LIFE Project Number

LIFE12 ENV/GR/001135 <READ>

FINAL Report

Covering the project activities from 01/10/2013 to 01/07/2016

Reporting Date

<01/07/2016>

LIFE+ PROJECT NAME or Acronym

<LIFE+ READ>

Project Data

Project location	Athens, Greece
Project start date:	<01/10/2013>
Project end date:	<01/10/2015> **Extension date:** <01/04/2016>
Total Project duration (in months)	<30> months
Total budget	391,081 Euro
Total eligible budget	387,083 Euro
EU contribution:	193,541 Euro
(%) of total costs	49,5%
(%) of eligible costs	50%

Beneficiary Data

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1. List of contents

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2. Executive Summary

2.1 Report Structure

This final report (FR) covers the project activities from October 1st, 2013 to April 1st, 2016. The most important tasks developed within each of the project actions are described. All documentation related is included as Annexes.

Section 3 offers a description of the READ background, the environmental problem addressed, and the objectives and results of the project.

Section 4 shows the structure of the partnership, as well as the description and evaluation of the management system.

Section 5 is an overview of the technical part of the project. One by one, the work progress of each action is described explaining what and how has been done regarding the different technical components of the project. An evaluation of the project implementation is also offered as well as an analysis of long-term benefits. In addition, this section summarizes the objectives of the dissemination plan giving an overview per activity.

Section 6 is focused on the financial report. The Standard Statement of Expenditure is used in order to include sufficient detail to establish a clear link between technical activities on the one hand and costs declared in the financial forms on the other. A summary of costs incurred can be here consulted.

2.2 LIFE+ READ Objectives & Outputs

READ (REACH Database for Safety Data Sheets) demonstrated a technically feasible and more effective alternative to the communication of chemicals' potential risks throughout the supply chain from the manufacturer / importer to the end user (professionals or consumers).

READ objectives included:

- Development of a public database, where companies upload their Safety Data Sheets and provide specific information for their products, such as:
    - Potential content of substances classified as SVHC, PBT, vPvB, Carcinogenetic, Environmental pollutant, etc.
    - Carbon footprint estimation
    - ECO-label or / and carbon neutral certification
- Transformation of more than 10.000 SDSs into Workplace Instruction Cards (WICs) for the convenience of professional users, due to their brief character.
- Translation of WICs to Albanian, Serbian, Bulgarian and English for immigrant professional users / consumers.
- Training of participating companies (especially SMEs) on new EU Regulations, such as REACH & CLP (new classification / labelling / packaging framework)
- Promotion of products certified as eco, according to EU Ecolabel criteria
- Estimation & offsetting of READ carbon emissions (Carbon Neutral Project)

- Development of a methodology that can be easily transferred to other countries in Europe
- Dissemination of READ project results to National Competent Authorities and professional users / consumers, in order to persuade more companies contribute with their SDSs and raise the awareness of professional users / consumers
- Reduction of both injuries / accidents and chemical releases to the environment

To address above mentioned objectives, the following actions have been carried out:

a/a	LIFE+ READ Actions
A	**Preparatory actions**
A1	*Project Management and Communication with potential stakeholders*
A2	*Data Preparation*
B	**Implementation actions**
B1	*READ Database and Platform creation*
B2	*Data Entry*
B3	*Data Management and WICs Reproduction*
B4	*GHS/CLP adaptation*
C	**Monitoring of the impact of the project actions**
C1	*Monitoring Actions*
D	**Communication and dissemination actions**
D1	*Communication and dissemination material*
D2	*Workshops and seminars*
D3	*After-LIFE Communication plan*
E	**Project management and monitoring of the project progress**
E1	*Project Management by SUSTCHEM Engineering*

Table 1: LIFE+ READ Actions

The **key outputs** of the READ project are:
- prototype with more than 10.000 SDSs & 50.000 WICS of chemical products, such as detergents, varnishes, building materials, adhesives, inks in the Greek, Albanian, Bulgarian, Serbian and English language

Figure 1. READ Platform – Search results

- free database, www.wic.gr which is more user-friendly, comparing to READ database (prototype). This explains why READ Consortium decided to deliver it as an additional output to the READ project (not included in Grant Agreement).

Figure 2. WIC Database – Search results

- carbon footprint calculator (CFC)

CFC is a web based application (http://cfc.wic.gr/) for the estimation of chemicals' carbon emissions.

Steps are quite simple, as user shall choose the type of product (paints, XYZ materials) and type specific data, such as the identity & concentration of containing raw materials & consumed energy during production and transport.

As an output, CFC provides the amount of total carbon emissions.

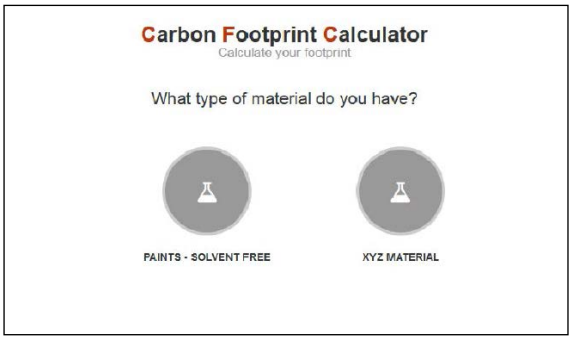


Figure 3. Carbon Footprint Calculator

- www.life-read.gr

READ website demonstrates feedback regarding the project (eg. executive summary, objectives), partners & budgeting. Also, a visitor can easily have access to both technical and dissemination deliverables, news / events or subscribe to READ newsletter.

READ consortium is always in the process of increasing the number of companies using the READ database to promote the safe & sustainable use of their chemical products. This is why both application and Memorandum of Understanding (MoU) have been uploaded on the website since the start date of the project. Last but not least, there is the possibility of

following READ on facebook, twitter and utube (social media), in order to get a better overview of the project.

- wic.gr mobile application

WIC application (for android / ios mobile phones) is available on google & apple play store. Workplace Instruction Cards – WICs have been designed to fit any short of screen, no matter the size. Fonts, pictures and layout automatically adjust to the monitor dimensions.

Figure 4: Layout automatically adjusting to screen dimensions.

- dissemination events / material

Dissemination of project results was efficiently done whole time during the project by web pages, press releases, published reports, presentations and posters / guidances, etc.

3. Introduction

3.1 Environmental problem/issue addressed

Previous experience and research shows that only a small percent of professional users / consumers worldwide have access to derive information regarding the safe handling of chemicals.

According to European legislation, manufacturers / importers are obliged to inform the risks of chemicals to the supply chain by providing Safety Data Sheets. Nevertheless, European Chemicals Agency (ECHA) has informed that:

- ✓ Many companies (mainly SMEs) do not have the knowledge or the ability to fully comply with the legislation requirements.
- ✓ Most companies do not communicate adequately the necessary information (Safety Data Sheets)
- ✓ Most SDSs reach the first party of supply chains, without allowing easy access to professional users (end users). Label is not sufficient for the safe handling of professional chemicals.

It shall be stated that after the implementation of REACH Regulation, Safety Data Sheets have become more complicated documents and difficult to handle.
It should also be noted that inspection results by the EU National Competent Authorities in the framework of REACH / CLP Regulation the last three years are rather disappointing, as:

- ✓ Only 23% of enterprises have compiled SDSs for all their products
- ✓ Only 25% of SDSs complied with the provisions of REACH regulation
- ✓ Only 9.7% of companies have the knowledge to author SDSs for their products
- ✓ 83.9% of companies provided SDSs, not following properly the provisions of REACH & CLP Regulation

Another issue for chemical companies was the mandatory implementation of CLP Regulation (new classification & labelling system for chemicals) in 2015. Greek companies, especially SMEs, would face severe difficulties to adopt, as most of them cannot afford Regulatory Affairs Departments. This would lead to non-reliable classifications of chemical products with possible impact to both human health and environment. It shall be added that CLP criteria are more stringent than the ones of prior classification system (DPD) and many products that used to be non-hazardous according to DPD, are classified as hazardous according to CLP.

3.2 Outline the hypothesis to be demonstrated / verified by the project

The main innovative aspect of READ, to be demonstrated/verified by the project, aims to elaborate a harmonized methodology for informing end users (professional users, consumers) on the safe handling of chemical products. Methodology is adaptable to all EU countries and

based also on a soundscape approach, considering the opinions of all involved parties (National Competent Authorities, stakeholders, professional users, consumers).

3.3 Description of the technical / methodological solution

In order to understand better the technical solution provided by LIFE+ READ, it is crucial to mention the differences between SDSs and WICs.
A Safety Data Sheet (SDS) is a document of sixteen (16) sections that contains information on the potential hazards (health, fire, reactivity and environmental) and safe handling of a chemical product. It is an essential starting point for the development of a concrete health and safety program. It also contains information on the use, storage and emergency procedures all related to the hazards of the material. The SDS contains much more information about the material than the label. SDSs are prepared by the supplier or manufacturer of the material. It is intended to tell what the hazards of the product are, how to use the product safely, what to expect if the recommendations are not followed, what to do if accidents occur, how to recognize symptoms of overexposure, and what to do if such incidents occur.

Traditionally the intended readers of SDSs were **occupational hygienists and safety professionals**. Now the audience also includes employers, workers, supervisors, nurses, doctors, emergency responders and workers. To ensure that SDS users can quickly find the information that they need, the information should be in an easy-to-read format and written in a clear, precise and understandable manner.

For personnel dealing with chemical products, specific sections of the SDSs are important to them. This kind of information needs to be available for professional users and consumers as a ready to use instruction card. Thus, READ WICs (simplified documents with basic information on safety, hygiene and environmental protection) helped both professional users and consumers handle with safety the chemical products throughout the supply chain.

Workplace Instruction Cards can be used as a readily available source of concise information for end users (professional users, consumers) and first responders dealing with a chemical incident. Also, WICs are used for other purposes, such as education and training activities.

By training companies on how to classify / label / package hazardous chemicals since 2014 (1 year earlier than CLP implementation to mixtures), Greek producers / importers were aware of their responsibilities.

Another issue is that the use of environmental friendly products (eg. certified with ecolabel) is not considered a priority among professional users and consumers and this is why READ consortium decided to promote such products through READ database and events (conferences, trainings, exhibitions).

In the project, cooperation among chemical companies, National Competent Authorities and professional users / consumers is promoted. LIFE+ READ focused on the cooperation triangle

below and wanted to draw attention to the fact that neither of the parties can do without the others.

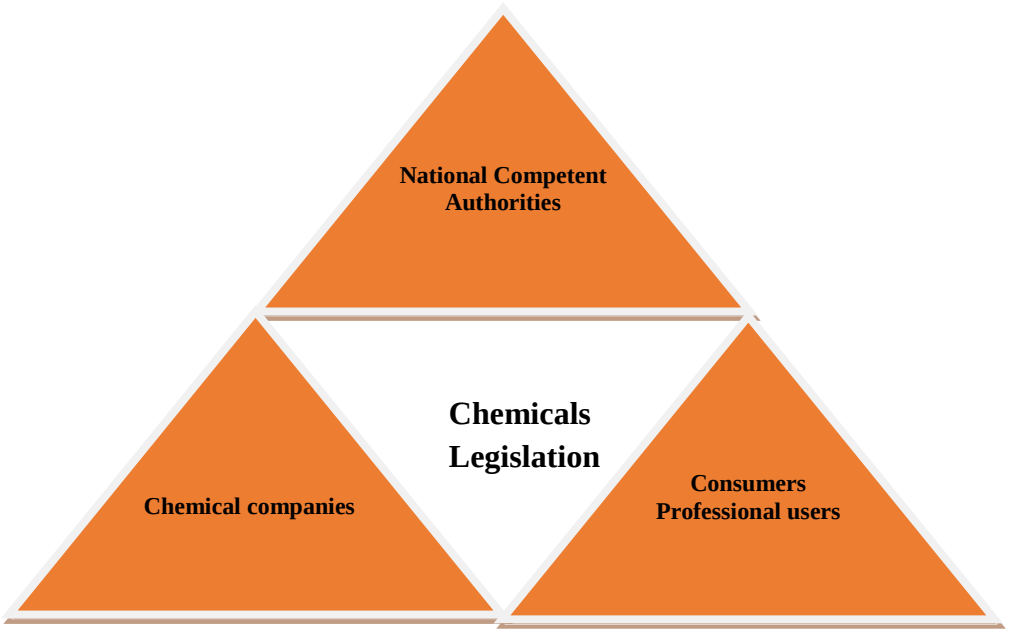


Figure 5. READ Cooperation triangle (National Competent Authorities, Chemical Companies, Consumers / Professional users)

3.4 Expected results and environmental benefits

As far as the expected results are concerned:

- ✓ Development of a central database with storage capacity of more than 10,000 SDSs and 40.000 WICs of chemicals intended to professionals and general public.
- ✓ More than 100.000 professional users, Greek and immigrants, located in every region of Greece obtained free access to multilingual and simplified safety information (WICs).
- ✓ Training of professional users / consumers through workshops on READ database use, safe handling of chemicals and appropriate waste management procedures.
- ✓ Reduction of injuries and accidents at workplaces, regarding that more than 50% accidents can be attributed to professional users' insufficient knowledge and improper procedures, according to Hellenic Institute for Occupational Health and Safety.
- ✓ Recycling or appropriate disposal of more than 1,000 packages after the implementation of READ project.
- ✓ Promotion of eco-labeled chemical products
- ✓ Estimation & offsetting of READ carbon emissions, in order to deliver a so called ''carbon neutral project''

3.5 Expected longer term results

Since Project's platform has been delivered in order to be easily used and since it has been translated in four (4) EU languages (English, Bulgarian, Albanian, Serbian), a wide diffusion of this document and of its application is expected. It shall be mentioned that there is the possibility of updating the platform to accept SDSs in other languages (eg. French, German, etc), so the methodology can be easily adaptable to other EU countries.

Dissemination of results achieved by the READ project will be carried out thanks to the connection with other European Associations (eg. CEFIC, CEPE). Furthermore, the project provides a solution to the gaps in supply chain mentioned above.

General Chemical State Laboratory, National Competent Authority for REACH, CLP & SDSs in Greece contributed with their participation to the project and found that it is a project with significant impact to protection of human health and environment. As a longer term result, READ team expects that it will be mandatory to provide WICs to end users, not only SDSs.

It is not all surprising that ECHA (European Chemicals Agency) started to prepare **Infocards** for chemicals, so that users are able to see at a quick glance the key properties: how it is classified and whether it is hazardous or not. And, if the substance has worrying properties, the Infocard also shows how the substance is being scrutinised by the regulators.

4. Administrative part

4.1 General

4.1.1 Project Management

Project Management contributed to effective implementation of READ project and the accomplishment of determined objectives. We respectfully acknowledge the support of the:

- **LIFE+ Office, Brussels, and**
- **NEEMO EEIG – Prospect C & S with special appreciation to Mr. Tziovaras**

The project was implemented by a consortium of three (3) organizations: SustChem Engineering, HACI and HCA. General project management was the main responsibility of SustChem Engineering, coordinating beneficiary and financial planner. SustChem Engineering took responsibility on:

- general administration
- financial framework and follow-up
- reporting to EU Commission
- practical coordinating work between actions

A Steering Committee (SC), consisting of representatives of the three (3) beneficiaries was established since the start date. Steering group supervised implementation of the projects and facilitated cooperation between actions. The responsibility of the steering committee was to ensure together with the project coordinator, that their actions and their cooperation proceed according to project plan.

