. Dropbox folder - second level of storage A third level of storage and accessibility will be the member's section in the DEFEAT website (Private documents).

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Contributors	e.g. STRATAGEM with the contribution of all other partners is of advisory and consultation nature.
Dissemination Level of Files Containing the Data Set(s)	
[File Name #1]	PU ☐ CO ☐
[File Name #2]	PU ☐ CO ☐
[File Name #3]	PU ☐ CO ☐

All the partners will be asked to provide information regarding the data that will derive from the Work Packages and the Tasks they are leading. For the Datasets that will be identified, all the partners will need to provide adequate information regarding the following issues:

Are you generating the data or sourcing it from somewhere else under certain terms and conditions?
Is the data digital or non-digital, or both?
How will the data be created or collected? What instruments or tools will be used to produce the data?
What transformations will the data undergo? What software or file formats will you use as you work with the data?
Will the data be updated or become redundant as you make revisions and produce subsequent versions?
Is the data sensitive or confidential?
Is there ethics approval, or is ethics approval required?

From the information that will be gathered the roles of the partners and the use of the data will be identified. As a result of each type of research data, it will be defined who will be providing the data and who will be using/analyzing the data.

Additionally, the file formats that will be used are an important issue. The formats that will be used should be the best for long-term preservation and continued access to data. Formats most likely to be accessible in the future are:

- Non-proprietary and not tied to a specific piece of software
- Open, documented standard

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

- Common, used by the research community
- Standard representation (ASCII, Unicode)
- Unencrypted
- Uncompressed

4.3 Descriptive information and Metadata

The DMP defines what documentation and metadata will accompany the data. Metadata is structured information describing the characteristics of a resource; for example, the dates associated with a dataset or the title and author of a book. Metadata support discovery, re-use and long-term preservation of resources. Metadata needs to vary across scientific fields, but typically cover the following:

- General descriptive and access to metadata,
- Data characteristics,
- Archive terms and access policies.

A metadata record consists of a set of predefined elements that define specific attributes of a resource. Each element can have one or more values; for example, a dataset may have multiple creators. Documenting data enables other researchers to discover your data. Metadata about the nature of files is also critical to the proper management of digital resources over time.

All the partners have agreed on specific issues regarding for example:

- The way that the data will be organized or formatted so that everyone working on it now and in the future knows the origins of the data.
- The way that each file will be named (File Naming Conventions). The use of the following format is proposed for each file/document:

  "Date (yyyymmdd)_project_company_filename_version".

  For example, the file containing the minutes from the kick-off meeting will be called:

  "20200701_DEFEAT_FRC_Minutes of Kick Off Meeting_Final".
- Providing adequate metadata within the dataset (e.g. field labels or column headings) in order to be easy to interpret the data. Other examples of information that the data need to contain include:
  - Reference period

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

- Project funding information: RIF and European Union logo and information about Grant Agreement and the action/program that funds the project
- Release policy including dissemination rules and purposes
- Information about data collection (source, frequency and adjustments)
- Keywords (Keywords or phrases describing the subject or content of the data)
- Geographic coverage of the dataset (if applicable)
- File formats
- Comments

o Ways to identify different versions. It is proposed in each data set to include a versioning table, additionally to use the prefix ".v1" in each file/document name relevant to the versioning table. For versioning, the rule that will be followed will be the use of a sequentially numbered system: v1, v2, v3, etc. and "Final" for the final version. If changes need to be done in the final version, then the name of the document will change including the relevant sequential version number, ensuring that the document with the "Final" prefix is indeed the final one.

At a minimum, metadata records should be kept in a fielded form, such as a spreadsheet, CSV file, or tab-delimited file. Auxiliary information necessary to interpret the metadata - such as explanations of codes, abbreviations, or algorithms used - should be included as accompanying documentation. The Datasets identified for the DEFEAT project from each work package are included in Annex 1.

4.4 Ownership (IPR)

In the DMP issues regarding copyright and Intellectual Property Rights (IPR) of the data are included. These issues are set in the Consortium Agreement and the Grant Agreement of the DEFEAT project regarding all the results of the project. Thus, the DMP follows the Consortium Agreement and the Grant Agreement that is signed by all project partners regarding Ownership issues. Materials generated under the DEFEAT Project will be disseminated in accordance with the Consortium Agreement. Those that use the data (as opposed to any resulting manuscripts) shall cite and annotate it as follows:

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

The data were created by DEFEAT project, co-funded by the European Regional Development Fund and the Republic of Cyprus through the Research & Innovation Foundation under grant agreement "INTEGRATED/0918/0052". For reuse of this data, please, contact the DEFEAT Consortium. Include your proposed use of the data to assist us in determining your eligibility and to help us navigate possible conflicts between research projects. We will provide you with a short data sharing agreement for you and your authorised institutional official to sign prior to your receiving of the data.

This information must also be described in the metadata.

4.5 Storage and Access

To ensure the safety of the data, the involved participants will use their available local file servers to create backups of the relevant materials periodically. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in Dropbox folder that has been created for the purposes of the project. It allows users to store files in the cloud, share files and edit documents, spreadsheets and presentations with collaborators. The DEFEAT Dropbox folder will be accessible by all of the partners of the consortium and it will include the following subfolders/architecture:

- Deliverables (where all the deliverables will be stored – drafts at the beginning that will be substituted by the finals when submitted)
- Financial (including documents regarding financial issues of the project)
- General (including general documents of DEFEAT project, e.g. Grant Agreement, Consortium Agreement, administrative templates etc.)
- Meeting (including folders for each meeting containing relevant documents and data)
- Periodic Report (Including data from the periodic reporting)
- WPs (containing one folder for each WP (10 in total) in which data relevant to each WP will be included containing all the deliverables - drafts at the beginning that will be substituted by the finals when submitted - and all other relevant data, files and folders)
- Other (to store and share any other document relevant to the DEFEAT project)

The research data must be Findable, Accessible, Interoperable and Reusable (FAIR). Therefore, the last level of storage and accessibility will be the open-access data repository, Zenodo (https://zenodo.org/). All the academic publications conducted by the partners will be uploaded to

Ευρωπαϊκή Ένωση
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

this web-platform in order to share the gained knowledge. Zenodo is an innovative and very useful platform, which apart from the other advantages, it enables the researchers to share and preserve their various scientific publications without regard to the format or size. Additionally, Zenodo allows researchers to deposit both publications and data, while providing tools to link them. Zenodo and some other repositories, as well as many academic publishers, also facilitate linking publications and underlying data through persistent identifiers and data citations.

All of the research data and material will be in place for at least 2 years after the end of the project. The Coordinator of the DEFEAT project along with the Dissemination & Exploitation Manager will be in charge of data management and all the relevant issues.

4.6 Data Security

The DEFEAT project will produce data and information that, at the end of the project, will be used in end-users' plant. Due to the sensitive nature of some of the information present in all documents, data security is of vital importance. The following guidelines will be used in order to ensure the security of data:

- Encrypt data if it is deemed necessary by the researchers
- Store data in at least two separate locations to avoid loss of data
- Save digital files in one the preferred formats and
- Labels files in a systematically structured way in order to ensure the coherence of the final dataset

5. Ethical and Legal Issues

5.1 Ethical Issues

The DEFEAT partners are to comply with the ethical principles as set out in the Contract of Cooperation Network Agreement of the Research Project with Protocol number INTEGRATED/ 0918/0052.

5.2 Confidentiality

All DEFEAT partners must keep any data, documents or other material confidential during the implementation for the project and for two years after the end of the project.

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

6. Conclusions

The document presented the Data Management and Open Access strategy for the DEFEAT project. The Initial DEFEAT Data Management Plan have been developed after the identification of the initial Datasets by all partners. The DMP will be revised and updated during the entire duration of the project. The DMP will be updated at least by the mid-term and final review to fine-tune it to the data generated and the uses identified by the consortium since not all data, or potential uses are clear from the beginning. New versions of the DMP will be created whenever important changes to the project occur due to the inclusion of new data sets, changes in consortium policies or external factors.

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Acknowledgements

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation.

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Appendix

DEFEAT Data Sets

WP1 Project Management

Task 1.1: General Project Management	
Data Set Reference & Name	General Management of the project, Legal and Contractual obligations, Financial and Administrative issues
Data Set Description	Compliance with the provisions of the Grant Agreement and the RIF. Handling legal issues and provisions of the Consortium Agreement. Planning, control and monitoring of financial progress. Resolving administrative problems that may occur in the course of the project Organizing project meetings and reviews; preparing and submitting Periodic Reports (including financial reports) and Final Reports. Keeping contact and submitting documents and deliverables to the RIF officers in charge. Convening scheduled and ad-hoc meetings of the General Assembly.
Standards	Word document, Excel Workbook
File name (s) containing the data sets	
[File Name #1]	Internal report on the progress of the project.docx
[File Name #2]	General Project Management Interim report.docx
[File Name #3]	General Project Management Final report.docx
[File Name #4]	Minutes of Meetings.docx

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #5]	Workflow Scheduling.xlsx
Metadata	N/A
Data Sharing	1)Data derives from all (consortium) partners. 2)Data is shared with all partners and the RIF. 3)Use of data by the consortium.
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup and the Project Coordinator as the second level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D1.1: Consortium Agreement	PU ☐ CO ☒
D1.2: Project Management Plan	PU ☒ CO ☐
D1.3: Risk and Mitigation Plan	PU ☒ CO ☐
D1.4:18 Month Progress Report	PU ☒ CO ☐
D1.5: Final Report	PU ☒ CO ☐

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

D1.6: Minutes of Meetings	PU ■ CO □

Task 1.2: IP Management	
Data Set Reference & Name	Management of Intellectual Property
Data Set Description	Consortium Agreement will govern the rules and procedures for the management of IP (e.g. rules for decision-making and conflict resolution procedures, addressing confidentiality-related aspects, etc.). Consortium Agreement addresses the rules regarding knowledge generated during the course of the project (Results) and confidentially related issues. PEDR (Plan for Exploitation and Dissemination of the Project Results) will govern these issues addressing both Strategy and Implementation of IPR and in a broader view the Knowledge Management.
Standards	Word document, Excel Workbook.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Consortium Agreement.docx Plan for Exploitation and Dissemination of the Project Results (PEDR).docx
Metadata	N/A
Data Sharing	1) Data derives from all (consortium) partners. 2) Data is shared with all partners and the RIF. 3) Use of data by the consortium.
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup and the Project Coordinator as the second level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D1.1: Consortium Agreement	PU ☐ CO ☒