As a first step of the preparatory actions, the Project Manager organized the first meeting of the Steering Committee (1nd week of October 2013) in HACI facilities, in order to determine the detailed future steps for the implementation of the project (Action Plan).
Project management structure is described in the organigramme below:

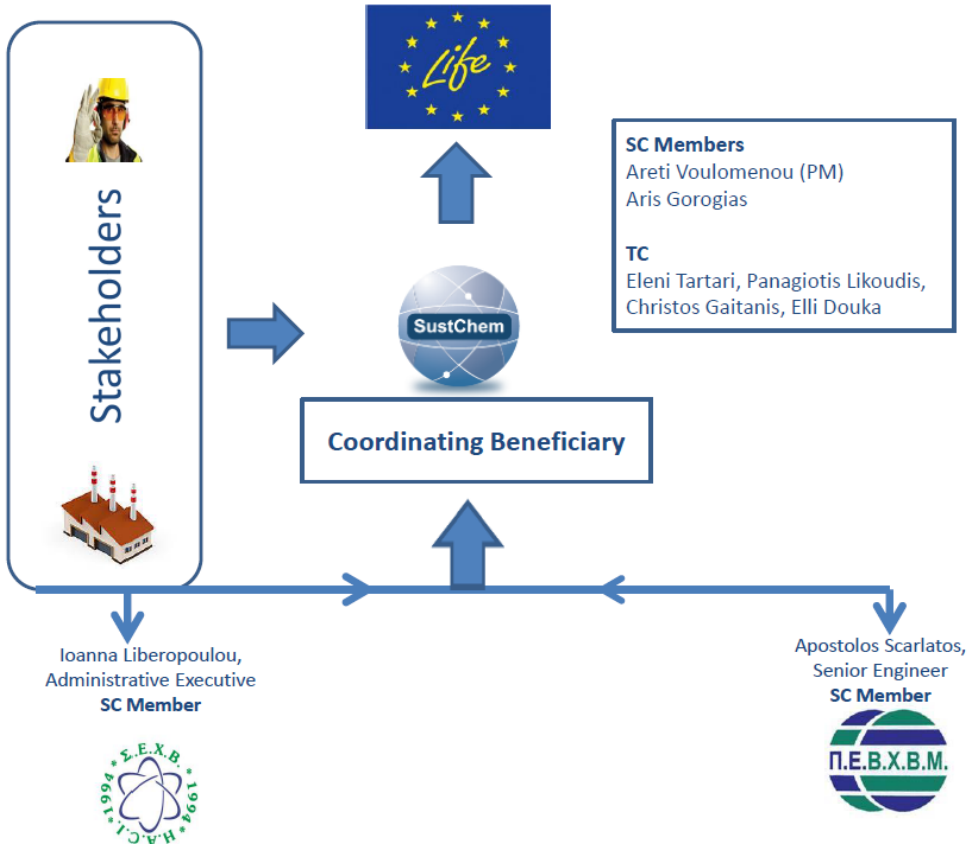


Figure 6. READ Organigramme

4.1.2 Partnership Agreements

Partnership agreement has been signed by all beneficiaries (SustChem Engineering, HACI, HCA) on 08/10/2013. It has been submitted to Commission with the Inception Report (30/06/2014).

The partnership agreement (in English) covers the following issues:

- Subject of the agreement
- Parties of the agreement
- Purpose and duration of the agreement
- Documents of the agreement
- Responsibilities of the parties
- Implementation of the project
- Reporting and payment of the funding portions
- Management of the project
- Terms of payment
- Termination of partnership agreement
- Jurisdiction clause
- Contacts - signatures

4.1.3 LIFE+ READ Actions

The division of labour with reference to actions is presented in table 1.

Action	**Main Coordination**
A1 Project Management and Communication with potential stakeholders	SustChem Engineering
A2 Data Preparation	SustChem Engineering
B1 READ Database and Platform creation	SustChem Engineering
B2 Data Entry	SustChem Engineering
B3 Data Management and WICs Reproduction	SustChem Engineering
B4 GHS/CLP adaptation	SustChem Engineering
C1 Monitoring Actions	SustChem Engineering
D1 Communication and dissemination material	HACI / HCA
D2 Workshops and seminars	HACI / HCA
D3 After-LIFE Communication plan	HACI / HCA
E1 Project Management by SUSTCHEM Engineering	SustChem Engineering

Table 2. READ LIFE+ Actions

4.1.4 Project Launch

A project kick-off meeting was organized on December 18, 2013 in Athens, where the project manager and the Steering Committee members were appointed. The project plan and schedule, finances, personnel, monitoring protocol, coordination, training needs as well as procurement of equipment were discussed and agreed, among others.

Audience, representatives of more than sixty companies demonstrated significant interest on the development of READ database.

Video streaming of the event has been uploaded on the website: www.life-read.gr.

4.1.5 Project Monitoring

Coordinating beneficiary monitored the progress of the project and its individual actions through regular contacts with the other beneficiaries.

Fifty-seven (57) meetings have been held among the four (4) representatives of Steering Committee, in order to discuss on crucial topics of project (budgeting, actions, workshops, etc.) and resolve issues arising. Steering Committee used to organize short meetings on a weekly basis, regarding that premises of three (3) partners are located in the same area.

4.1.6 Reporting to EC / External Monitoring Team

On 30/6/2015, Coordinating Beneficiary submitted ‘’Request for an amendment to the Agreement’’ since substantial changes occurred:

- Financial structure (changes by more than 10% and 30.000 € of the foreseen costs in more categories of expenditure),
- Extending the project deadline from 01/10/2015 to 01/04/2016,
- Extension of database to more chemical categories than construction and professional cleaning chemicals, in order to be of use to the majority of professional users & consumers.

Amendment for above mentioned (and other minor) changes was approved by European Commission on 02/10/2015.

SustChem Engineering conducted the preparation of the following obligatory reports to EC:

- Inception report, 30/06/2014
- Progress report, 25/11/2015

4.1.7 Monitoring visits

Steering Committee organized four (4) visits with external monitoring team at SustChem Engineering premises:

- 05/11/2013, Dr. Georgia Valaoras
- 24/10/2014, Ms. Raftopoulou
- **24/04/2015, Mr. Tziovaras (NEEMO EEIG)**
- **29/03/2016, Mr. Tziovaras (NEEMO EEIG)**

4.1.8 Networking with other LIFE+ projects

Networking with other products has been active and successful in the sense that the project and its outcomes have been made familiar to a wide expert audience and coordination of efforts and learning from others have been achieved. READ experts have established links and met, discussed and exchanged information and experiences with LIFE+ projects *Proteas (LIFE+09 ENV/GR/291), 3x environment (LIFE12 INF/PL/000009).*

It shall be highlighted that READ project invited LIFE+ PROTEAS (Protocol for Emissions & Accident Scenarios) run by the Technical University of Crete (www.proteas-reach.gr) to participate to READ Heraklion event on 26/10/2015. The event took place in the brand new modern Cultural & Conference Centre of Heraklion Municipality and was attended by professional users, chemists, chemical engineers and company executives who demonstrated a constant interest throughout the whole event.

Figure 7: PROTEAS Representative, Heraklion, 26/10/2015

4.2 Evaluation of the management system

Project management was efficient, although READ Consortium had some difficulties to keep up with the planned deadlines of some deliverables.
Technical, Human Resources, Financial and Dissemination issues encountered were described in detail through Request for Amendment to Grant Agreement (08.09.2015). After Commission approved proposed changes, no other problems or difficulties occurred.
Major issues encountered are described below:
Delays have occurred, because stakeholders had low participation in Data Entry (Action B2), although tool is extremely easy- to-use and trainings (conferences, webinar) / manuals have been provided to all of them. Also, the majority of participating companies delivered their SDSs after the implementation of CLP to their products (01.06.2015), although CLP trainings have been delivered since 2013 by READ Consortium. As a result, number of available SDSs increased since June 2015 and this explains why READ project needed additional human resources (two engineers) to resolve the issue and stay viable and efficient.
Another issue encountered was that companies / professional users did not respond to READ hardcopy questionnaires. Instead, they would prefer e-questionnaires and this is why READ team decided to provide them electronically, as web-surveys (C1-Monitoring Actions).
On the other hand, dissemination activities were effective and in time, consisting mainly of workshops / conferences, several meeting with stakeholders (participating companies) and National Competent Authorities (General Chemical State Laboratory, Consumer organizations, etc). Totally, ten (10) conferences (instead of (6) mentioned to proposal) & one (1) webinar for stakeholders and thirteen (13) workshops (instead of (9) mentioned to proposal) for professional users and consumers have been organized. Also, READ has participated in five (5) exhibitions:

- COLOR & DECORATION-TOOLS, 23-24/05/2015, Grand Palace Hotel, Thessaloniki
- AGROTICA 26th International Fair, 29/01/16, Thessaloniki International Exhibition & Congress Centre
- Athens Boat Show, 11/02/16, Olympic Fencing Hall
- HORECA Exhibition, 12/02/2016, Metropolitan Expo
- Boat & Fishing Show, 18-20/03/2016, Helexpo, Athens

Figure 8: Horeca Exhibition, 12/2/2016

Figure 9: Agrotica Exhibition, 29/1/2016

Regarding that we are already leading the after LIFE period, READ is managed by HACI and HCA. Costs for database hosting, update of contents and WICs reproduction are charged to annual budgets of both Associations. Associations will continue the communication with potential stakeholders, in order to deliver new data entries to READ platform.
More information about the continuation of the project as described on After LIFE Communication plan.

Communication with Commission and Monitor Team

During the project period there were three different persons as representative of Astrale Monitor Team (Dr. Georgia Valaoras, Dr. Katerina Raftopoulou) and NEEMO EEIG (Mr. Theocharis Tziovaras).

The monitor has visited our project 05/11/2013, 24/10/2014, 24/04/2015 & 29/03/2016. Negotiations at meetings have made sure and facilitated the performance of project and increased its quality. Especially when preparing the technical reports, the tight discussions with the monitor have been essential in the quality of the reports.
Communication with Commission has happened via Monitor Team or after discussion with monitor, almost all cases.

5. Technical part

5.1. Technical progress, per task

A1. Project Management and Communication with potential stakeholders
Timing of action:
start date – 01/10/2013; end date – 31/03/2016

Main activities:
The main tasks of Action A1 were the establishment of Steering Committee (SC) and the preparation of deliverables for potential stakeholders, companies which produce / import construction products and professional cleaning agents.

Action A1 Summary:
As a first step, Steering Committee has been established to monitor the project progress. Steering Committee prepared the READ Action Plan, which determines in detail the steps for the implementation of the project and created the three (3) deliverables of A1 Action: READ General Description, Application Form and Memorandum of Understanding, before running the kick-off meeting (18/12/2013, Athens). It was identified as a key step for the efficient communication with producers / importers of professional detergents and chemicals for construction. HACI and HCA took the responsibility to send above mentioned three (3) documents to their members and other related associations.

Expected Results:

Deliverables	**Responsible Beneficiary**	**Delivered along with:**	**Evaluation**
Steering Committee establishment	SustChem Engineering	Not applicable.	Delivered as expected 03.10.2013
Action Plan	SustChem Engineering	Inception Report, 30/06/2014	Delivered as expected 14.10.2013
READ General Description	SustChem Engineering	Inception Report, 30/06/2014	Delivered as expected 21.10.2013
Memorandum of Understanding	SustChem Engineering	Inception Report, 30/06/2014	Delivered as expected 31.10.2013
Application Form	SustChem Engineering	Inception Report, 30/06/2014	Delivered as expected 21.10.2013

Milestones	Responsible Beneficiary	Due Date	Comments
Confirmation of Detailed Action Plan	SustChem Engineering	14/10/2013	Reached as expected

Table 3: Expected Results (deliverables, milestones), Action A1

Indicators of Progress:
Progress indicator of this action is the participation of more than 100 companies. It is confirmed that 110 companies have already signed to READ project and delivered their SDSs to READ platform.

Description	**Indicators**	**READ outcome**
No. of participating companies - Stakeholders	100	110
No. of ‘’READ General Description’’ copies	1000	>1000

Table 4: Indicators of progress, Action A1

Problems and delays:
Several companies, due to confidentiality reasons, would not upload their SDSs on READ platform / database. As a result, more meetings took place with their Management and Legal Division, in order to persuade them that our procedures are solid and clear. It shall be highlighted that approximately 85% of them signed and provided their Safety Data Sheets.

Another delay occurred by re-design of READ platform after the request of more than forty-two (42) potential participating companies. These potential stakeholders recommended that READ database should cover more chemical categories (eg. fertilizers, consumer products, lubricants, biocides), not only construction products and professional cleaning agents. READ team considered that idea was in favor of professional users / consumers / environmental protection and this explains why they proceeded with the extension of READ platform. Moreover, most of participating companies requested to produce WICs not only for their final products, but also for containing raw materials, which are handled by their personnel on a daily basis and normally have more hazardous properties than their final products. READ Consortium in cooperation with IT subcontractor managed to include raw materials, as well (search option ‘’Raw Materials’’).

A2. Data preparation
Timing of action:
start date – 01/10/2013; end date – 31/12/2013

Main activities:
This action involved the assessment of SDSs for chemical products disposed to the Greek market. A sample of (48) SDSs has been collected from participating companies, in order to evaluate both format and content.

Categories of Chemicals	Number of SDSs	Companies
Paints	11	Druckfarben SA, Vivechrom SA, Vechro SA, Yannides SA, Berling SA, Vechro SA, Vernicol SA
Varnishes	15	Vivechrom SA, Vechro SA, Yannides SA
Adhesives	6	Henkel SA
Primers	8	Vivechrom SA, Vechro SA, Yannides SA
Solvents	2	Vivechrom SA
Various chemicals	6	Importing companies

Table 5. Collected data for ''Assessment of existing conditions''

Coordinating Beneficiary performed quality check, in order to inform the other (2) beneficiaries about the existing standards. Main outcome from the assessment was that SDSs from producing companies more or less complied to chemical legislation, while the ones from importers had several issues.

Importers SDSs

- blank sections and sub-sections
- format other than the one of (EC) 453/2010, which requires 16 Sections
- insufficient information (eg. SDS of one page, while a common SDS is a document of at least three pages)
- Technical Data Sheets instead of Safety Data Sheets

Producers SDSs

- compliant SDSs (EC 453/2010 & 1907/2006)
- missing date of compilation, which is mandatory on the first page according to (EC) 453/2010
- not numbered pages
- SDSs lack an indication of the length (such as “page 1 of 3”)
- SDSs lack indications, such as “Continued on next page” or “End of safety data sheet”

Prior to database development, READ team had to ensure that uploaded SDSs would be in compliance to EU Chemical Legislation (REACH, CLP, (EC) 453/2010) and have identical or at least similar structure and format (doc, xml, pdf), in order to be searchable and manageable. This explains why READ Consortium has prepared a detailed Guidance for the compliant SDSs since the start date of the project (November, 2013) and delivered it to 600 copies to potential participating companies – stakeholders.

Expected Results:

Deliverables	**Responsible Beneficiary**	**Delivered along with:**	**Evaluation**
‘’Guidance for legally compliant and standardized data’’	SustChem Engineering	Inception Report, 30/06/2014	Delivered as expected 29/11/2013

Milestones	**Responsible Beneficiary**	**Evaluation**
‘’Assessment for existing conditions’’	SustChem Engineering	Reached within timeframe 15/11/2013

Table 6: Expected Results (Deliverables, Milestones), Action A2

Indicators of Progress:

Progress indicator of this action is the preparation of 500 copies for the deliverable, ‘’Guidance for legally compliant and standardized data’’. READ Consortium delivered 600 copies.

Description	**Result**
Delivery of ‘’Guidance for legally compliant and standardized data’’ (500 copies)	600 copies > 500 copies

Table 7: Indicators of progress, Action A2

Problems and delays:

No delays or particular issues.

B1. READ Database and Platform creation

Timing of action:

start date – 01/10/2013 end date 29/01/2016

Main activities:

Main task of Action B1 was the development of READ database, platform and essential utilities. Outcome of this Action is a prototype, able to store more than 10.000 Safety Data Sheets and transform them to Workplace Instruction Cards (Greek, English, Albanian, Serbian, Bulgarian).

Estimation of difficulties

Prior to platform creation, READ team estimated the potential difficulties to be encountered, while editing the SDSs. Issues of both SDS format / structure and content have been recognized as the major ones and have been divided to either technical difficulties or content difficulties.