Task 1.3: Technical Project Management	
Data Set Reference & Name	Management of technical aspects and addressing technical issues of the project.
Data Set Description	Management of the overall scientific coordination and implementation of the project in cooperation between the Project Coordinator, the Project Technical Manager and the WP-leaders. Meetings of the Technical Steering Committee, to implement the decisions taken by the General Assembly in the remaining research activities, and to synchronize the technical research progress across the WPs. Meetings per WP to report the progress, discuss future scheduled research tasks and resolve technical issues that may arise. Determination of technical and scientific parameters (e.g. material requirements, CDW characterization, processing methods, experimental program, results and analysis, procedure of image processing and machine learning techniques, etc.)
Standards	Word document, Excel Workbook
File name (s) containing the data sets	
[File Name #1]	Internal reports on the technical progress of the project.docx

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #2] **[File Name #3]**	Minutes of Meetings.docx Workflow Scheduling.xlsx
Metadata	N/A
Data Sharing	1)Data derives from all (consortium) partners. 2)Data is shared with all partners and the RIF. 3)Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup and the Project Coordinator as the second level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC as the task leader (in close collaboration with RECS and more specifically Dr Konstantinos Sakkas – Project Technical Manager) and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D1.2: Project Management Plan	PU ☒ CO ☐
D1.3: Risk and Mitigation Plan	PU ☒ CO ☐
D1.4: 18 Month Progress Report	PU ☒ CO ☐
D1.5: Final Report	PU ☒ CO ☐

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

D1.6: Minutes of Meetings	PU ☒ CO ☐

WP2 - Dissemination Activities, Exploitation & Innovation Management

Task 2.1: Exploitation of the project results	
Data Set Reference & Name	Study the current market insights and identify new business opportunities and pave the way for the market penetration & development of PUDR.
Data Set Description	Study the possible impact of the project results to the market.
Standards	Word document
File name (s) containing the data sets	
[File Name #1]	Exploitation. docx
Metadata	N/A
Data Sharing	1) Data derives from all partners 2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium.
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	STRATAGEM as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D2.2: 1st Interim Plan for Use and Dissemination of	PU ☒ CO ☐

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

the Results (PUDR) **D2.3: Final Plan for Use and Dissemination of the Results (PUDR)** **Exploitation.docx**	PU ☒ CO ☐ PU ☐ CO ☒

Task 2.2: Dissemination and communication of the project results	
Data Set Reference & Name	Activities for dissemination and communication & Development of initial dissemination strategy
Data Set Description	List of dissemination (journal papers, presentations in scientific conferences) and communication (seminars, workshop, leaflet, social media, banners) activities, included name, date, audience, location, partner, link.
Standards	Excel Workbook
File name (s) containing the data sets	
[File Name #1]	Dissemination & Communication.xlsx
Metadata	N/A
Data Sharing	1) Data derives from all partners 2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	STRATAGEM as the task leader and all the other parts will

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	contribute to the aforementioned action, as well as providing feedback and updates. FRC will organize the Scientific Information Day.
Dissemination Level of Files Containing the Data Set(s)	
D 2.1: Initial Dissemination Plan	PU ■ CO □
D2.4: Project Website	PU ■ CO □
D2.6 Scientific Information Day	PU ■ CO □
Dissemination & Communication.xlsx	PU □ CO ■

Task 2.3. Innovation management	
Data Set Reference & Name	Innovation Management activities & production of PUDR
Data Set Description	SWOT analysis and Porter's Five Forces analysis, Business Plan and Innovation Strategies
Standards	Word document and Excel Workbook
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	IM activities.docx IM activities.xlsx
Metadata	N/A
Data Sharing	1) Data derives from all partners 2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	STRATAGEM as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D2.2: 1st Interim Plan for Use and Dissemination of the Results (PUDR)	PU ■ CO □
D2.3: Final Plan for Use and Dissemination of the Results (PUDR)	PU ■ CO □
IM activites.docx	PU □ CO ■

Task 2.4. Knowledge management	
Data Set Reference & Name	Knowledge Management System and IPR protection activities.
Data Set Description	Creation of a Knowledge management document. Update of the Knowledge management system. Creation of a catalogue with the IPR results, as they derive from the research actions, carry out patent searches, filling of patent applications, develop the Data Management Plan.
Standards	Word document & Excel Workbook
File name (s) containing the data sets	

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #1]	IP Registry.xlsx
Metadata	N/A
Data Sharing	1) Data derives from all partners 2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	STRATAGEM as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D2.5: Data Management Plan	PU ■ CO ☐
IP Registry.xlsx	PU ☐ CO ■

WP3 - Construction and Demolition Waste Separation

Task 3.1: Definition of crucial parameters for the image processing	
Data Set Reference & Name	Definition of all properties for the optimization of separation by applying image process technology.
Data Set Description	Analyse CDW derived from a typical separation process: a. percentage of each waste stream per tonne of CDW b. shape of waste concrete and ceramic c. colour of the all the waste derived from this procedure d. volume of waste