Technical Difficulties

The technical difficulties concern the structure of the SDS. Usual problems causing the difficulties are mentioned below:

Different format than the one required by the Regulation 453/2010/EC	•SDSs must be compiled by 16 specific sections, which must be in a particular order and must have specific subsections containing specific information. Any deviation from the Regulation makes the SDS not compliant.
Blank sections/subsections	•The 16 sections and their subsections must have the relevant information. If there is no relevant to the subsection data, then it should be stated so. In any case the subsections cannot be blank.
SDS size	•There is no limitation on the size of the SDS. Due to the requirements that the various regulations set, the SDS is expected to be, at the very least, 3 pages long. A shorter than 3 pages SDS, most probably has gaps and blank sections and requires the attention of a READ consortium expert.
SDS language	•The SDS should be provided on the language of the market which the product is marketed. If the product is marketed in Greece then the SDS should be in Greek language. For the companies that market their products in other countries that are in the scope of the project, such as Bulgaria or Serbia, it is preferred to be provided in English language so that an READ expert is able to check its quality.
Technical Data Sheets (TDS) and Safety Data Sheets (SDS)	•The Technical Data Sheet is a document that summarizes the performance and the technical characteristics of a product. The purpose of the TDS is usually to inform the consumer concerning the use of the product. Unlike the SDS, the TDS is not a regulated document and usually do not contain safety information. It was usual for the companies to upload, instead of their products' SDSs, their TDSs, which since they do not contain information on the safe use of the products are of no use to the READ Platform.
File format	•The platform edit SDSs that are in pdf file format. Although almost all of the companies have theirs SDSs in pdf format, there may be variations on the some parameters of the format. Usually these parameters involve the encoding of the format. The various pdf variations made it difficult for the platform to use a single procedure for the edit of all the SDS.

Figure 10: Technical difficulties

Content Difficulties

Content difficulties concern the quality of the information of the SDS. Since WICs are generated from SDSs, their quality levels are closely related.

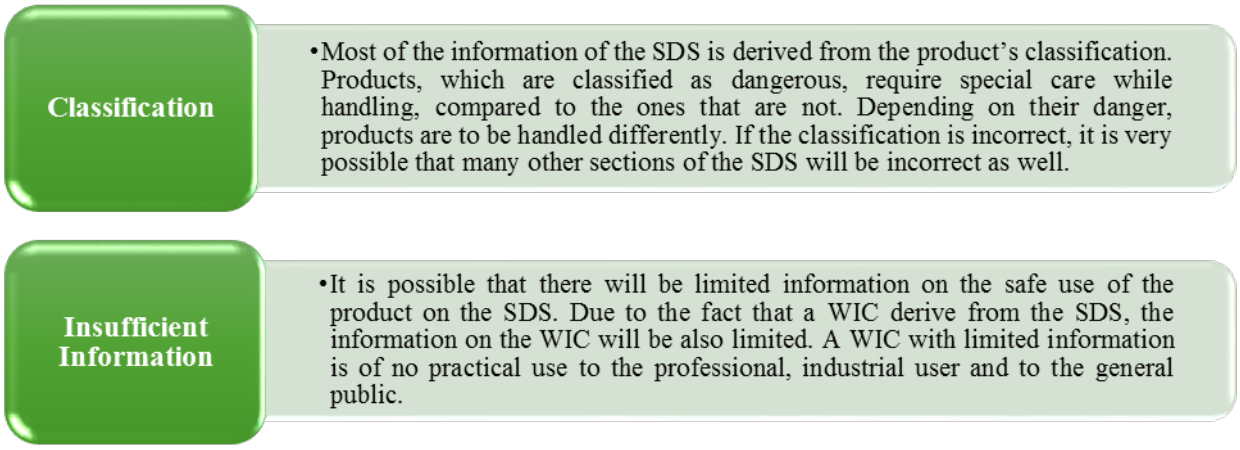


Figure 11: Content difficulties

Tools

READ platform tools are the following:

- *Parsing tool:* Determines data structure of imported Safety Data Sheets (SDSs) with respect to recommended structure of the ‘’Guidance for legally compliant and standardized data’’.
- *WICs reproduction tool:* Generates Workplace Instruction Cards (WICs) from imported Safety Data Sheets (SDSs)
- *WICs translator:* Translates Greek WICs to the English, Albanian, Bulgarian and Serbian language
- *Carbon Footprint Calculator (CFC):* Designed with respect to GHG Protocol Standard and ISO 14044, CFC estimates CO2 emissions / product.

Parsing tool is an essential tool for READ platform, as it filters the non-compliant SDSs in an automated way. The tool has the following functions:

- Checks the format of the content of the SDS. If the SDS consists of less than sixteen (16) sections, or there are blank sections or it consists of less than three pages, then the Parsing Tool alerts the platform user that the SDS is incorrect, due to its content format and that it requires the experts’ attention. In a similar way, the Parsing Tool also separates the TDSs from the SDSs.
- Checks the language of the SDS. If the SDS is not in Greek or English, then the platform user is properly informed. Although platform is able to edit SDSs, regardless of their language, it is mandatory that the SDSs of products disposed to the Greek Market is in Greek.
- Checks the file format. The tool checks if the pdf file is editable by the platform. If not, then it uses a subroutine program called Pdf to Text, in order to make the file

editable for the platform. The file is automatically converted to an editable form and reinserted to the platform.

Once SDSs are checked by parsing tool and no experts' attention is needed, then they enter the platform, where corresponding WICs are created.

Manual check of the SDSs

SDSs that failed to pass the parsing tool, need to be checked by READ experts.

Most cases, SDSs not passing the parsing tool are not compliant to the European legislation and appropriate action is required by the company. Expert informs the company of the issue and how it should be handled.

Unless the SDS is compliant with the European legislation, it will not proceed to further procedures of the platform.

SDSs that have been checked by the parsing tool and their format is appropriate, move to next step of quality control, implemented by READ Consortium experts. If SDSs do not provide sufficient information to users, the expert informs the company to update them accordingly.

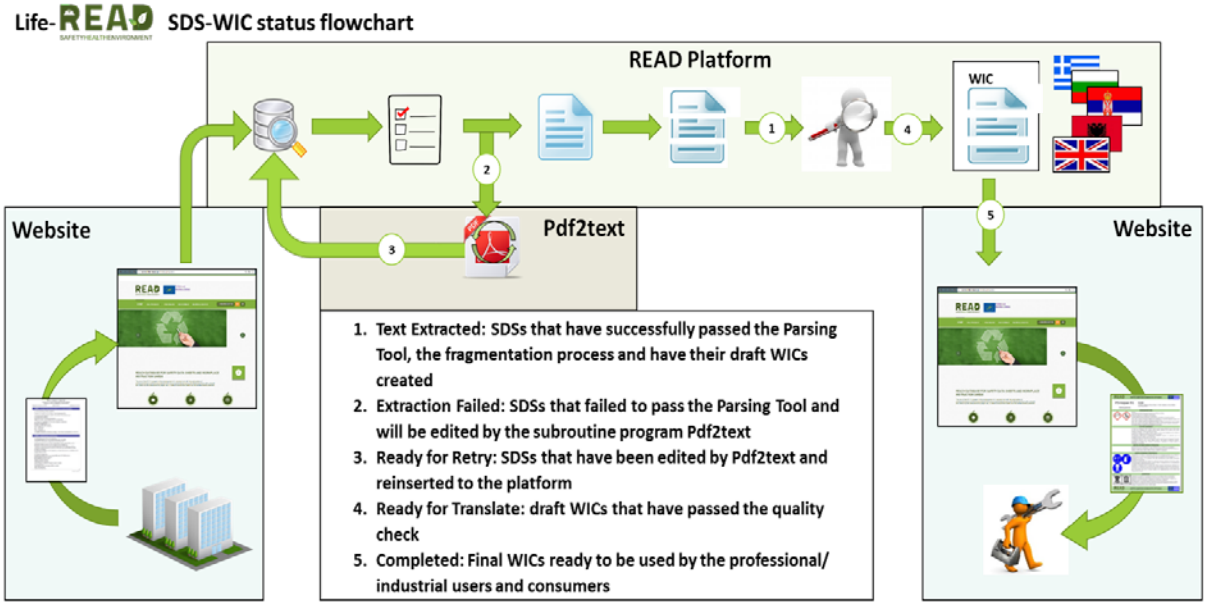


Figure 12: READ flowchart

WIC application

READ Platform is not accessible only from PC, but also from smart devices, in order to serve professional users working in remote areas, such as construction fields. It shall be highlighted that although workers / technicians shall have access to Safety Data Sheets (in hardcopy) for chemicals they use, this is not always the case.

As a result, READ team thought that a way to provide crucial information to them, especially when an accident occurs (eg. fire, contact of chemical with skin / eyes, etc) is the development of a free application (wic.gr). Both professional users and consumers are able to receive feedback (hazardous properties, firefighting measures, first aid measures, and personal protective equipment and disposal methods) for a chemical either by typing the trade name or

scanning the barcode.

Expected Results:

Deliverables	Status	Responsible Beneficiary	Evaluation
Database ready to host the data	✓	SustChem Engineering	Delivered in time (28/02/2014)
READ platform + utilities ✓ Parsing tool ✓ WICs Reproduction tool ✓ WICs translator ✓ Carbon footprint calculator ✓ Application (android, ios)	✓	SustChem Engineering	Delay occurred. Carbon footprint calculator was delivered on 29/01/2016, while READ platform itself along with the other utilities were delivered within timeframe.
Search engine (www.wic.gr)	✓	SustChem Engineering	Additional output to EU funding.

Table 8: Deliverables, Action B1

Additional deliverables (further to EU funding):

Deliverables	Status	Responsible Beneficiary
Search engine (www.wic.gr)	✓	SustChem Engineering

Table 9: Additional Deliverables, Action B1

Indicators of Progress:
No indicators have been set for above mentioned Action.

Problems and delays:
Several technical difficulties have been encountered during the development of the platform. Although READ platform operates automatically, quality control (from experts) is essential, as mentioned above. As a result, additional personnel has been hired, in order to assure the highest quality of both content and translation text of WICs.

Another significant issue was that READ parsing tool would fail most of the SDSs, due to encoding reasons. In the beginning, it used to give incorrect values and no SDS could be transformed into WIC. IT partner needed further time to resolve the issue by changing the specifications. As a result, prolongation was crucial for READ implementation.

Although READ platform itself along with the parsing tool, WICs reproduction tool & translator were delivered in time, delays occurred in the case of carbon footprint calculator. IT contractor had difficulties in implementing GHG (Greenhouse Gases) Protocol and ISO. As a result, prolongation was crucial for the delivery of CFC (Carbon Footprint Calculator).
Till now, it calculates carbon emissions for both paints (water based) and raw materials. READ team found out that it would be difficult to simplify the calculations for cleaning agents and fertilizers, as the compositions may differentiate significantly due to containing raw materials and the output would not be representative in all cases.
It shall be highlighted that this task was tricky, due to peculiarities of chemical compositions. **READ CFC is the only calculator (free access) which is dedicated to products.** Most of CFC on the website measure the carbon footprint of companies / people / employees (eg. energy consumption, travelling and food), data easy to assess. **All calculators intended to measure the carbon footprint of chemical products (eg. Gabi) are commercial and of rather high cost.**

Last but not least, the 1st version of READ platform could not copy images from uploaded SDSs and insert them in the corresponding WICs. At first, images were entered manually during the quality control process, but it was a time consuming procedure and READ Consortium decided to optimize the system along with the IT subcontractor. As a result, a tool was developed to allow the platform recognizing keywords on specific sections of WICs and ‘’interpreting’’ them to corresponding images.

B2. Data Entry
Timing of action:
Start date – 03/02/2014; end date – 01/04/2016

Main activities:
The main objective of this action was the training of participating companies – stakeholders to enter their data in the READ platform. For this purpose, several workshops and webinars took place covering the following topics:

- SDSs format & content, according to (EC) 1907/2006, 453/2010, 1272/2008
- Data entry (uploading SDSs, ecolabel declaration, SVHC, CMRs, etc)
- Uploading SDSs on READ platform

It shall be mentioned that webinar was recorded and uploaded on READ website, in order to provide guide to stakeholders who didn’t manage to participate to any READ event.

Indicators of Progress:
Indicator of progress for Action B2 is the number of data entries (SDSs) on the READ database. READ objective was to deliver more than of 10.000,00 data entries (SDSs) on the platform till the end date.

Deliverables	Delivered	Responsible Beneficiary	Due date	Evaluation
10.000 Data Entries	10.334 Data Entries	SustChem Engineering	28/11/2014	Delays occurred. Prolongation was crucial. Delivered: 28/03/2016

Table 10: Deliverables, Action B2

Milestones	Delivered	Responsible Beneficiary	Due date	Evaluation
Complete READ database	10.334 Data Entries	SustChem Engineering	28/11/2014	Delays occurred. Prolongation was crucial. Delivered: 28/03/2016

Table 11: Milestones, Action B2

It shall be mentioned that READ platform offers the possibility to enter below data for an uploaded SDS / file:

- Barcode
- Category (eg. building materials, cleaners, etc)
- Ecolabel

Till now, forty-seven (47) ecolabelled products have been uploaded on READ platform. In order to promote further eco products among professional users and consumers, WICs mention that the products are certified and are distinguished from the conventional ones.

Figure 13: Eco labelled product

It shall be stated that no products containing SVHC, PBT, vPvB or CMRs have been uploaded on READ platform, so far.
In case such products are submitted, READ SC will mention on WIC that:
''The product contains SVHC or CMRs, etc., substances with extremely hazardous properties''.
While majority of READ products can be used by consumers or DIY (Do-it-yourselfers), it was expected that the uploaded chemical compositions would not lead to severe classifications, such as toxic, carcinogenic, etc.

Problems and delays:
Delays have occurred, because stakeholders demonstrated low participation in data entry, although tool is user friendly and trainings (Action D2) / manuals (Action D1) have been delivered in time. Despite the fact that READ platform provided participating companies the opportunity to enter their data directly, most of them sent their SDSs by e-mail / CD. As a result, beneficiaries themselves had to upload the corresponding files to READ database for further processing, which was time consuming. This led to the necessity of additional human resources both for SustChem Engineering & HACI (involved in Action B2).
Low participation of stakeholders in Data Entry (Action B2) was not foreseen, as the preliminary evidence from discussions of the associations with industry experts had shown the opposite. According to READ SC observations, financial crisis forced the companies to reduce staff involvement in volunteer actions / programs. This explains why only the 20% of participating companies have uploaded the files on their own.

Another issue which caused severe delays was that the majority of participating companies wanted to deliver their SDSs only after the implementation of CLP to mixtures (01/06/2015). As a result, the majority of SDSs has been uploaded on June 2015 and this explains why READ project needed additional human resources to encounter the work load.

B3. Data Management and WICs Reproduction
Timing of action:
Start date – 05/05/2014; end date – 01/04/2016

Main activities:
After data entry, beneficiaries had to check and manage the imported data (Safety Data Sheets). If data did not follow the criteria of Guidance (Action A2), READ experts would inform stakeholders to proceed with necessary changes.
Another crucial task of this activity was the creation of WIC template (structure, content). Coordinating beneficiary decided that WICs would be consisted of the following sections:

- Trade name
- Responsible company for disposal to the Greek Market
- Hazards Identification
- First Aid Measures

- Firefighting measures
- Personal protective equipment
- Disposal
- Disclaimer content

After the successful entry of a Safety Data Sheet in the platform (parsing tool, quality check from experts), READ platform generates the Greek Workplace Instruction Card and then translates it to **English, Albanian, Serbian and Bulgarian**.

Expected Results:

Expected results	Delivered	Responsible Beneficiary	Due date	Evaluation
10.000 Greek WICs	10.334 Greek WICs	SustChem Engineering	30/04/2015	Delays occurred. Prolongation was crucial. Delivered: 28/03/2016
- Translation to Bulgarian, Serbian, Albanian - Delivery of 40.000 translated WICs	-Translation to Bulgarian, Serbian, Albanian & English * - Delivery of 51.670 translated WICs	SustChem Engineering	30/04/2015	Delays occurred. Prolongation was crucial. Delivered: 28/03/2016

Table 12: Expected Results, Action B3

* An additional output, not funded by LIFE+, was the translation of WICs to the English language.

Indicators of Progress:

Deliverables	Delivered	Responsible Beneficiary
10.000 Greek WICs	10.334 Greek WICs	SustChem Engineering
40.000 translated WICs	51.670 translated WICs	SustChem Engineering

Table 13: Indicators of Progress, Action B3

Problems and delays:

Same as Action B2.

Delays of stakeholders to provide their updated SDSs, in accordance to CLP, (EC) 1272/2008, resulted to the prolongation of Action B3.