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	e. mass of waste Decide the value ranging for the application of the crucial parameters for the image processing technology. These parameters include: a. the colour of each waste derived from the demolition b. the shape of the waste the volume and mass of the waste
Standards	Raw data files, Word document, Excel Workbook, PDF file.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Report on the data characteristics of each steam derived from CDW typical separation process.docx Definition of value ranging for application of crucial parameters for the image processing technology.docx
Metadata	List of parameters, Materials characteristics, Scaling of materials characteristics, Codification
Data Sharing	1) Data derives from the consortium partners who carried the specific work (FRC, UCY, Netiatis). 2) Data is shared with all partners 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	Netiatis and FRC as the task leaders and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

D3.1: Report on data characteristics of each steam derived from the CDW.	PU ☒ CO ☐
D3.6: Publication in open access journal.	PU ☒ CO ☐
D3.7: Presentation in conference.	PU ☒ CO ☐

Task 3.2: Image processing application	
Data Set Reference & Name	Image processing and machine learning techniques for the optimization of the separation of CDW
Data Set Description	Image processing is going to be performed with Machine Learning techniques (such as Neural Networks), which will be trained on a set of images that will be annotated with the waste type in which they belong. The result will be a model that will be able to classify a given waste image to the type it belongs. Employment of equipment for the optimization of separation of CDW. Collection of separated CDW materials after the application of image processing and machine learning techniques (wastes after image processing will be collected in separate points according to the type of waste, i.e. paper, wood, concrete, ceramic etc.).
Standards	Word document, Excel Workbook, Raw Data, etc.
File name (s) containing the data sets	
[File Name #1]	Neural Networks Code
[File Name #2]	Image processing report.docx
[File Name #3]	Characteristics of separated CDW.docx

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Metadata	Code, Data characteristics (List of parameters, measurements)
Data Sharing	1) Data derives from the consortium partners who carried out the specific work (experimental, machine learning, etc.) (FRC, Netiatis). 2) Data is shared with all partners 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D3.6: Publication in open access journal.	PU ☒ CO ☐
D3.7: Presentation in conference.	PU ☒ CO ☐
D3.2: Report on applying the image processing technology.	PU ☒ CO ☐
D3.4: Application of image processing on the CDW separation.	PU ☒ CO ☐
D3.5: Demonstration	

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

video of the innovative separation method. **D3.8: Workshop for exploiting the results of the image processing.**	PU ☒ CO ☐ PU ☒ CO ☐

Task 3.3: Separated Concrete Rubbles Treatment and Reuse	
Data Set Reference & Name	Rubbles Treatment Methods Raw data and analyzed data. Reuse Methods and suggestions yielding from the experiments.
Data Set Description	This set of Data will include the experimental results of rubbles treatment where the reusing methods will be based on. The data will be collected from experimental procedures based on our (Latomia Pharmaka and FRC) previous experience. Treated aggregates will be used for the production of new concrete mixtures.
Standards	Excel Workbook
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]**	Rubbles Treatment.xlsx Rubbles Treatment Image Analysis.xlsx Rubbles Treatment Report and Reuse suggestions.docx
Metadata	Treatment time evaluation
Data Sharing	1) Data derives from experimental procedures and analysis 2) Data is shared with the Project Coordinator 3) Use of data by the Consortium and the Manuscript authors
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	Coordinator - second level of storage External Hard disks of the Task Leader, backed up every month - third level of storage
Contributors	Latomia Pharmakas as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Rubbles Treatment **Rubbles Treatment Image Analysis** **Rubbles Treatment Report and Reuse suggestions**	PU ☐ CO ☒ PU ☒ CO ☐ PU ☐ CO ☒

WP4 - Raw Materials Characterization

Task 4.1: Chemical Analysis	
Data Set Reference & Name	Chemical analysis – raw materials characterization
Data Set Description	Generic chemical analysis of the raw materials. Characterization of the separated waste concrete and ceramic using X-Ray Fluorescence (XRF) and fusion method.
Standards	Word Document, Excel Workbook, Adobe Acrobat Reader
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]**	Materials_characterization_report.docx and .pdf Characterization_FusionMethod.xls Characterization_XRFanalysis.xls

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Metadata	N/A
Data Sharing	1)Data derives from analysis output of relevant equipment and instrumentation -data loggers. 2)Data shared with the Project Coordinator 3)Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Materials Characterization report	**PU** ☐ **CO** ☒
Characterization Fusion Method	**PU** ☐ **CO** ☒
Characterization XRFanalysis	**PU** ☐ **CO** ☒

Task 4.2: Mineralogical Analysis	
Data Set Reference & Name	Mineralogical analysis

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Data Set Description	Mineralogical analysis of the raw materials. Characterization of the separated waste concrete and ceramic using D8 Advance X-Ray diffractometer.
Standards	Excel Workbook, Adobe Acrobat Reader
File name (s) containing the data sets	
[File Name #1]	Characterization_XRDanalysis.xls and pdf
Metadata	N/A
Data Sharing	1)Data derives from analysis output of relevant equipment and instrumentation -data loggers. 2)Data is shared with the Project Coordinator 3)Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Characterization XRDanalysis	PU ☐ CO ■