As far as quality of translations is concerned, it shall be mentioned that the technical / regulatory terminology is used (coming from corresponding legislation text & SDSs) and in

this way a good quality is guaranteed. Also, it shall be stated that READ SC used google translator services, in order to deliver WICs in automated and cost-efficient way. Nevertheless, for the highest quality of translation in all (5) languages, READ SC could hire translation experts, but it is certain that READ budgeting and duration would be totally different.

B4. GHS/CLP adaptation

Timing of action:

start date – 03/02/2015; end date – 01/04/2016

Main activities:

Major task of Action B4 was the preparation of CLP Guidance, in order to help participating companies implement CLP Regulation, entered into force on 01/06/2016 for mixtures (final products). CLP Guidance used to be one of the main deliverables to companies, participating to READ conferences / workshops. In order to be of further assistance to companies, READ Consortium decided to provide CLP Regulation in hardcopy, as an additional output (not financed by LIFE+). Another deliverable under Action B4 was the preparation of READ cards, ‘’ Brochure about the use of READ Platform from professional users’’ in all five (5) languages (Greek, English, Bulgarian, Serbian, Albanian).

Expected Results:

Deliverables	Responsible Beneficiary	Due date	Evaluation	Delivered along with:
Updated READ platform with CLP feedback	SustChem Engineering	21/09/2015	Delays occurred. Prolongation was crucial. Delivered: 28/03/2016	Not applicable.
CLP guidance	SustChem Engineering	09/02/2015	Delivered as expected.	Progress Report, 25/11/2015
Brochure about the use of READ Platform from professional users	SustChem Engineering	27/02/2015	Delivered as expected.	Progress Report, 25/11/2015

Table 14: Expected Results, Action B4

Indicators of Progress:

Deliverables	Indicators	Delivered
CLP guidance	1000	1000
Brochure about the use of READ Platform from professional users	5000	5000

Table 15: Indicators of Progress, Action B4

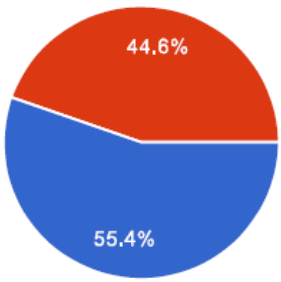
Problems and delays:
Delays in this Action have been significant, due to delayed adaptation of CLP Regulation from stakeholders. As a result, updated data entries have not been delivered in time. This fact justifies the need for additional personnel, in order to resolve the issue of workload. It shall be mentioned that trainings and READ technical material (CLP book, CLP poster & CLP guidance) helped stakeholders to deliver SDSs of better quality than the ones initially delivered (DPD, prior legislation framework).

C1. Monitoring Actions
Timing of action:
start date – 29/11/2013; end date – 01/04/2016

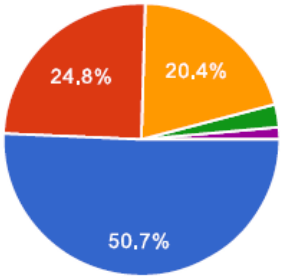
Main activities:
Main task of Action C1 is the development of tools monitoring the project impact.
First of all, READ Consortium had to deliver a project management tool (REDMine tool) till November of 2013 for the project planning, scheduling, budgeting, resource allocation and communication of the three (3) beneficiaries.
For the monitoring of READ impact to both climate change and accidents, questionnaires have been prepared and shared to stakeholders and professional users / consumers in hardcopy and electronically. By assessing the results of questionnaires, READ SC measures the impact of READ to accidents reduction and proper disposal of packaging.

<u>Climate Change Questionnaire (1211 responders)</u>

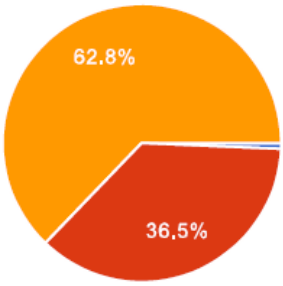
Genre:
Male: 55,4%
Female: 44,6%



Age:
18-25: 50,7%
26-30: 24,8%
31-45: 20,4%
46-60: 2,7%
>60: 1,5%



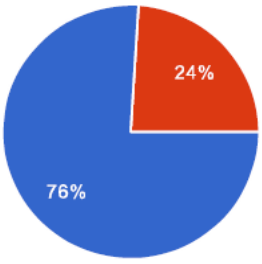
Education level:
Secondary: 0,7%
High school: 36,5%
University: 62,8%
Other: 0%



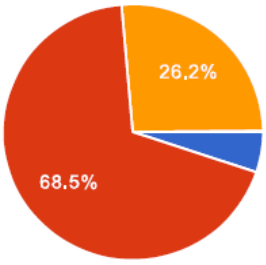
As far as recycling is concerned, it shall be mentioned that 649 different users (53,6%) replied that they recycle packaging. Thus, it is assumed that the target of 1000 recycled packages has been certainly reached within READ duration. It is important, as well, that 40% of them were not aware of recycling methods prior to READ project.

<u>Safety & Hygiene Questionnaire (2296 responders)</u>

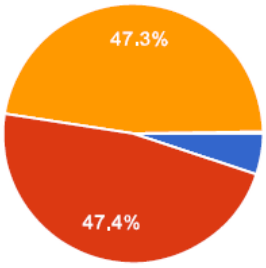
Genre:
Male: 76%
Female: 24%



Age:
18-25: 5,1%
26-35: 68,3%
35-60: 26,1%
>60: 0,2%



Education level:
Secondary: 5%
High school: 47,4%
University: 47,3%
Other: 0,2%



An interesting finding of ‘’Safety & Hygiene Questionnaire’’ was that 1066 from 2296 users prefer to use Instruction Cards instead of SDSs and labels when they need information about the hazardous properties of chemical products.
Also, 1575 (69,6%) responders considered that wic application was helpful in terms of safety & hygiene and reduction of injuries at the workplace. This means that 69,6% of professional users / consumers received valuable feedback regarding the personal protective equipment, firefighting measures, etc, so READ SC assumes that the target of 10% injuries reduction has been reached.

General Findings from Questionnaires:

In order to reveal the results and indicates the significant role of the project into chemical industries, two questionnaires (with optional participation) have been launched through the ‘’LIFE – READ’’ platform.

These questionnaires deal with the matters of climate change and with hygiene and safety in working areas. Participation of stakeholders and professional users led to some significant results. The most important where as follows:

a. Almost 54% of the participants seem to have knowledge of safe wasting, while more than 71% follow the instructions of wastage as described by the producer.

b. The recycling concern has been raised to almost 54%. Furthermore, 3 out 5 found the ‘’READ PROJECT’’ helpful, while more than 81% rating WICs as an important tool, specifically in terms of general information and personal safety.

c. As for personal precaution actions in general, 70% stated that they had attempted the seminars dealing with these.

d. More of 70% have general knowledge in measures that should be taken in case of fire and almost everyone seems to have access to firefighting equipment.

e. Although almost 60% claimed that SDS for the products are available (either in Greek or foreign language), claimed that they provide complex information and are difficult in understanding. On the other hand, though, 70% found the WIC application much more helpful and practical (which was program’s main target).

f. Finally, almost 1 out of 2 stated that they have cooperate in order to take more precaution measures in terms of hygiene and service, but there were also 58% who wish to acquire more information upon that.

Another task was the estimation & offsetting of READ carbon emissions.

Coordinating Beneficiary, SustChem Engineering was responsible for the calculation of READ CO2e.

Sources of carbon emissions were the following:

- Electricity consumption (PCs)
- Electricity consumption (heating, cooling, lighting)
- Paper consumption
- Travelling (petrol, diesel, kerosene)

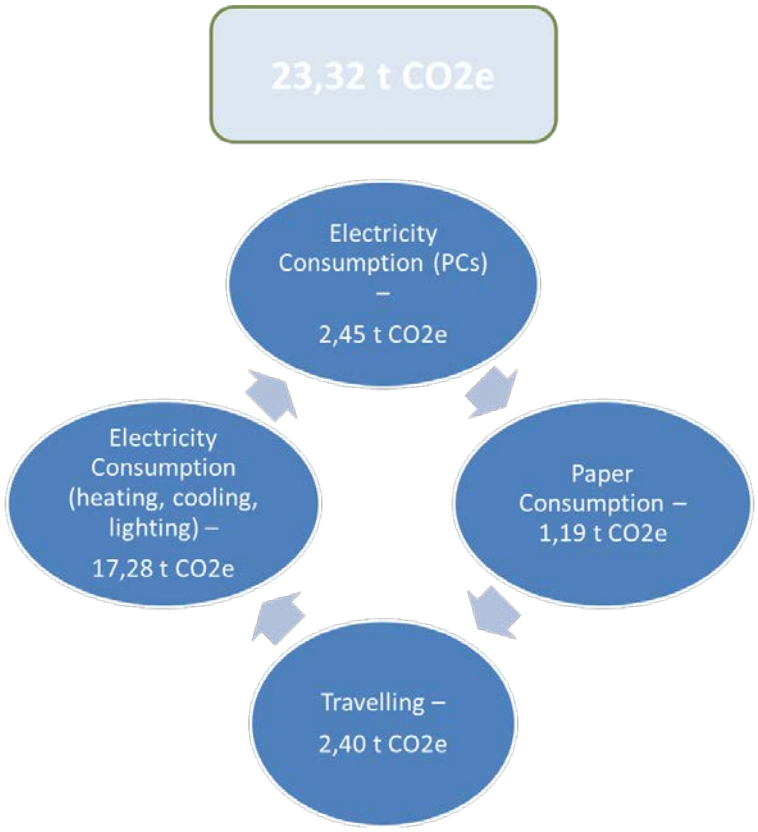


Figure 14: Total carbon emissions

READ total carbon emissions were estimated, according to ISO 14044 and 14046 by using Gabi parameters and Microsoft Office Excel.

In order to verify that READ calculations were valid, Carbon Footprint LTD, leading provider on sustainability services certified that methodology for estimation follows relevant protocols and after that, they offset the amount of 23,32 t CO2e by investing in a developing country.

carbon footprint

This certificate acknowledges that

SustChem Engineering Ltd

offset 23.32 tCO_2e

through Verified Carbon Standard (VCS) reduction projects

and

planted 23 trees in the Great Rift Valley, Kenya

thereby offsetting carbon emissions and helping to combat climate change in support of the READ LIFE+, LIFE12 ENV/GR/001135 project

With the contribution of the LIFE financial instrument of the European Union.

22 March 2016

John Buckley, Managing Director, Carbon Footprint Ltd

www.carbonfootprint.com

Planting native trees,
offsetting carbon emissions,
helping disadvantaged communities and providing wildlife habitats

carbon footprint

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www.carbonfootprint.com

31 March 2016

Verification of carbon emissions calculations in support of the READ LIFE+ project for SustChem Engineering Ltd

Dear Sir/Madam,

SustChem Engineering Limited (SustChem), commissioned Carbon Footprint Ltd to verify their carbon emissions calculations. These were calculated in support of the Read Life+ project.

The Read Life+ project involved the compilation of a database of workplace instruction cards, in support of the EU REACH (Registration, Evaluation and Authorisation of Chemicals) Regulations. This database covers a wide range of commonly used chemicals and products, to help companies communicate associated hazards to workers and consumers alike.

The emissions calculation covers the travel and associated office activities of consultants and contractors in support of the project, between 2013 and 2016. Specifically, this calculation includes consultant travel to client sites and conferences; office use (heating, cooling and lighting); the use of office equipment; and embodied emissions from paper used.

Carbon Footprint Ltd verified SustChem's emissions calculations by checking the sources data used in the calculation and emissions factors, along with the calculation methodology used to determine the results. SustChem has confirmed that the calculations have been completed using emissions factors sourced from the EcoVadis database and that the methodology followed is based on principles outlined ISO 14044 standard for life cycle assessment.

Carbon Footprint Ltd confirms that in our opinion SustChem have correctly assessed the carbon emissions arising from the implementation of this project following methodology as set out in ISO 14044.

Yours faithfully,

Iain Forsyth
Environmental Consultant
Carbon Footprint Ltd
+44 (0) 1256 345 645

carbon footprint Verified
Carbon emissions calculations verified by Carbon Footprint Ltd

Carbon Footprint Ltd is a UK registered Company No. 4532520
VAT Registration No. 876040225
Registered Office:
2 Westminster Close, Basingstoke, Hampshire, RG22 4PP, UK

INSPIRE11

Figure 15: Verification certificate – Carbon neutrality certificate

READ Consortium prepared three (3) Assessments (First, Second, Final – Socioeconomic Analysis). First Impact Assessment provided feedback regarding the 1st group of workshops dedicated to participating companies – stakeholders, while the Second one focused to the 2nd group of conferences intended to professional users / consumers. In order to assess the socioeconomic impact of the project, a socioeconomic study consolidating both data and results is delivered along with the Final Report. It shall be highlighted that READ aimed to increase social awareness, train community on topics of safety, hygiene and environmental protection and help companies / National Competent Authorities deal with the new EU Regulations (REACH, CLP, SDSs).

Expected Results:

Deliverables	Responsible Beneficiary	Due date	Evaluation	Delivered along with:
The monitoring and project management tool, ‘’REDMine’’	SustChem Engineering	29/11/2013	Delivered as expected.	Not applicable.
First Impact Assessment	SustChem Engineering	31/03/2014	Delivered as expected.	Progress Report, 25/11/2015
Second Impact Assessment	SustChem Engineering	30/01/2016	Delivered as expected.	Attached.
READ Carbon footprint – LCA – Carbon Neutrality	SustChem Engineering	26/02/2016	Delivered as expected.	Attached: - Contract with Carbon Footprint LTD, Verification document, Carbon neutrality certificate
Socioeconomic Analysis (Final Impact Assessment)	SustChem Engineering	28/03/2016	Delivered as expected.	Attached
Climate Change Questionnaire	SustChem Engineering	28/03/2016	Delays to delivery. Target reached. http://www.life-read.gr/gr/erotimatologia-asfali-xrisi-ximikon	Not applicable – available on website
Accidents Questionnaire (Safety & Hygiene)	SustChem Engineering	31/03/2014	Delays to delivery. Target reached. http://www.life-read.gr/gr/erotimatologia-asfali-xrisi-ximikon	Not applicable – available on website

Table 16: Expected Results, Action C1

Indicators of Progress:
Foreseen: 1000 questionnaires (professional users)

DELIVERED:

- **1211** questionnaires (Climate Change - Ecology)
- **2296** questionnaires (Accidents – Chemical Safety)

Problems and delays:
Major issue was that companies / professional users did not respond to READ hardcopy questionnaires (accidents, climate change). This led to delays, until SC decided that they should be facilitated to answer, as questionnaires were an essential tool to measure the project's impact. As a result, READ team provided the questionnaires electronically. All participants of workshops and exhibitions have been informed about the two (2) questionnaires. Also, in order to collect more data, a newsletter with an extended reference to questionnaires has been sent on March, 2016 to all contacts of the three (3) beneficiaries. According to the numbers of collected questionnaires (mentioned above), it seems that dissemination was successful, as target of 1000 replied questionnaires has been reached.

Delays occurred to the delivery of Impact Assessments, as well. First Impact Assessment was published on 31.03.2014 after the last event of 1st group, while Second Impact Assessment was delivered on 30/01/2016, after the finalization of 2nd group of conferences.
REDMine project management tool was delivered in time, but IT subcontractor could not make it interact with READ Database as already stated in the Inception Report.

D1. Communication and dissemination material
To be discussed under ''Dissemination actions, §5.2''

D2. Workshops and seminars
To be discussed under ''Dissemination actions, §5.2''

D3. After-LIFE Communication plan
To be discussed under ''Dissemination actions, §5.2''

E1. Project Management by SUSTCHEM Engineering
SustChem Engineering, Coordinating Beneficiary was responsible for project management. Along with representatives of Steering Committee, Project Manager monitored the progress and impact of READ project, prepared deliverables and reports for European Commission and Monitoring Team, scheduled actions and assigned tasks.

A/A	Name/Surname	Responsibility	Responsible Beneficiary
1	Aris Gorogias Areti Voulomenou	Senior expert Project manager	SustChem Engineering
2	Ioanna Liberopoulou	Administrative support	HACI
3	Apostolos Scarlatos	Senior engineer	HCA

Table 17: Members of Steering Committee, Action E1

Administrative actions during reporting period are the following:

- **Coordinating Beneficiary: SustChem Engineering**

Meetings

A major responsibility of Project Manager is the monitoring of technical and dissemination actions. Thus, fifteen (15) meetings with IT subcontractors (WIC tool, search engine, sites, carbon footprint calculator, etc) and more than sixty-eight (68) meetings with potential stakeholders (companies to share SDSs) have been taken place till reporting date.

Seminars

As far as seminars are concerned, it shall be mentioned that the coordination /management is undertaken by Associated Beneficiaries. However, training material is designed & presented by SustChem Engineering experts. More information is provided in *Workshops & seminars (Action D2).*

Dissemination material

Dissemination material has been designed / developed mainly by SustChem Engineering. Along with HACI & HCA support, CLP posters and other material have been provided to Competent Authorities, stakeholders & professional users. More information is provided in *Communication and dissemination actions (Action D1).*

- **Associated Beneficiaries : HACI & HCE**

Seminars

Both Associated Beneficiaries (HACI & HCA) undertook the dissemination of READ project to their respective members (meetings, General Assemblies).

Moreover, it shall be mentioned that the coordination / dissemination of conferences is responsibility of the Associated Beneficiaries.

One of the major tasks of Action E1 was the interaction with other LIFE+ projects (*Proteas, 3x environment*), in terms of exchanging knowledge and managerial techniques / methods.

Figure 16: Interaction with Proteas & ex environment

Project management was efficient, although READ Consortium had some difficulties to keep up with the planned deadlines of some deliverables (pls see Request for Amendment to Grant Agreement, 08/09/2015).

Gantt chart

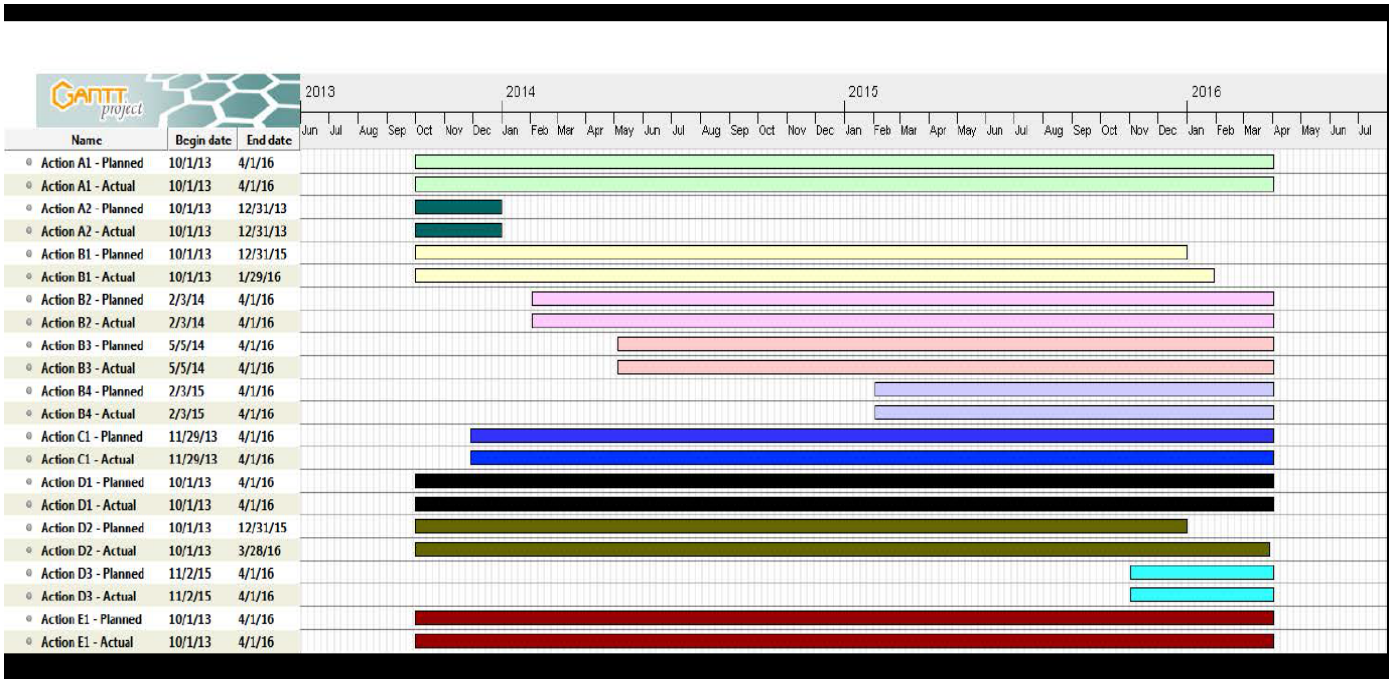

Figure 17: LIFE+ READ Gantt Chart

5.2 Dissemination actions

5.2.1 Objectives

The project's awareness-raising and dissemination actions (in particular Actions D1, D2, and D3) promote the safe handling of chemicals throughout the supply chain, especially to end users (professional users, consumers).

5.2.2 Dissemination: overview per activity

D1. Communication and dissemination material

Timing of action:

start date – 01/10/2013; end date – 01/04/2016

Main activities:

Main objective of Action D1. was the preparation of communication material (site, social media, posters, brochures, etc), in order to disseminate LIFE+ READ project to stakeholders (participating companies) and professional users / consumers, as well as the National Competent Authorities.

Communication material has been mainly delivered to participants (companies, professional users, consumers) of READ workshops and exhibitions. In order to persuade more stakeholders to participate to READ project, HACI & HCA sent posters, cards, etc to their members, who have not participated to any READ event. CLP posters and READ cards (Brochure for READ platform, Greek) have been sent to National Competent Authorities (General Chemical State Laboratory, Ministry of Food and Rural Development, National Organisation for Medicines, General Secretariat for Consumers, Chemical Services all over Greece, etc).

Last but not least, dissemination material has been delivered to executives of Cefic (Belgium) and Biocidal Technical Group (Ljubljana), in order to disseminate the project in EU.

Social media

The LIFE+ READ project has actively participated in the two most popular social media platforms: Facebook and Twitter. Especially since the beginning of 2016, the LIFE+ READ Facebook page managed to reach over 10000 people in Greece, with the regular publication of posts, the creation of ads and the consistent engagement with the customers. The posts that were published during this marketing activity period concerned mainly news, events and the dissemination of the usefulness of the WIC platform. The use of Twitter for the purpose of raising awareness about the safe handling of chemical products was also successful. Within a few months, READ managed to gain a significant number of followers, both in the academic field and the chemical industry.

The results of these social media strategies were the creation of a strong social community and the strengthening customer loyalty.

Website

The project website with READ platform and web-based questionnaires and other information, such as project objectives, the distinguished work packages, results, news, interesting links, etc was delivered on 29/11/2013.

Website, http://www.life-read.gr displays information on the project in Greek, English, Bulgarian, Serbian and Albanian and has been communicated through twitter & facebook.
Website was updated on a monthly basis with new information, such as workshops presentations, deliverables, etc. Also, links to instructive videos (kick-off meeting) were added and users are able to find the webinar of 02/12/2014 regarding compliant Safety Data Sheets. It shall be mentioned that the project website will be active for five years after the project conclusion.

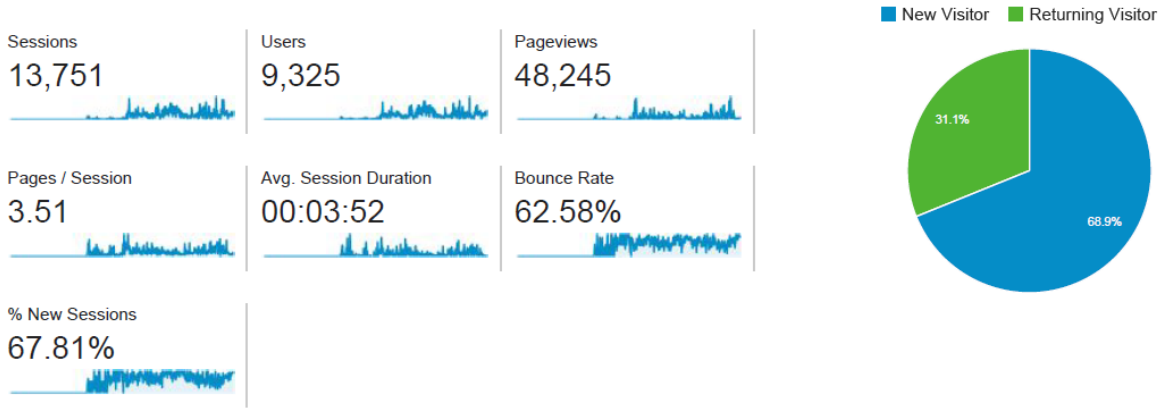

Figure 18: Google Analytics

Application wic.gr

WIC application (for android / ios mobile phones) is available on google and apple store. It is helpful that they adjust to the screen's size, so users can easily read the information they need. Workplace Instruction Cards – WICs are designed, so that they fit any short of screen, no matter the size. Fonts, pictures and layout automatically adjust to the monitor dimensions.

Links

- *Google play store: https://play.google.com/store/apps/details?id=net.siquel.wic*
- *Apple store: http://www.apple.com/itunes/download/*

Posters

Posters mentioned on table below have been delivered mainly to participants of workshops / conferences. For each workshop, READ SC prepared a dedicated poster, mentioning the date and place of event. CLP poster, additional deliverable to proposal, was a very useful tool for both companies – stakeholders and National Competent Authorities. READ SC sent more than 200 posters to the General Chemical State Laboratory, Ministry of Rural Development & Food, Chemical Services all over Greece, National Organisation for Medicines and General Secretariat for Consumers, etc. Also, in order to disseminate wic.gr application (android, ios), WIC poster was delivered in hardcopy and electronically.

Dissemination material (folders, pens, notepads, guidance, etc.)

Dissemination material mentioned on table below has been delivered to both stakeholders – participating companies and professional users / consumers.

Legislation guidance (CLP, SDS) normally was intended to companies that prepared the Safety Data Sheets, while the target group for ‘’Brochures for READ platform (Greek, English, Albanian, Serbian, Bulgarian) was the professional user / consumer. As far as pens, posters, etc are concerned, READ team delivered them to all involved parties (National Competent Authorities, companies, professional users / consumers).

Newsletters

As far as newsletters are concerned, READ team has prepared and sent three (3) newsletters to:

- SustChem Engineering contacts
- HACI contacts (mainly members)
- HCA contacts (mainly members)
- Lists of technicians, hotels, professional users
- Companies – members of PASEPPE (Greek Association of Environmental Protection Companies)

Newsletters kept stakeholders & professional users / consumers up-to-date on READ progress, upcoming events, questionnaires, etc.

1st newsletter: 2013, December

First READ newsletter was sent prior to kick off meeting (18/12/2013, Athens). Main objective was to inform **stakeholders** (companies) about READ project, in order to motivate them to participate with the submission of their SDSs.

2nd newsletter: 2014, October

Target group of the second newsletter were the manufacturers / importers of chemical products. Reason for the preparation of the second newsletter was to inform the delivery of

READ platform. It was necessary to collect SDSs of the participating companies, in order to check how the platform reacted to massive submission of data and if there was need to optimize the tool. Last but not least, it informed companies about the event in Patras, third largest city and the regional capital of Western Greece (25/11/2014).

3rd newsletter: 2015, December & 2016, March

Third newsletter aimed to approach mainly professional users / technicians and persuade them to reply to READ questionnaires (climate change, safety & hygiene). In order to collect more questionnaires (representative sample), same newsletter was sent again on March, 2016 mainly to hotel owners and members of PASEPPE.

Notice boards

Two (2) notice boards have been erected, one at the premises of SustChem Engineering and the other at the shared facilities of HACI & HCA. Regarding that banners & posters have been produced, READ SC decided that mobile boards are not crucial for events / workshops.

Expected Results:

Deliverables	**Responsible Beneficiary**	**Evaluation**	**No of copies**	**Delivered along with:**
READ General Description (Greek)	SustChem Engineering	Delivered as expected	>1000	Inception Report, 30/06/2014
READ folders (A4)	SustChem Engineering	Delivered as expected	650	Inception Report, 30/06/2014
READ pens	SustChem Engineering	Delivered as expected	750	Inception Report, 30/06/2014
READ notepads (A4)	SustChem Engineering	Delivered as expected	650	Inception Report, 30/06/2014
READ flyer	SustChem Engineering	Delivered as expected	1500	Inception Report, 30/06/2014
Application forms	SustChem Engineering	Delivered as expected	400	Inception Report, 30/06/2014

Guidance for compliant & standardized SDSs	SustChem Engineering	Delivered as expected	500	Inception Report, 30/06/2014
CLP guidance	SustChem Engineering	Delivered as expected	1000	Progress Report, 25/11/2015
Brochure for READ platform (Greek, Serbian, Albanian, Bulgarian)	SustChem Engineering	Delivered as expected	4000	Attached.
Layman's report	SustChem Engineering	Delivered as expected	20	Attached.
Posters (events, CLP, etc)	SustChem Engineering	Delivered as expected	10 / event	Progress Report, 25/11/2015
Notice Boards	SustChem Engineering	Delivered as expected	2	Inception Report, 30/06/2014 (photos)
READ poster	SustChem Engineering	Delivered as expected	120	Inception Report, 30/06/2014
Banners	SustChem Engineering	Delivered as expected	4	Inception Report, 30/06/2014
Newsletters	SustChem Engineering	Delivered as expected	3	Not applicable. Published on site.
Web conferencing application for READ webinars	SustChem Engineering	Delivered as expected	Not applicable	Not applicable. Published on site.
READ website	SustChem Engineering	Delivered as expected	Not applicable	Not applicable.
Social media (Facebook, Twitter)	SustChem Engineering	Delivered as expected	Not applicable	Not applicable.
After LIFE Communication plan	SustChem Engineering	Delivered as expected	0	Attached.

Table 19: Deliverables, Action D1

Additional dissemination outputs (no LIFE+ funding):

Additional Deliverables	Status	Responsible Beneficiary	No of copies	Delivered along with:
CLP poster	✓	SustChem Engineering	3000	Progress Report, 25/11/2015
WIC poster	✓	SustChem Engineering	10	Progress Report, 25/11/2015
READ General Description (English)	✓	SustChem Engineering	700	Progress Report, 25/11/2015
Brochure for READ platform (English)	✓	SustChem Engineering	1000	Attached.
Additional site (www.wic.gr)	✓	SustChem Engineering	Not applicable	Not applicable.
CLP Regulation (book)	✓	SustChem Engineering	500	Inception Report, 30/06/2014

Table 20: Additional Deliverables, Action D1

Indicators of Progress:
- Delivery of communication material (design & printing) on time.

Problems and delays:
No problems and delays occurred.

Comparison with planned objective and outputs:
The objectives of this Action have been fully accomplished up to the current reporting period. Additional outputs not financed by LIFE+ funding have been delivered, in order to disseminate better the READ objectives.

D2. Workshops and seminars
Timing of action:
start date – 01/10/2013; end date – 28/03/2016

Main activities:
In order to achieve the maximum dissemination of READ project and mobilize chemical companies (stakeholders) upload their Safety Data Sheets on READ platform, Steering Committee organized the following workshops in:

1st Group of seminars / workshops:

READ Steering Committee organized the 1st group of workshops, in order to persuade chemical companies to participate to project by delivering their Safety Data Sheets (SDSs):

- ✓ Kick off meeting in Athens, 18/12/2013

Along with the General Chemical State Laboratory, kick-off meeting was held at the Titania Hotel on the 18th of December. Participants were 65, representatives of companies, who have been invited by HACI & HCA.

In terms of dissemination, kick off meeting was recorded.