Task 4.3: Particle Size Analysis	
Data Set Reference & Name	Particle size analysis of the raw materials
Data Set Description	Particle size analysis of the separated waste concrete and

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	ceramic using gravitational settling and light scattering.
Standards	Excel Workbook, Word document Adobe Acrobat Reader
File name (s) containing the data sets	
[File Name #1]	Characterization_PSD_analysis.xls and pdf
Metadata	N/A
Data Sharing	1)Data derives from the analysis output of relevant equipment and instrumentation -data loggers 2)Data is shared with the Project Coordinator 3)Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
[File Name #1]	PU ☐ CO ■

Task 4.4: Density of the Raw Materials	
Data Set Reference & Name	Density of the raw materials
Data Set Description	Particle size analysis of the separated waste concrete and ceramic using gravitational settling and light scattering
Standards	Excel Workbook, Word document Adobe Acrobat Reader
File name (s) containing the data sets	

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #1]	Characterization_PSD_analysis.xls and pdf
Metadata	N/A
Data Sharing	1)Data derives from recording measurements during the experiment, and or using analysis output from relevant equipment and instrumentation/data loggers 2)Data is shared with the Project Coordinator 3)Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment where applicable
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Characterization PSD analysis	PU ☐ CO ■

Task 4.5: Dissolution Tests	
Data Set Reference & Name	Determination of reactivity of raw materials
Data Set Description	Dissolution tests carried out in the raw materials using KOH and NaOH leaching solutions for measuring Al and Si contents across varying concentrations.
Standards	Excel Workbook, Word document Adobe Acrobat Reader
File name (s) containing the data sets	

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #1]	Dissolution tests.xls and pdf
Metadata	N/A
Data Sharing	1)Data derives from recording measurements during the experiment, and or using analysis output from relevant equipment and instrumentation/data loggers 2)Data shared with the Project Coordinator 3)Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment where applicable
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Dissolution tests	PU ☐ CO ■

WP5 - Design and Development of the Composite Material

Task 5.1: Fire Resistance Design	
Data Set Reference & Name	Design of the material in order to achieve the required fire resistance. This includes thermodynamic analysis and experimental trials to achieve this target.
Data Set Description	Design of fire resistant geopolymeric materials based on thermodynamic studies and the use of FactSage software. Optimize materials composition (i.e. Leucite (K[AlSi2O6]) in the triangular diagram of K2O–SiO2–Al2O3 so that the final

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	geopolymeric products to contain refractory phases at high temperatures. Test of the final geopolymeric materials that they meet the requirements for building application (i.e. according to ISO-834 fire curve). Optimization of the thickness of the upper and lower layer of the designed material, in order to achieve the lowest possible which will offer the fire resistance.
Standards	ISO-834 thermal temperature curve, Raw data files, Word document, Excel Workbook, PDF file.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]** **[File Name #4]**	FactSage software results Comparison of refractory phases of geopolymeric products on the triangular diagram of K2O–SiO2–Al2O3 Test of final geopolymeric materials according to ISO-834 fire curve Report on the design of the material
Metadata	Temperature parameters evaluated, simulation with software
Data Sharing	1) Data derives from the consortium partners who carried out analysis with the software and analysis of the raw material (FRC, UCY, RECS). 2) Data is shared with all partners 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	RECS and FRC as the task leaders and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D5.1: Report on the fire design.	PU ■ CO ☐
D5.2: Publication in open access journal.	PU ■ CO ☐
D5.4: Presentations in conference.	PU ■ CO ☐

Task 5.2: Insulation Design	
Data Set Reference & Name	Design of the geopolymeric materials, so that to achieve extremely low thermal conductivity and density.
Data Set Description	Design of thermal insulation geopolymeric materials by controlling the materials composition a) chemically: with the addition of proper amount of the total mass of the material by Aluminium powder (Al-) or Hydrogen Peroxide (H2O2) and b) mechanically: with the addition of lightweight aggregates or cenospheres. Achieve density of <400 kg/m3 and thermal conductivity of 0.04W/m.K. Optimization of the thickness of the designed material, in order to achieve the lowest possible which will retain low density and thus low thermal conductivity.
Standards	Word document, Excel Workbook, Raw Data, etc.
File name (s) containing the data sets	
[File Name #1]	Material's density reduction results.xlsx

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

[File Name #2] **[File Name #3]**	Material's thermal conductivity results.xlsx Report on the design of the material
Metadata	Data characteristics (List of parameters, measurements)
Data Sharing	1) Data derives from the consortium partners who carried out the specific experimental and analytical work (FRC, UCY, RECS). 2) Data is shared with all partners 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	RECS as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D5.1: Report on the thermal insulation design.	PU ☒ CO ☐
D5.2: Publication in open access journal.	PU ☒ CO ☐
D5.4: Presentations in conference.	PU ☒ CO ☐

Task 5.3: Adherence of the two materials

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Data Set Reference & Name	Development of final material as a composite of a porous and a compact material.
Data Set Description	Results on the best coherence method between the two materials, i.e. a) fixing with special anchors and b) bonding by applying a small layer of the geopolymeric paste on the porous surface.
Standards	Word document, Excel Workbook, design etc.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]**	Fixing with anchors adherence results.xlsx Bonding with geopolymeric paste adherence results.xlsx Report on the evaluation of the best bonding method.docx
Metadata	Data characteristics (List of parameters, measurements)
Data Sharing	1) Data derives from the consortium partners who carried out the specific experimental and analytical work (FRC, RECS). 2) Data is shared with all partners 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D5.3: Material prototype	PU ■ CO □

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

with fire and insulation properties in sandwich type.	

WP6 - Material and Properties Engineering

Task 6.1: Design of Properties of the Geopolymeric Materials	
Data Set Reference & Name	Data sets on the mechanical, thermal and fire-resistance properties of panels created with two implementation techniques, i.e. casting and 3D-Printing: • requirement sheet definition; • results of the different experimental investigations to be performed; • assessment and valuation of the properties achieved.
Data Set Description	Source of data from various experimental investigations, i.e. LVDT shrinkage measurements, EPMA and ESEM, X-ray, nano-CT, in-situ FTIR and XRD, flexural tests, tests for density and hydrolytic stability, etc.
Standards	Word Documents, Excel Workbooks, ASCII, Images, Formats of data acquisition and instrumentation software, etc.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]** **[File Name #4]**	WP6 report.docx Report on the material engineering of the production method.docx Flowsheet with the material production.docx Material Data-sheet with the most crucial properties.xls
Metadata	Data characteristics: list of parameters, measurements, graphs, diagrams, images, etc.
Data Sharing	1) Data derives from FRC, UCY and KU Leuven, as well as from the literature, reference documents and standards.

Ευρωπαϊκή Ένωση
Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium.
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).
Contributors	FRC and UCY as the task leaders and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
WP6 report.docx	PU ■ CO □
D6.1. Report on the material engineering of the production method.	PU □ CO ■
D6.2. Flowsheet with the material production.	PU □ CO ■
D6.4: Publication in open access journal.	PU ■ CO □
D6.5: Presentation in conference.	PU ■ CO □

Task 6.2: Characterization and Properties Measurement	
Data Set Reference &	Testing of fire resistance of the developed materials in a mid-

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Name	scale testing scenario (i.e. ISO-834 test scenario).
Data Set Description	Testing of fire resistance by an expert subcontractor on large scale fire tests in building materials. Measurement of the main properties of the composite materials (i.e. mechanical, physical, thermal and chemical properties of the developed materials. Development of full product datasheet of the material including all the mandatory properties of a typical commercial structural material.
Standards	Word Documents, Excel Workbooks, ASCII, Images, Formats of data acquisition and instrumentation software, etc.
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]**	WP6 report.docx Data sheets with experimental results.xls Report on characterization and properties measurement.docx
Metadata	Data characteristics: list of parameters, measurements, graphs, diagrams, images, etc.
Data Sharing	1) Data derives from FRC, UCY and KU Leuven, as well as from the literature, reference documents and standards. 2) Data is shared with all partners and target stakeholders. 3) Use of data by the consortium.
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (PCs, laptops etc.) of the Task leader as the first level of storage and backup. Additionally, all other relevant documentation created during the project such as deliverables will be self - archive and preserved in a Dropbox folder that has been created for the purposed of the project. Other levels of storage and accessibility for the confidential data will be the member's section in the DEFEAT website (Private documents).

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Contributors	FRC and UCY as the task leaders and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D6.3. Material Data-sheet with the most crucial properties.	PU ☐ CO ☒
D6.4: Publication in open access journal.	PU ☒ CO ☐
D6.5: Presentation in conference.	PU ☒ CO ☐

WP7 - Production and Pilot Application of the Material

Task 7.1: Composite Material Engineering and Process Design	
Data Set Reference & Name	Detailed Composite Material Engineering (CME), Production flowsheet
Data Set Description	Detailed Engineering for the design and prototype of the composite material, according to previous work packages. Blocks up-scaling, production, and configuration flowsheet.
Standards	Word document, Excel Workbook, CAD software, Acrobat Reader.
File name (s) containing the data sets	
[File Name #1]	CME Report.docx
[File Name #2]	Production flowsheet report.docx and.pdf
[File Name #3]	Production flowsheet.dwg
Metadata	N/A
Data Sharing	1) Data derives from previous work packages

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	2) File 1 and File 2 .pdf shared with the Project Coordinator File 2 .docx and File 3 being preparation files, not intended to be shared 3) Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator • Dropbox shared between the task leader and the Project Coordinator • External Hard disks of the Task Leader, backed up every month
Contributors	Latomia Pharmakas, RECS Engineers and FRC
Dissemination Level of Files Containing the Data Set(s)	
CME Report	PU ☐ CO ☒
Production flowsheet report	PU ☐ CO ☒
Production flowsheet	PU ☐ CO ☒