Kick off meeting videos:

LIFE+ : 1st Kick off meeting READ, Athens (Part 1)
LIFE+ : 1st Kick off meeting READ, Athens (Part 2)
LIFE+ : 1st Kick off meeting READ, Athens (Part 3)
LIFE+ : 1st Kick off meeting READ, Athens (Part 4)

- ✓ Conference in Larissa, 24/02/2014

Following the successful inaugural presentation in Athens, Larissa, a city with a significant industrial area, was interested in offering the stage for twenty-seven (27) company executives and representatives from the competent authorities to become acquainted of the advantages the database has to offer, both to companies and professional users / consumers. The event was hosted by the Association of Thessalian Enterprises and Industries on the 24th of February and gained a significant coverage at the local press and blogs. It shall be highlighted that the Director of Environment, General Chemical State Laboratory (Athens) travelled to Larissa with READ team, in order to train the executives in chemical legislation (SDSs, etc) and responsibilities arising from CLP & REACH implementation.

Figure 19: Conference in Larissa, 24/02/2014

- ✓ Conference in Thessaloniki, 09/04/2014 – 10/04/2014

Another READ conference / workshop took place at the Thessaloniki Chamber of Commerce and Industry on April 9th. The presentation of the "READ" Programme amongst forty-six (46) company representatives and executives was an opportunity to address and discuss on the effectiveness the programme offers in the communication of safety information throughout the supply chain. On 10/4/2014, CLP training was provided to twenty-eight (28) stakeholders

in order to help them updating their SDSs properly and in time (CLP implementation: 1/6/2015).

- ✓ Conference in Athens – "Meet Candidate MEPs'' – 30/04/2014

READ project was announced at the conference "Meet Candidate MEPs'' (30/04/2014, Athens). About thirty- four (34) company representatives participated and discussed with READ SC and candidate members of European Parliament the importance of EU programs for Greek universities and companies, especially SMEs.

Figure 20: Conference with MEPs, 30/04/2014

- ✓ Conference in Thessaloniki, 02/06/2014 – 03/06/2014

READ project was communicated to CEFIC (European Chemical Industry Council) and the Bulgarian Association for Chemical industries in a conference, held in Thessaloniki (02/06/2014). Along with representatives of Greek companies, located in Northern Greece, participants were thirty-one (31). On 03/06/2014, CLP training was provided to seventeen (17) stakeholders, in order to help them updating their SDSs properly and in time (CLP implementation: 1/6/2015).

Figure 21: Conference with MEPs, 30/04/2014

- ✓ Conference in Patras, 25/11/2014

Along with the Chemical Service of Peloponnese, Western Hellas and Ionian Islands, READ Consortium provided a workshop in Patras. Twenty-six (26) participants represented academia & chemical companies.

- ✓ Conference in Sofia, 30/09/2014

Bulgarian Association of Chemical Industries invited HACI to the workshop,"Safety of chemicals and nanomaterials" on 30/09/2014. Participants were approximately 30, mainly representatives from Bulgarian chemical companies and CEFIC (The European Chemical Industry Council). READ Consortium presented the objectives of READ and the CLP Regulation.

- ✓ Conference in Athens with charcoal companies, 26/04/2015

READ team met forty-four (44) executives from charcoal industry (26/04/2015, Athens), in order to present the objectives of READ. Majority of participants signed to READ terms.

2nd Group of seminars / workshops:

As far as the 2nd group of conferences / workshops is concerned, it shall be highlighted that target group was professional users and consumers:

- ✓ Conference in Athens, 22/04/2015

Along with Hellenic Institute for Occupational Health and Safety, READ Consortium organized a conference of fifty-five (55) participants in Athens. Companies and professional users were informed about the READ targets, CLP Regulation (SDSs & labels), as well WICs / tools.

- ✓ Conference in Heraklion, 23/10/2015

READ Consortium along with the Chemical Service of Crete, chemical companies and universities organised a workshop in Heraklion (61 participants). It shall be mentioned that READ project invited LIFE+ Proteas to participate to the relevant workshop.

- ✓ Conference in Skopelos, 31/03/2015

In cooperation with READ stakeholder, VITEX (manufacturer of paints, antifouling products and other chemicals), READ team trained 26 professional users on how to use READ platform, download WIC application to their smart devices and recognize chemical hazards for health and environment.

- ✓ Conference in Kavala, 27/5/2015

Same as Skopelos. Participation of 10 professional users.

- ✓ Conference in Kozani, 25/5/2015

Same as Skopelos. Participation of 72 professional users.

- ✓ Conference in Kos, 21/10/2015

Same as Skopelos – 101 participants.

- ✓ Conference in Patras, 02/04/2015

Same as Skopelos – 51 participants.

- ✓ Conference in Kefallonia, 29/4/2015

Same as Skopelos – 28 participants.

- ✓ Conference in Larisa, 10/12/2015

Same as Skopelos – 47 participants.

- ✓ Conference in Patras, 16/12/2015

Same as Skopelos – 39 participants.

- ✓ Conference in Corfu, 25/11/2015

Same as Skopelos – 59 participants.

- ✓ Conference in Mytilene, 16/03/2016

Same as Skopelos – 25 participants.

- ✓ Conference in Ioannina, 28/03/2016

Same as Skopelos – 30 participants.

Webinar:

READ team delivered a webinar on 2/12/2014 (Athens) for stakeholders – participating companies. Fifty-four (54) company representatives were trained on compliant SDSs and responsibilities arising from the implementation of legislation.

Streaming: http://www.life-read.gr/gr/outcomes/allilepidraseis-me-alla-life-projects/15-news-and-events/webinars

Exhibitions:

- ✓ **COLOR & DECORATION-TOOLS, 23-24/05/2015, Grand Palace Hotel, Thessaloniki**

In order to increase READ dissemination, HCA participated to the 2 days exhibition, organized by Expoint company and specialized in paints industry.
The success of the event was manifested by approximately 1000 visitors, among them painters, contractors, architects, interior designers, builders and craftsmen-builders.

- ✓ **AGROTICA 26th International Fair, 29/01/16, Thessaloniki International Exhibition & Congress Centre**

- ✓ **Athens Boat Show, 11/02/16, Olympic Fencing Hall**

- ✓ **HORECA Exhibition, 12/02/2016, Metropolitan Expo**

Figure 22: HORECA Exhibition

- ✓ **Boat & Fishing Show, 18-20/03/2016, Helexpo, Athens**

Figure 23: Boat & Fishing Exhibition

Indicators of Progress:

Totally, ten (10) conferences (instead of (6) mentioned to proposal) & one (1) webinar for stakeholders and thirteen (13) workshops (instead of (9) mentioned to proposal) for professional users and consumers have been held.

In terms of READ dissemination, Steering Committee decided to organize more workshops / conferences.

Target 1: Participation of 5.000 professional users to workshops / conferences and 500 companies

Target 2: Communication of READ to more than 100.000 professional users / consumers

It shall be highlighted that both targets of Action D2 have been achieved. Professional users / consumers who joined HORECA Exhibition were 120.000 (> 5000), while companies 40.368.

A press release relevant to HORECA Exhibition:

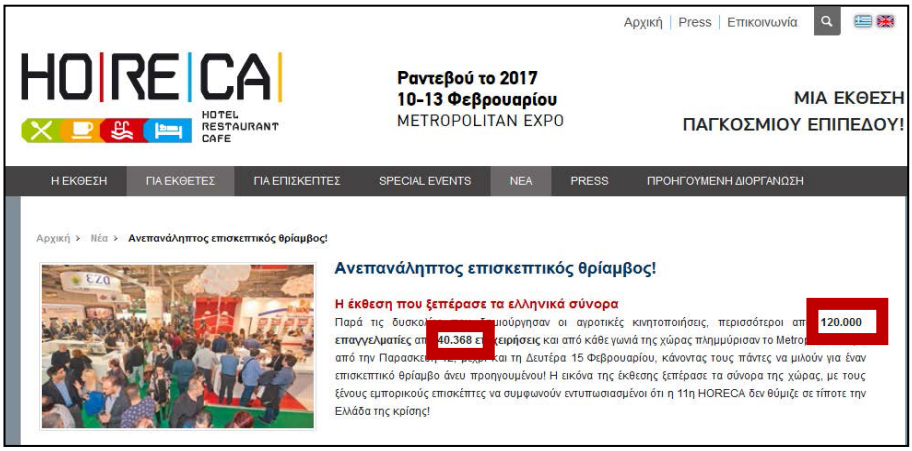

Figure 24: HORECA press release

As far as communication of READ to both professional users and consumers is concerned, READ project objectives / deliverables were published to a newsletter of Technical Chamber of Greece, whose members are 107.633 > 100.000. Also, support from the General Secretariat for Consumers was important for READ dissemination (READ publication on website (efpolis.gr)).

Hellenic Institute for Occupational Health & Safety (>10000 readers) has mentioned READ project on its newsletter after the co-organization of the conference / workshop on 22/04.

Output	**READ proposal**	**Delivered**
1st group of workshops (stakeholders)	6	8 > target: 6
2nd group of workshops (professional users)	9	14 > target: 9
Exhibitions	0	5

Table 21: Workshops / Conferences / Exhibitions, Action D2

Event	**Participants**	**Indicator**	**Responsible Beneficiary**
Exhibition Chroma-Tool	1000	5000	**HCA**
Exhibition Horeca	120000		
Exhibition Boat Show	>1100		
Exhibition Fishing & Boat	>3000		
Exhibition Agrotica	>3000		

Table 22: Indicators for participation, Action D2

a/a	READ Dissemination (Press release, sites, etc)	Readers
1	General Secretariat for Consumers http://www.efpolis.gr/	>500
2	Technical Chamber of Greece - Newsletter	**107633**
3	READ Newsletter (1)	4805
4	READ Newsletter (2)	4805
5	READ Newsletter (3)	4805
6	READ Newsletter (4)	16408
7	Iefimerida	2690
8	Tovima	8060
9	Euro2day	13848
10	Imerissia	11127
11	Reporter	79711
12	Sofokleousin	41131
13	Sustainable Greece 2020, Newsletter 24.11.15	>200
14	Hellenic Institute for Occupational Health & Safety Newsletter	**>5000**
15	Weekly News - Water & Waste	>1000
16	Global Sustain	>1000
17	Mychroma newsletter	>5000
18	4green	>250
19	Water & Waste site	>700
20	Weekly News - Water & Waste	>1000
21	Mychroma magazine	5500

Table 23: Indicators for dissemination, Action D2

Problems and delays:

In the beginning of READ project, READ Steering Committee had to deal with low participation of professional users (PU) / consumers to workshops / conferences. Nevertheless, issue was resolved by READ participation to above mentioned exhibitions, where READ team managed to approach more than 120.000 professional users (target: 5.000).

Expected Results:

Deliverables	Responsible Beneficiary	Due date	Evaluation	Delivered
Minutes from the seminars about SDSs	SustChem Engineering	28/02/2014	Delay occurred. Patras workshop was organized on 25/11/2014. Report was delivered on 02/12/2014.	Inception report (30/06/2014)
Minutes from the first group of workshops about READ project	SustChem Engineering	30/05/2014	Delay occurred. Patras workshop was organized on 25/11/2014. Report was delivered on 02/12/2014.	Inception report (30/06/2014)
Minutes from the second group of workshops about CLP adaptation and READ Platform use	SustChem Engineering	30/01/2016	Delay occurred. Ioannina workshop was organized on 28/03/2016. Report was delivered on 31/03/2016.	Attached

Table 24: Deliverables, Action D2

D3. After-LIFE Communication Plan

Timing of action:

start date – 02/11/2015; end date – 31/12/2015

Main activities:

- ✓ HACI & HCA communicate with potential stakeholders, in order to upload their SDSs on READ Platform. Another ‘’After LIFE’’ objective is to extend READ database by including other chemical products, such as agrochemicals, water treatment chemicals, petrochemicals, polymers etc. Effort will be enhanced through dissemination actions mainly among their members (website announcements, press releases, workshops, etc).
- ✓ Data entry for new chemical products
- ✓ WIC generation and translation to English, Albanian, Bulgarian, Serbian for new products entering READ Platform
- ✓ Communication with professional users / consumers (exhibitions, syndicates, associations, etc)

Indicators of Progress:

Indicator is the annual number of new data entries (SDSs). Target has been set to 50 - 150 new entry products every year.

It shall be highlighted that since the end date of READ project (31/03/2016) up to now, more than 300 new data entries have been handled (WIC production & translation to English, Bulgarian, Albanian, Serbian).

READ team demonstrated significant efficiency within three (3) months.

Table 25: List of dissemination deliverables

READ website	http://www.life-read.gr
Social media (Facebook, Twitter)	**Facebook account:** https://www.facebook.com/READEUproject/ **Twitter account:** https://twitter.com/liferead_eu
Newsletters	**Newsletter 1** http://www.life-read.gr/images/newsletters/issue1.pdf **Newsletter 2** http://www.life-read.gr/newsletter/October_2014/index.html **Newsletter 3 (1)** http://www.life-read.gr/newsletter/2015/resp-email.html **Newsletter 3 (2)** http://www.life-read.gr/newsletter/2016/march-2016.html
Video streaming (Kick off meeting, 18.12.2013)	- LIFE+ : 1st Kick off meeting READ, Athens (Part 1) - LIFE+ : 1st Kick off meeting READ, Athens (Part 2) - LIFE+ : 1st Kick off meeting READ, Athens (Part 3) - LIFE+ : 1st Kick off meeting READ, Athens (Part 4)
Press releases	Press releases relevant to READ have been published to project's website: http://www.life-read.gr/en/2014-10-21-13-34-04/media
Webinar streaming (02/12/2014)	http://www.life-read.gr/gr/outcomes/dissemination-deliverables/15-news-and-events/webinars

5.3 Evaluation of project implementation

5.3.1 Methodology applied: Success & Failures

It shall be mentioned that READ project reached its milestones, but the milestones were not all reached within the planned time schedule, as mentioned above in detail.

A good practice that READ project demonstrated was the extension of READ database to all chemical categories (not only professional detergents and chemicals for construction as in the initial Grant Agreement), in order to raise awareness to more professional users and also consumers. In such way, the impact of READ project is more significant, in terms of human health and environmental protection. Also, it was decided that WICs should be translated in the English language, so that the possibilities of funding after – LIFE would increase.

Regarding that the main deliverable was a prototype, technical issues occurred were unknown to all involved parties (READ team, IT contractor) and could not be handled within the timeframe. Nevertheless, apart from delays, READ project generated an innovative tool that can be used in most countries of EU, as it is. Also, READ Carbon footprint calculator is the only free tool measuring the carbon emissions of chemicals. Peculiarities of these measurements forced READ team to deliver two modules, one for water-based paints and the other for raw materials.

Non establishment of ‘’Hellenic Registry for Certified Technicians’’ made READ dissemination to professional users / technicians difficult. This explains why the participation to workshops (2nd group) was quite low. As a result, READ SC decided to participate to massive exhibitions and finally reached the targets have been set in Grant Agreement.

For all above reasons, it was crucial for the sustainability of project to request an Amendment to Grant Agreement, as substantial changes occurred:

- **Project prolongation from 01/10/2015 to 01/04/2016**
- Cost allocation
- Extension of READ database to further chemical categories, other than construction chemicals and professional cleaning agents.
- Additional human resources

A prolongation of six (6) months was crucial, due to the following reasons:

- Majority of data entries (SDSs) had errors in both structure and content. As a result, SDSs standardization and corrections had to be made before their entry on READ platform and this explains why slight delays to project implementation occurred.
- Lack of experience in chemical legislation from the side of SMEs led to delays, as beneficiaries needed additional working hours to train SMEs (meetings or teleconferences).
- Due to confidentiality reasons, a significant percentage of stakeholders would not provide their SDSs to the platform.

- Additional working hours for quality control (human resources with expertise in Regulatory Affairs), although READ platform operates automatically.
- Technical difficulties during the development of the platform (details in ‘’Request for an Amendment to Grant Agreement’’)
- ‘’Registry of Certified Technicians’’ was not established in 2012 by the Ministry of Infrastructure, Transport and Networks.
- Data entry has been implemented mainly by READ Beneficiaries (and not participating companies), although READ platform is user friendly (eg. massive uploading)
- Additional human resources to encounter the increased needs in Data Entry (Action B2)
- Significant delays from Greek companies to implement CLP Regulation (mandatory since 1/6/2015 for mixtures).

After EC approval of our ‘’Request for an Amendment to Grant Agreement’’, no specific issues occurred.