Task 7.2: Production and application of composite materials	
Data Set Reference & Name	Data sets on the process set up and parameters for the fabrication of pre-casted and 3D printed composites as follows: • composition of concrete mixture. • related process parameters, i.e. curing temperature, speed, deposition rate, layer thickness and width etc. • evaluation of probes in collaboration with Task 6.1.
Data Set Description	Source of data from the experimental trials: • mixture designs of the boards produced in the Company production line • all related data post-mixing, such as material mixing time, curing temperature, environmental temperature,

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	deposition rate, layer thickness etc. • evaluation of probes in collaboration with Task 6.1.
Standards	Excel Workbook
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Boards Mixture design.xlsx Mixing data.xlsx
Metadata	Data characteristics
Data Sharing	1) Data derives from previous work packages after material development 2) The data will be shared with the Project Coordinator, partners and target shareholders, Host Organization Post-Doctoral Fellow, and consortium 3) Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator • Dropbox shared between the task leader and the Project Coordinator • External Hard disks of the Task Leader, backed up every month
Contributors	FRC and Latomia Pharmakas the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Boards Mixture design	PU ☐ CO ☒
Mixing data	PU ☐ CO ☒

Task 7.3: **Application of the Materials**

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Data Set Reference & Name	Full-scale production data
Data Set Description	The set of data in this task will include the large scale application of the production boards on a free wall space provided by PA6 and PA7. This pilot application will act as evidence for organizations and stakeholders, to be convinced for the material application.
Standards	Word Workbook
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Boards Application Processes.doc Installed Boards Performance.doc
Metadata	Journal Papers
Data Sharing	Data derives from previous work packages after material development, material production and small scale application. The data will be shared with the • Project Coordinator • Host Organization Post-Doctoral Fellow • Involved Project Partners
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator • Dropbox shared between the task leader and the Project Coordinator • External Hard disks of the Task Leader, backed up every month
Contributors	FRC, Latomia Pharmakas, OSEOK, PWD
Dissemination Level of Files Containing the Data Set(s)	
Boards Application Processes.doc **Installed Boards**	PU ☐ CO ☒

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Performance.doc	PU ☐ CO ■

WP8 - Technoeconomic Evaluation, LCA Analysis and Business Model

Task 8.1: Technical and economic evaluation	
Data Set Reference & Name	Technoeconomic evaluation, feasibility study
Data Set Description	Feasibility study for analyzing technical viability of developed materials and methods. Determination of economic boundary conditions and market share for various applications within the building materials market.
Standards	Word Document, Adobe Acrobat Reader
File name (s) containing the data sets	
[File Name #1]	Feasibility_study.docx and .pdf
Metadata	N/A
Data Sharing	1) Data derives from analysis carried out by task leader 2) Files shared with the Project Coordinator 3) Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Dissemination Level of Files Containing the Data Set(s)	
Feasibility study	PU ☐ CO ■

Task 8.2: Environmental Evaluation and Life Cycle Assessment	
Data Set Reference & Name	Environmental Evaluation and Life Cycle Assessment
Data Set Description	Life cycle assessment for impact evaluation of raw materials, of production energy use, phase use and end of life scenarios.
Standards	Microsoft Word, Adobe Acrobat Reader
File name (s) containing the data sets	
[File Name #1]	LCA_report.docx and .pdf
Metadata	N/A
Data Sharing	1) Data derives from analysis output of relevant software 2) Files shared with the Project Coordinator 3) Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage • External Hard disks of the Task Leader, backed up every month - third level of storage • Raw data saved in the analysis computer of the relevant equipment
Contributors	UCY as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
LCA report	PU ☐ CO ■

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Task 8.3: Business Model and Go – To Market Strategy	
Data Set Reference & Name	Development of a program to attract investment
Data Set Description	Program development in order to investigate possible impact of the project results and allow the introduction of the produced materials to the market. Define the extent of the predicted impact of the specific technology results on the B&C industry.
Standards	Word document
File name (s) containing the data sets	
[File Name #1]	Business_plan.docx
Metadata	N/A
Data Sharing	1) Data derives from previous work packages after material development and interviews with the relevant partners 2) The data will be shared with the consortium 3) Use of data by the Consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator • Dropbox shared between the task leader and the Project Coordinator • External Hard disks of the Task Leader, backed up every month
Contributors	Latomia Pharmakas as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
D8.3 DEFEAT business plan:	PU ■ CO □

WP9 - Activities for the Commercialization of the Material

Task 9.1: Patenting

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Data Set Reference & Name	Patenting
Data Set Description	All data required to file and secure the patenting application
Standards	Word document
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Patent_application.docx Patent_preparation.docx
Metadata	Patent application
Data Sharing	1) Data derives from experimental procedures and analysis 2) Data shared with the Project Coordinator 3) Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage External Hard disks of the Task Leader, backed up every month - third level of storage
Contributors	Latomia Pharmakas as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Patent application	PU ☐ CO ☒
Patent preparation	PU ☐ CO ☒

Task 9.2: CE Marking	
Data Set Reference & Name	CE Marking

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Data Set Description	CE marking application
Standards	Word document
File name (s) containing the data sets	
[File Name #1] **[File Name #2]**	Patent_application.docx Patent_preparation.docx
Metadata	Patent application
Data Sharing	1) Data derives from experimental procedures and analysis 2)Data shared with the Project Coordinator 3)Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator - first level of storage • Dropbox shared between the task leader and the Project Coordinator - second level of storage External Hard disks of the Task Leader, backed up every month - third level of storage
Contributors	Latomia Pharmakas as the task leader and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Patent application **Patent preparation**	PU ☐ CO ☒ PU ☐ CO ☒