5.3.2 Lessons learnt

- EU Chemical legislation (REACH, CLP, SDSs) aims to protect human health and environment, but it is complicated and stringent. One of READ findings is that Safety Data Sheets, important documents for chemicals, do not reach the end users (professional users) due to peculiarities (long supply chain, extended SDSs, etc) we already mentioned.
- According to CLP Regulation, it is mandatory to provide Greek SDSs and labels for products disposed to the Greek Market. Immigrant professional users and consumers, who do not speak the Greek language, are not protected properly.
- Due to peculiarities of the Greek market, READ encountered several issues. For example, no registry of certified technicians has been established and it has been extremely difficult to approach professional users. Also, there are many DIY who have access to products intended exclusively to professional users and this may lead to significant risks for human health and environment. It seems important for the Greek market to establish a more fixed structure.
- Human resources are in need, even when the developed prototype operates automatically. In READ case, as it has already mentioned, quality control of both SDSs and WICs was mandatory by Regulatory Affairs experts.
- It is crucial that National Competent Authorities cooperate with chemical companies, in order to raise awareness among professional users and consumers regarding safe handling of chemicals.
- Multinational companies (such as ECOLAB & UNILEVER) participated with eager to READ project. It has been stated that most of them would pay to have WICs generation services. This was one of the most important lessons learnt, as READ team would like to promote prototype to other industrial sectors and other EU countries (eg. Belgium, Germany, UK).

5.3.3 Results achieved against the objectives

Table 26: Results achieved against the objectives

Task	Foreseen in the revised proposal	Achieved	Evaluation
A1 Project Management and Communication with potential stakeholders	-Steering Committee establishment -Preparation of Action Plan, READ General Description, MoU	Achieved	Completed as expected.
A2 Data Preparation	-Assessment for existing conditions -Guidance for legally compliant and standardized data	Achieved	Completed as expected.
B1 READ Database and Platform creation	- Database delivery -Delivery of READ platform + utilities (Parsing tool, WICs Reproduction tool, WICs translator, Carbon footprint calculator Application wic.gr (android, ios)	Achieved **Additional output:** Search engine (www.wic.gr)	Substantial changes ‘’Amendment to Grant Agreement’’
B2 Data Entry	10.000 Data entries	Achieved 10.389 Data Entries > 10.000	Substantial changes ‘’Amendment to Grant Agreement’’
B3 Data Management and WICs Reproduction	- WIC template - 10.000 Greek WICs -Translation to Albanian, Serbian, Bulgarian	Achieved 10.389 Greek WICs > 10.000 **Additional deliverable:** WICs translated in English	Substantial changes ‘’Amendment to Grant Agreement’’
B4 GHS/CLP adaptation	- Updated READ platform (CLP Reg.) - CLP guidance - Brochure about the use of READ Platform from professional users (Greek, Bulgarian, Albanian, Serbian)	Delivered **Additional deliverable:** Brochure about the use of READ platform from professional users **(English)**	Completed as expected with additional deliverables.
C1 Monitoring Actions	SC is expected to keep the project on course. **Deliverables** ‘’REDMine’’ tool, First Impact Assessment, Second Impact Assessment, READ Carbon footprint – LCA – Carbon Neutrality, Socioeconomic Analysis – Final Impact Assessment, Climate Change Questionnaire, Accidents Questionnaire (Safety & Hygiene)	SC had 57 meetings. Delivered.	Completed as expected.
D1 Communication and dissemination material	READ General Description (Greek), READ folders (A4), READ pens, READ notepads (A4), READ flyer, Application forms, Guidance for compliant & standardized SDSs, CLP adaptation document, Brochure for READ platform (Greek, Serbian, Albanian, Bulgarian), Layman’s report, Posters (events, CLP, etc), Notice Boards, Banners, Newsletters, Web conferencing application for READ webinars, READ website, Social media (Facebook, Twitter), Layman’s report, After – LIFE Communication Plan	Delivered. **Additional deliverables:** CLP poster, WIC poster, READ General Description (English), Brochure for READ platform (English), Additional site (www.wic.gr), CLP Regulation (book)	Completed as expected with additional deliverables.

D2 Workshops and seminars	**- Workshops for stakeholders** **-Workshops for professional users / consumers** **- Deliverables** *Minutes from the seminars about SDSs* *Minutes from the first group of workshops about READ project* *Minutes from the second group of workshops about CLP adaptation and READ Platform use*	Workshops organized with low participation. In order to encounter this issue, READ participated to (5) exhibitions with success. Target reached.	Substantial changes ''Amendment to Grant Agreement''
D3 After-LIFE Communication plan	- Delivery of After Life Communication plan - 50 – 150 new entries / year	- Delivered. **-Best practice: Since 1/4/2016 till now, READ team managed 300 data entries.**	Completed as expected with additional deliverables.
E1 Project Management by SUSTCHEM Engineering	An efficient implementation of the project activities, the accomplishment of objectives, results delivered and budget / finances kept within the framework.	- Request for amendment to Grant Agreement - After EC approval of amendment to Grant Agreement, budget and milestones / deliverables kept according to schedule.	Substantial changes ''Amendment to Grant Agreement''

5.4 Analysis of long-term benefits

5.4.1 Environmental benefits:

READ project aims to educate professional users on the safe usage of chemicals and on environmentally friendly disposal ways.

Both SDSs and WICs provide information related to the *protection* of the *environment.* Sections 12 & 13 of the SDSs and Part 6 of WICs inform users about the ecological properties of chemical products and ways to dispose or recover them, in order to assure environmental protection.

READ project prioritizes ECO-labeled products, due to their low environmental impact. According to EU ECO-label policy the use of hazardous substances and substances that may be harmful to the aquatic environment should be minimized. Substances contained in eco-products are highly biodegradable as well, so their impact to the aquatic environment is not as severe as the one of conventional chemical products. Their packaging is eco-friendly, biodegradable and disposable, non -toxic, non-wax coated and made from recyclable material.

Another contribution of READ to the protection of the environment is the feedback provided to users of READ Web Portal regarding the carbon emissions of water soluble paints and raw materials they use and their carbon footprint, estimated according to PAS 2050:2011.

The project aims at covering different aspects on the safe and responsible use of chemicals throughout their full life cycle. Specifically, except the chemical risk handling and environmental risks associated, the project will address and contribute to solve the following environmental problems:

Waste disposal: WICs provide sufficient information on waste disposal of construction materials and industrial cleaning products, which comes from SDS Section 13. After reading a WIC, professional users are aware on how they should dispose the packages and the residues of the products they had used.

Last but not least, READ project promotes eco labeled and carbon neutral products, whose packages are biodegradable, disposable, non-toxic, non-wax coated and made from recyclable material.

CO2 emissions: First of all, READ platform uses a Carbon Footprint Calculator, a tool that measures CO2 emissions for each product. As a result, professional users will get feedback about the product's environmental impact. READ project aims to reduce CO2 emissions from chemicals' usage and handling by promoting through its database and LIFE+ website carbon neutral products and products with low carbon emissions.

Dangerous use substances in chemicals: One of the long-term aims of READ project is to reduce the use of hazardous chemical products. Even if a professional user is not sensitive on environmental topics, it is quite sure that he would choose a product with less severe hazards, in order to protect their health if not the environment. As a result, more and more companies will be pushed to develop non-hazardous or formulas of milder hazards.

5.4.2 Long terms benefits and sustainability:

a. According and as stated in earlier presentations the program succeed in recycling 1.000 chemical packages through 10.000 total entries. In the years to follow we expect an amount of at least 150 new entries per year. Take that into account, we expect at least 15 of them (15 products) to be recycled. This is a minimum target and we expect a rising in the percentage as all stakeholders will become more concerned on environmental protecting issues and we expect to achieve this by organizing new actions and seminars for professional users.

The ''LIFE – READ'' program is expecting to led to a decrease in professional chemical accidents. We already have eliminated them by 10% and we expect the number to rise through the updated of the platform and from the fact that more professional users will inform on its existence and start using it.

The environmental protection along with health and safety matters will have essential impact and on financial issues as sources that went to these will be saved and used in other important aspects. Moreover a decrease in professional accidents will led to a decrease in total costs of the companies.

As already mentioned, READ project aims to increase social awareness, offset social and economic isolation, increase the viability of the local community, help SMEs deal with the obligations of EU legislation without any cost and protect professional users, including immigrants, and the environment (re-using of chemical waste products, recycling or appropriate disposal of packages).

It is envisaged that the plan will be used in the following way:

- to highlight some significant economic and social challenges
- to bring people together

- to plan aims to bring partners together and ensure a bigger impact and more sustainable outcomes
-to generate involvement - much of this document sets a framework for involving professional users, especially immigrants, and giving them more of a stake in their local community.
b. In order to develop Europe's environmental policy, the general EU objective of achieving a "high level of protection and improvement of the quality of the environment" has been defined.
As of 01.06.2015 mixtures will be classified according to CLP Regulation 1272/2008. This will directly affect the content of the SDSs and especially the part with the Classification and Labeling of the products. As a result WICs should be updated in part 2 (Hazards Identification).
The Associated Beneficiaries will organize the second group of workshops concerning CLP adaptation in order to inform companies about the responsibilities arising from the implementation of the CLP 1272/2008 and professional users about the use of the Platform and the new CLP criteria (new hazard pictograms, hazardous and precautionary statements etc). Workshops will take place from February 2015 to July 2015 in the capitals of the 13 Regions of Greece READ Platform and its utilities will be represented during workshops while information material for CLP (1,000 copies) and READ Platform use from professional users (almost 5,000 copies) will be shared to the participants (companies and professional users). The material for CLP demands and the material for READ Platform use will be prepared from the Coordinator during February 2015.
From February 2015 and under the supervision of the Coordinator Beneficiary, participating companies will update their SDSs according to CLP demands. As a result related WICs will be also updated from Coordinator Beneficiary. Indicators have been developed, which allow a measurement of success and failure, and specific targets with deadlines set in EU legislation, to provide Europe's citizens with clear and enforceable rights to a clean environment.
The added value of READ project is the development of a public platform, where the SDSs and WICs of hazardous chemical products used in constructions and detergent agents for professional use which are being placed in Greek market.
Project actions expected to contribute to the achievement of European environmental objectives are the following:
- Recycling or appropriate disposal of more than 1,000 packages the first year after the implementation of READ project.
- Promotion of eco-labeled chemical products, in order to increase environmental sustainability by manufacturing products of good quality with reduced environmental impact.
- Promotion of low-carbon footprint chemical products and reduction of GHG emissions. This tool will be used to measure the CO2 emissions produced per product.
Professional users will be informed about the product environmental impact. At the same time participating companies will benefit from having an effective solution to achieve sustainability and to effectively differentiate their products. The tool will be designed based on GHG Protocol Standard and ISO 14064 and will be structured using an inventory of GHG emissions for several industrial processes.
- Enhancement of companies' Social Responsibility and EU environmental policy and legislation. Especially directive 2000/60/EC aims to identify priority hazardous substances,

achieve their elimination and contribute to achieving concentrations in the marine environment near background values for naturally occurring substances. According to the same Directive, Member States should adopt measures to eliminate pollution of surface water by the priority substances and progressively to reduce pollution by other substances which would otherwise prevent Member States from achieving the objectives for the bodies of surface water. For the priority substances, the Commission shall submit proposals of controls for the progressive reduction of discharges, emissions and losses of the substances concerned. READ project share the same aims with Water Framework Directive, as it contributes to the progressive reduction of emissions of hazardous substances to water. It has been already mentioned that WICs provide sufficient information on waste disposal of chemicals and promote non-hazardous formulas with recyclable and easily biodegradable packages. As a result, chemicals' residues and packages after their usage, even if they are not handled and disposed appropriately, regarding that most of them will contain mild or non-hazardous substances (non-Persistent, non-Bio accumulative, non-Toxic) will not cause a serious damage to the marine environment.

- Communication and publication of potential risks for the workers, health & safety and for the environment arising from the use of chemical products.

c. The platform will have a positive effect in many social aspects. In Greece a large number of chemical users are immigrants (especially from Eastern Europe), which have a little if none professional experience in terms of handling, using and environ mental concerning. The platform will allow them to gain more professional experience as it is focused on the most important matters and it's already available in five different languages. In addition, all users will gain specific experience dealing with chemicals at a reasonable cost. he specific knowledge on using chemicals substances will help companies in order to build and / or creates new technologies (e.g. more effective supply chains), which can lead to a drastic boot in a country's financial profile. As for the environment, a more proper and sufficient use will help in decreasing chemical pollution, while increase interest in terms of recycling.

d. After the end of the project the READ Platform will be handled by HACI and HCA. The costs for the hosting of the database, the update of its contents and WICs reproduction will be charged to their annual budgets, as the above mentioned beneficiaries are willing to handle and invest the total budget of it. . The actions which will be carried out or continued after the end of the project will be:

The associations will continue the communication with potential participating companies in order to participate by providing their SDSs in READ Platform. Also, the target for after-LIFE period is to extend database with other chemical products such as agrochemicals, water treatment chemicals, petrochemicals, polymers etc. This will be implemented by reinforcement and dissemination actions through their members and non-members (website announcements, press releases, workshops etc).

Hellenic Association of Chemical Industries (HACI) and Hellenic Coatings

Association (HCA) are going to disseminate the results, the impact assessments and lessons of READ project to:

- Companies - Members of HACI and HCA.
- Technical journals to raise the awareness of professional users
- Hellenic Association of Chemical Engineers Association of Greek Chemists.

- General Confederation of Greek Workers (GSEE)
- Hellenic Association of Expanded Polystyrene (HEPSA)
- Hellenic Association of Industrial and Medical Gases
- Synergies of professional users (painters, building contractors).

5.4.3 Replicability, demonstration, transferability cooperation:

Platform was created through this life program will continue to maintain in order to be keep it's fully update status. With slight differences (according to every individual's preferences), the main target is to transcend it into a full data – based program which will become a useful tool not only to our company but also to others (companies or individuals), as they will be able to trace useful information in very short time.

On one hand, those companies will be interested in having a sufficient and easy database where they can include all their products. On the other hand the platform can be a very helping hand to foreign chemical association. A spreading in countries of EU (and maybe outside of it) can be the foundation step of creating a ''chemical web'', were advice will be given not only in terms of using and protection but in terms of transportation, safe – keeping to stakeholders, drivers etc.

As the data base is already in state of expanding and updated, it's expected that more partners will be concerned on its usage. A next step will be a kind of seminars in order to inform outsiders beneficiaries – to – be that may found it useful.

Another important aspect will be the limitation of obstacles in transportation and marketing as all products will share more or less the same piece of information.

''LIFE READ'' is already associated with two other LIFE programs ''PROTEAS'' and ''3X ENVIRONMENT'', which play a great role in updating our data info.

Along with these the personnel of program has started to inform companies and sector associations from other countries. Travels to European Countries such as Bulgarian, Slovenian and Belgium have been organized and carried out in order to signify the importance of platform as it can be used by foreign companies as well. This plan has led to results with ''AGRIA S.A.'' (Bulgarian's largest agrochemical company) being added to the list of participating companies. In addition it is expected that more chemical categories (agrochemicals, petrochemicals etc) will be added to the ones existing.

As for the commercial part of the project it is expected to take place in 5 years from now. Throughout this period the chemical sector will be benefitted from the reducing of chemical danger. Along with help other chemical associations across Europe we will try to make European authorities concern on purpose, results and benefits of the program, while the all idea of it to be the leader in chemical protection policy.

5.4.4 Best practice lessons:

The program led to invest a wide range of best practices, emphasizing mostly in terms of environment. The most important where as follows:

a. Neutralizing of carbon offset. ''Sustchem Engineering Ltd'' (greatest partner of the project) succeed in neutralizing the production of CO2 (as this was calculated by the ''Carbon

Footprint Ltd'' specialized to such matters) by planting a number of trees (23) in ''Great Rift Valley'' (Republic of Kenya).

b. The application was mostly paperless. This was of much importance when taken to account that original SDS can exceed even to 100+ pages. On the other hand, the created WICs are strictly 1 - page long (in rare cases 2), which lead to a great savings in paper supplies.

c. Multi language WICs. When creating the program, it was taken to account that a great number of users / stakeholders are immigrants especially from Balkan Countries. For this reason, the whole platform (including WICs), were translated to English, Albanian, Serbian and Bulgarian in order to be multi accessible.

d. The application ''wic.gr''. It was a procedure which took place alongside the whole project but without external funding. The whole idea behind it, was making the platform available and accessible not only via pc, but also through tablets and smart phones making the content of platform practically available everywhere.

e. The using of recycled paper in all leaflets, guidances, the flexible booklet. along with part of the hardware material make the whole project more environmental – friendly.

5.4.5 Innovation and demonstrative value:

Previous experience and research shows that only a small percent of professional users worldwide have access to derive that information or the basic knowledge for understanding. This is one of the key parameters that shape the large number of occupational accidents occurring in Greece. Although European legislation requires from industries producing / formulation chemicals to inform professional users about the risks inherent from the use of chemicals products, through Safety Data Sheets and exposure scenarios, the daily practice demonstrates the problematic practice that exists:

- Many companies (mainly SMEs) do not have the knowledge or the ability to fully comply with the legislation requirements.
- Most companies do not communicate adequately the necessary information (Safety Data Sheets) and this leads to inadequate information of the supply chain.

It should also be noted that during the tests been conducted by the EU National Competent Authorities for chemicals legislation within the REACH-EN-FORCE1 project of ECHA, proved that:

-Most of professional users (55,4 %) are male, almost three out four between 18-30 years old, while almost everyone has an education level of high school at least.
- Only 23% of enterprises have SDSs for all their products
- Only 25% of SDSs complied with the provisions of REACH regulation
- Only 9.7% of companies have the ability to create SDSs for their products
- 83.9% of companies found with serious infringements on SDSs contents based on REACH Regulation provisions.

This complex situation is trying to be solved by READ project through the development of an innovative method of communication, collaboration and publication which include:

- Innovative methods of dissemination and trainings which allows distance learning and participation.

- Innovative method for project monitoring and management thought a web administrative tool (REDMine) designed only for the specific purposes of the project.
- Actively promotion of green products, products and services with low or zero carbon footprints.

5.4.6 Long term indicators of the project success:

After the end of the project the READ Platform will be handled by HACI and HCA. The costs for the hosting of the database, the update of its contents and WICs reproduction will be charged to their annual budgets which are estimated for a five year period as follows:

- Personnel cost: 7.500,00 €
- Travels : 1.500,00 €
- External Assistance: 2.500,00 €
- Miscellaneous costs: 1.500,00 €.

Indicators are as follows:
- Up to this day more than 10.500 SDS have already been imported and almost all of them have been transcended to WIC'S. The uploading of the platform is continuous and moreover the project team has already focused on specific varieties of products that should be uploaded (e.g. ''Eco products'', ''Agrochemicals'', ''Petrochemicals'', ''Water treatment chemicals'' etc). All WIC's are translated in four different languages (English, Albanian, Serbian and Bulgarian) while more languages can be added if necessary.
- Communication with professional users Associations for further dissemination of READ project and the yearly monitoring of READ impact to the target audience.

Professional users will be able to access READ Platform from the website www.life-read.gr (as required in the LIFE+ Common Provisions), where they will be able to search and view products information (SDSs, WICs etc)

6.1 Summary of Costs Incurred

6.1.1 Overview of the cost incurred:

The total real cost of the project as defined in the consolidated financial statement is € 394.382 while the total cost of the project had been calculated as € 391.081 (increased only by +0.84 %) and the total eligible cost (with non - recoverable VAT) was € 387.083 according to the Grant Agreement. The EU contribution (received & expected) counts up to € 193.541. The contribution of the Coordinating Beneficiary is € 150.450 and the contribution from the Associated Beneficiaries is € 50.390.

The actions of the project and the related financial and technical parts have fully completed without major discrepancies in the costs per action, although there is a small discrepancy of -9.52 % in the total traveling cost category which is according to the Article 15.2 of the Common Provisions. It should be stated that the initial Grant Agreement has been modified once on 9/9/2015 (EC final acceptance) due to the following changes:

- Changes on the nature and content of actions, that would have a significant impact on the project;
- Updated list of deliverables;
- Modification on the project duration;
- Modification on the financial structure and the budget, with an increase by more than 10% and 30.000 € of the foreseen costs in one or more categories of expenditure.

Last but not least the CB as private company recovers the VAT while the ABs not.

6.1.2 Information about the accounting system:

The Coordinating Beneficiary has an analytical accounting system and each cost related to the project is specified under specific accounts, while the Associated Beneficiaries have revenue and expenditure accounts. Each invoice related to the project has either a clear reference of the project (LIFE READ, LIFE12 ENV/GR/001135) or a stump created for this purpose. According to the Partnership Agreement signed between the ABs and the CB the ABs were providing to the CB copies of all the expenditures related to the project (invoices, pay slips, proof of payments, signed timesheets) once per month.

The method for the depreciation of the durable goods / equipment follows the national tax regulations for depreciation:

- Machinery, Equipment (excluding computers & software): 10%
- Equipment (computers & software): 20%

When the purchased price is less or equal of 1,500.00 € then the whole amount can be depreciated in the year that is used.

6.1.3 Allocation of the costs per action:

The allocation of the costs per action (project actions: A1, A2, B1, B2, B3, B4, C1, D1, D2, E1) follows the same approach as the Grant Agreement. The costs per action are given on the table below. As a result, there are no major discrepancies between this table and the summary

of costs per action set out in the updated Grant Agreement since the real costs per action have not changed more than 3.2 % from the costs per action defined in the final Grant Agreement.

The following table shows the incurred project costs and the budget according to the modified Grant Agreement. There are no major discrepancies between the cost categories. The only small discrepancy (-9.52%) refers to traveling cost which follows the rule of €30.000 and 10% (cf. Article 15.2 of the Common Provisions). This discrepancy in the traveling cost of the project, is due to the fact that beneficiaries were using the same mean of transport (for example the same car) to share - reduce the total traveling costs (tools, fuels, etc) and the carbon footprint of the project (one of the objectives for the project was to be defined as a low carbon or zero emissions project).

PROJECT COSTS INCURRED				
Cost category		**Budget according to the grant agreement**	**Costs incurred within the project duration**	**%**
1.	Personnel	251.011	253.404	+0,95%
2.	Travel	12.832	11.610	-9,52%
3.	External assistance	71.668	73.201	+2,14%
4.	Durables: total non-depreciated cost	-	-	-
	- Infrastructure sub-tot.	7.996	7.996	0,00%
	- Equipment sub-tot.	18.900	18.900	0,00%
	- Prototypes sub-tot.	-	-	-
5.	Consumables	-	-	-
6.	Other costs	3.353	3.470	+3,49%
7.	Overheads	25.321	25.801	+1,90%
	TOTAL	**391.081**	**394.382**	**+0,84%**

6.2 Accounting system

As already stated, the CB use an analytical accounting system and each cost related to the project is specified under specific accounts (created for the monitoring of the project) while the Associated Beneficiaries have revenue and expenditure accounts with a clear reference of READ project.

The CB uses the following accounting codes to identify the project costs:

Cost category	Codes	Details
Personnel	60.00.00.0000	Regular Salaries
	60.00.03.0000	Christmas and Easter bonus
	60.00.07.0000	Regular vacation allowance
	61.00.98.0023	Third Parties Fees LIFE READ 23%
	61.01.01.0001	Fees and expenses of profess. not subject to income tax withholding LIFE READ 0%
	60.03.00.0000	Contribution to social security
Travel	64.00.05.0000	Travelling Expenses Tolls LIFE READ
	64.00.05.0013	Travelling Expenses LIFE READ 13%
	64.00.05.0016	Travelling Expenses LIFE READ 16%
	64.00.05.0023	Travelling Expenses LIFE READ 23%
	64.01.03.0000	Travelling Expenses Tickets LIFE READ
	64.01.03.0001	Travelling Expenses Hotels LIFE READ
	64.01.03.0002	Travelling Expenses Food LIFE READ
	64.01.03.0003	Other Travelling Expenses LIFE READ
External assistance	61.00.07.0023	Accountants fees and expenses LIFE READ 23%
	61.00.98.0024	Third Parties Fees LIFE READ 23%
	61.01.01.0001	Fees and expenses of profess not subject to income tax withholding LIFE READ 0%
	64.98.05.0014	Expenses LIFE VAT13%
	64.98.05.0024	Expenses LIFE VAT23%
	64.98.05.0025	Expenses LIFE READ 0%
	64.98.06.0001	Printings LIFE READ 23%
	64.98.06.0023	Expenses LIFE READ 23%

Durables: total non-depreciated cost		
- *Equipment sub-tot.*	14.03.01.0012	Dell Precicio T1700E31241 LIFE READ
	14.03.01.0013	Dell Optiplex 3020MT SM010D3020MT11HSWG LIFE READ
	14.09.01.0002	PC Equipment 23% LIFE READ
	16.17.01.0031	Set Windows 8.1Pro64bit LIFE READ
	16.17.01.0032	Ecoinvent LIFE READ
- *Prototypes sub-tot.*	16.17.01.0029	READMINE LIFE READ
	16.17.01.0030	READ Platform LIFE READ
Other costs	64.98.05.0025	Expenses LIFE READ 0%

The ABs do not use special codes but in their revenue and expenditure accounts there is a separate column for all the project costs.

Each invoice related to the project has either a clear reference of the project: “LIFE READ”, or “LIFE12 ENV/GR/001135” under the cooperation with the suppliers or a stump created for this purpose in case the supplier couldn’t add any reference on the invoice. According to the Partnership Agreement signed between the ABs and the CB the ABs were providing to the CB copies of all the expenditures related to the project (invoices, pay slips, proof of payments, signed timesheets) once per month. Once per week the Financial Manager was checking and characterizing (cost category and action category) all the invoices and the proof of payments (of the CB and the ABs) incurred by the project implementation if they were in compliance with the Grant Agreement, the Common Provision rules and the internal rules for traveling and subsistence cost. Once per month an external accountant (under the supervision the Project Manager and the Financial Manager) was registering the invoices and the payments (with the clear project reference on them) in the accounting system of the CB (ERP/CRM: SOFT1). The same procedure has been made by another external accountant for the ABs invoices and payments related to the project.
Timesheets were filled (manually in excel files) in monthly base by each employee, approved and characterized (according to the defined actions of the project) by the Project Manager in cooperation with the Financial Manager, printed, signed and archived in paper and in excel file using REDmine (project management tool created for the project). The Financial Manager had also the daily supervision for all the payments and pay slips related to the project for the CB and also guided the ABs for all the payments related to the project.
During the project meetings of the Steering Committee the financials were at the top of the discussions list.

6.3 Partnership arrangements (if relevant)

The only financial transactions between the CB and the ABs was for the first instalment of the grant at the begging of the project. These transactions are followed by separate invoices (one invoice per transaction and beneficiary) according to the Partnership Agreement. The financial reporting has been made by the ABs' employees involved in the project and their external accountant of course under the supervision of the Financial Manager and the Project Manager.

6.4 Auditor's report/declaration

Based on the project budget it was not obligated to use an external independent auditor according to the Common Provisions, although the CB and the ABs used their own external accountants to monitor the project (external accountant eligible cost for the CB under the external assistance but not for the ABs which financed this cost independently).

6.5 Summary of costs per action

The following table presents the allocation of the costs incurred per project action.

There are no major discrepancies between this table and the summary of costs per action set out in the Grant Agreement since the inquired costs per action of the project have not changed more than 3.5 % from the costs per action defined in the Grant Agreement.

Action no.	Short name of action	1. Personnel	2. Travel &subsistence	3. External assistance	4.a Infra-structure	4.b Equip-ment	4.c Proto-type	5. Purchase or lease of land	6. Consum-ables	7. Other costs	TOTAL
A1	**Project Management and Communication with potential stakeholders**	10.420		515							**10.935**
A2	**Data Preparation**	8.250		1.140							**9.390**
B1	**READ Database and Platform creation**	4.690		21.812			18.500				**45.002**
B2	**Data Entry**	38.438									**38.438**
B3	**Data Management and WICs Reproduction**	70.395		10.516		3.621					**84.532**
B4	**GHS/CLP adaptation**	13.695									**13.695**
C1	**Monitoring Actions**	45.014	490			4.375	400			2.353	**52.632**
D1	**Communication and dissemination material**	12.483		17.149							**29.632**
D2	**Workshops and seminars**	9.711	9.682	12.619						1.117	**33.129**
E1	**Project Management by SUSTCHEM Engineering**	40.308	1.438	9.450							**51.196**
Over-heads											**25.801**
	TOTAL	**253.404**	**11.610**	**73.201**	**0**	**7.996**	**18.900**	**0**	**0**	**3.470**	**394.382**

7. Annexes

7.1 Administrative annexes

Partnership Agreement has been signed in two (2) copies by three (3) beneficiaries, as Representative of both HACI and HCA is the General Director (Mr. Panagiotis Scarlatos). It has been submitted to the Commission and the Monitoring team with Inception Report (30/06/2014, Annex I).

- **Annex I: Partnership Agreements**

7.2 Technical annexes

- **Annex II: List of keywords and abbreviations used**

- **Annex III: Technical deliverables <u>not submitted to Commission</u>**
    - Second Impact Assessment
    - Minutes from the second group of workshops about CLP adaptation and READ Platform use
    - Final Impact Assessment – Socioeconomic Analysis
    - Brochure about the use of READ Platform from professional users
        - Greek
        - Bulgarian
        - English
        - Serbian
        - Albanian

- **Annex IV: Technical deliverables already submitted in hardcopy to Commission (available only in the electronic version of Final Report)**
    - Action Plan (Annex I, Reply to EC Correspondence of 30/09/2014, Ref. Ares(2014)3206068 - 30/09/2014)
    - General Description of READ (Greek, English) (Annex N01, Inception Report, 30/06/2014)
    - Application Form (Greek, English) (Annex N01, Inception Report, 30/06/2014)
    - Memorandum of Understanding (Annex N01, Inception Report, 30/06/2014)
    - Guidance for legally compliant and standardized data (Annex N02, Inception Report, 30/06/2014)
    - Minutes from the seminar about SDSs (Annex 04, Progress Report, 25/11/2015)
    - First Impact Assessment (Annex 02, Progress Report, 25/11/2015)

- **Annex V: LIFE+ READ Carbon Neutrality**
    - Contract with Carbon Footprint LTD
    - Carbon Footprint LTD Verification document
    - Carbon neutrality certificate

7.3 Dissemination annexes

7.3.1 Layman's Report

7.3.2 After LIFE- Communication Plan

- **Annex VI:**
  - **Layman's report**
  - **After-LIFE Communication plan**

7.3.3 Other dissemination annexes

USB:

- **Annex VII: Other Dissemination Deliverables**
  - READ flyer
  - READ General Description (Greek & English)
  - Application Forms
  - Brochure for READ platform (Greek, English, Albanian, Bulgarian, Serbian)
  - READ poster (general)
  - READ poster (dedicated to each conference)
  - WIC poster
  - Newsletters
  - READ folder
  - READ notepad
  - READ pen
  - CLP Regulation (book)
  - CLP adaptation document / CLP guidance
  - Guidance for compliant & standardized SDSs
  - Notice boards
  - Banners
  - CLP poster
- **Annex VIII: Workshops & conferences**
  Per workshop:
  - Agenda
  - List of participants
  - Presentations
  - Poster
  - Videos (if available)
  - Photographs
- **Annex IX: Webinar**
  - List of participants
  - Streaming (link)
- **Annex X: Press releases**

7.4 Final table of indicators

- **Annex XI: LIFE+ READ Outcome Indicators**

8. Financial report and annexes

- **Annex XII: Payment Request**
- **Annex XIII: Consolidated Cost Statement**
- **Annex: XIV: Individual Cost Statements**
  - CB: Sustchem Engineering Ltd
  - AB: HACI
  - AB: HCA
- **Annex XV: Financial Reporting Sustchem Engineering Ltd**
  - Individual transactions
  - Tax authority certification
- **Annex XVI: Financial Reporting HACI**
  - Individual transactions
  - Tax authority certification
- **Annex XVII: Financial Reporting HCA**
  - Individual transactions
  - Tax authority certification