Task 9.3: Design of the industrial manufacturing plant	
Data Set Reference & Name	Design of the industrial manufacturing plant
Data Set Description	The cost for production, capital investment, throughput time and other production aspects will be evaluated

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART RESEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Standards	Word document, Excel Workbook, CAD software
File name (s) containing the data sets	
[File Name #1] **[File Name #2]** **[File Name #3]**	Workflow.docx Cost estimation file.xlsx Production Line. dwg
Metadata	N/A
Data Sharing	1)Data derives from the boards produced in large-scale 2)Data will be shared with the Project Coordinator 3)Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials • Personal Computers of Task Leader team and Project Coordinator • Dropbox shared between the task leader and the Project Coordinator • External Hard disks of the Task Leader, backed up every month
Contributors	Latomia Pharmakas as the task leader in collaboration with RECS and all the other parts will contribute to the aforementioned action, as well as providing feedback and updates.
Dissemination Level of Files Containing the Data Set(s)	
Workflow.docx	PU ☐ CO ☒
Cost estimation file.xlsx	PU ☐ CO ☒
Production Line. dwg	PU ☐ CO ☒

WP10 - Development of Guidelines for a Strategic Action Plan for Recycled CDW

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

Reuse

Task 10.1: A thorough review of the national, the European, and the international literature	
Data Set Reference & Name	List of bibliographical references
Data Set Description	The review of the literature will focus on practices and perceptions surrounding Recycled CDW Reuse. This task will seek to combine a list of pertinent bibliographical references.
Standards	Word document
File name (s) containing the data sets	
[File Name #1]	WP10_Bibliography.docs
Metadata	N/A
Data Sharing	1)Data derives from the literature 2)Data shared with all partners 3)Use of data by the consortium
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (i.e. PC) of the WP leader, WP affiliated research personnel, and Project Coordinator). The Project Coordinator may choose to upload the given information on the project's Google Drive
Contributors	FRC, as the task leaders
Dissemination Level of Files Containing the Data Set(s)	
WP10_Bibliography.docs	PU ☐ CO ■

Task 10.2: Development and implementation of a targeted opinions and perceptions survey	
Data Set Reference & Name	Perceptions Survey
Data Set Description	This task will seek to develop the following datasets: 1. A draft questionnaire (list of possible questions that could be utilized in the final form of the survey tool)

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	2. A final survey tool (i.e. questionnaire) 3. An excel file that will comprise of the raw data obtained from the survey 4. A set of tables and graphs that will summarize the main findings (i.e. statistical analysis of the raw data) A report that will utilize the statistical findings of the survey, alongside information from the literature (task 10.1)
Standards	Word documents, Excel workbook, Web-based questionnaire
File name (s) containing the data sets	
[File Name #1]	WP10_Draft Questionnaire.docx
[File Name #2]	WP10_Final Questionnaire.docx
[File Name #3]	WP10_Questionnaire Data.xlsx
[File Name #4]	WP10_Questionnaire Results.docx
[File Name #5]	WP10_Action Plan.docx
[File Name #6]	WP10_Action Plan Executive Report.docx
[File Name #7]	WP10_Conference Paper.docx
Metadata	List of questions Sampling methodology Survey results
Data Sharing	Data derives from survey Data shared with WP personnel and Project Coordinator Use of data by WP personnel and Project Coordinator
Archiving and preservation (including storage & backup)	Storage and backups of the relevant materials in local servers (i.e. PC) of the WP leader, WP affiliated research personnel, and Project Coordinator. The Project Coordinator may choose to upload the final

Ευρωπαϊκή Ένωση Ευρωπαϊκό Ταμείο Περιφερειακής Ανάπτυξης
Κυπριακή Δημοκρατία
Διαρθρωτικά Ταμεία της Ευρωπαϊκής Ένωσης στην Κύπρο
RESEARCH & INNOVATION FOUNDATION
2016-2020 RESTART SEARCH
The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation

	questionnaire, the reports and the summary of the survey results (not the raw data) on the project's Google Drive.
Contributors	FRC, as the task leaders and all consortium partners, alongside external stakeholders (especially as this relates to the finalization of the survey tool).
Dissemination Level of Files Containing the Data Set(s)	
WP10_Draft Questionnaire.docx	PU ☐ CO ☒
WP10_Final Questionnaire.docx	PU ☒ CO ☐
WP10_Questionnaire Data.xlsx	PU ☐ CO ☒
WP10_Questionnaire Results.docx	PU ☐ CO ☒
WP10_Action Plan.docx	PU ☐ CO ☒
WP10_Action Plan Executive Report.docx	PU ☒ CO ☐
WP10_Conference Paper.docx	PU ☒ CO ☐

The Project DEFEAT (INTEGRATED/0918/0052) has been co-funded by the European Regional Development Fund (ERDF) and the Cyprus Government, through the RESTART 2016-20 framework program of the Cyprus Research & Innovation Foundation