

Circular Innovation and Resilient City Labs in the Adrion Region

WORK PACKAGE T3

DELIVERABLE T3.2.1

**Report of the results from the
CIRCLab CAMP**

ANATOLIKI SA PP7

DRAXIS S.A.

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1 Introduction

This section presents the main objective of this study carried out in the context of the CIRCLE project as well as the report's structure.

This study is the **Deliverable 5 “Report of the results from the CIRCLab Camp”** that is included in the Agreement, signed on 15th June 2020, between DRAXIS S.A. and ANATOLIKI S.A Development Agency of Eastern Thessaloniki's Local Authorities.

The **aim of the present Deliverable** is to conduct a report regarding the organisation of the CIRCLab Camp which was held in Thessaloniki in OK!Thess Hall (Komotinis 2, Thessaloniki, <https://okthess.gr/en/>) on 9th and 10th December 2010hall with the main objective to and explain how CIRCLab was created and to encourage other local or regional authorities and institutions to set up their own CIRCLab and then create a wide network.

For the design and realisation of the Camps, the deliverable T3.1.1 was used, which was conducted by the partners PP7 and PP8.

The Deliverable is organized as follows:

Chapter 1 (present chapter) included the *Introduction* to the document.

Chapter 2: *Organisation of the CIRCLab Camp*. In this section all aspects regarding the organisation and results of the CIRCLab Camp are presented.

2 Organisation of the CIRCLab CAMP

2.1 Objective

The main objective of the CIRCLab CAMP was to present the results of the project and further promote the urban labs and the circular approach to waste management. The focal idea of the CIRCLab Camp was to tell and explain how CIRCLab was created and to encourage other local or regional authorities and institutions to set up their own CIRCLab and then create a wide network. Moreover, presenters involved to other Labs were invited in order to share their experience and exchange ideas and good practices.

2.2 Organisation of the CIRCLab CAMP

The CIRCLab CAMP was organised in Thessaloniki in OK!Thess Hall (Komotinis 2, Thessaloniki, <https://okthess.gr/en/>) on **9th and 10th December 2010**. The duration of the program was totally 16 hours and participated the Community Manager of the CIRCLab of Thessaloniki and other members of the Lab, the Community Manager of the CIRCLab of Patra as well as local stakeholders. Totally, in the 2 days CAMP there were 50 participants.

The presenters were from ANATOLIKI S.A, DRAXIS S.A., as external experts collaborating with ANATOLIKI S.A Development Agency of Eastern Thessaloniki's Local Authorities, as well as guests invited by ANATOLIKI SA and DRAXIS S.A. so as to share their expertise in the relative topics of waste management, circular economy and lab development. The presenters are recorded in the table below.

Table 2-1: Presenters' List

Name	Organisation
Christos Karkanias	AANATOLIKI S.A Development Agency of Eastern Thessaloniki's Local Authorities
Vasiliki Papadopoulou	AANATOLIKI S.A Development Agency of Eastern Thessaloniki's Local Authorities
Adigoni Tsilia	Cleaning & Recycling Department Directorate of Environment & Cleaning
Natasa Rizopoulou	ANATOLIKI S.A Development Agency of Eastern Thessaloniki's Local Authorities
Pantelis Pekakis	DRAXIS ENVIRONMENTAL S.A.
Anna Michou	ANAKEM
Ioannis Karagogos	Appliances Recycling S.A.
Evangelos Papadakis	AEIPLOUS
Nikolaos Tsoniotis	Project Manager of the H2020 Pop Machina, Startup Coach of OKThess!
Evangelia Skourtanioti	DRAXIS ENVIRONMENTAL S.A.
Apostolos Malamakis	Institute for Bio-Economy and Agri-Technology (iBO), CERTH

The CIRCLab CAMP was organised in two days and more specifically in the first day the topic was the Urban Waste Management and the Circular Economy Initiatives and was focused on the current waste management of local municipalities and the problems and challenges faced.

The second day the concept was more dedicated to Industrial Symbiosis in the region and different examples and good practices of urban labs were presented as well as case studies of industrial symbiosis between different sectors.

At the end of all presentations there was 1 hour time for discussion and questions and at the end of the day light lunch followed. The detailed Agenda which was sent to the participants is provided below.

Draft Agenda

DAY 1: Διαχείριση Αστικών Αποβλήτων και Δράσεις Κυκλικής Οικονομίας

Ημερομηνία: 9 Δεκεμβρίου 2021

Ώρα: 10.00 – 15.00

Θέμα	Ομιλητής	Ώρα
Υποδοχή και εγγραφές		10.00
Χαιρετισμοί		10.20 – 10.30
Εισαγωγή στο Έργο CIRCLE Κυκλική Καινοτομία και Ανθεκτικές Πόλεις στην περιοχή της Αδριατικής Θάλασσας	Χρήστος Καρκανιάς ΑΝΑΤΟΛΙΚΗ	10.30 – 10.45
ΔΗΜΟΣ ΠΥΛΑΙΑ-ΧΟΡΤΙΑΤΗ – Νέος Σχεδιασμός Διαχείρισης Στερεών Αποβλήτων και Δράσεις Κυκλικής Οικονομίας	Αντιγόνη Τσιλιά Τμήμα Καθαριότητας & Ανακύκλωσης Δ/νση Περιβάλλοντος & Καθαριότητας	10.45 – 11.00
ΔΗΜΟΣ ΘΕΡΜΗΣ – Νέος Σχεδιασμός Διαχείρισης Στερεών Αποβλήτων και Δράσεις Κυκλικής Οικονομίας	Νατάσα Ριζοπούλου ΑΝΑΤΟΛΙΚΗ	11.00 – 11.15
Ερωτήσεις - Συζήτηση		11.15 – 11.45
15 min coffee break		
Σχέδιο Διαχείρισης Κυκλικής Οικονομίας Δ.Αμυνταίου	Παντελής Πεκάκης DRAXIS	12.00 – 12.15
ΔΙΑΧΕΙΡΙΣΗ CDW ΚΑΙ ΚΥΚΛΙΚΗ ΟΙΚΟΝΟΜΙΑ	Άννα Μίχου ΑΝΑΚΕΜ	12.15 – 12.30
ΔΙΑΧΕΙΡΙΣΗ WEEE ΚΑΙ ΚΥΚΛΙΚΗ ΟΙΚΟΝΟΜΙΑ	Ιωάννης Καραγώγος ΑΝΑΚΥΚΛΩΣΗ ΣΥΣΚΕΥΩΝ	12.30 – 12.45
Ανοιχτή Συζήτηση		12.45 – 13.45

Ελαφρύ γεύμα και δικτύωση 14.00-15.00

Draft Agenda

DAY 2: Βιομηχανική Συμβίωση

Ημερομηνία: **10 Δεκεμβρίου 2021**

Ώρα: **10.00 – 15.00**

Θέμα	Ομιλητής	Ώρα
Υποδοχή και εγγραφές		10.00
Εισαγωγή στην ημέρα	ΑΝΑΤΟΛΙΚΗ	10.20 – 10.30
Το CIRCLab της Ανατολικής Θεσσαλονίκης	ΑΝΑΤΟΛΙΚΗ	10.30 – 10.45
Το CIRCLab της Πάτρας	Ευάγγελος Παπαδάκης ΑΕΙΠΛΟΥΣ	10.45 – 11.00
POP MACHINA – ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ	Νικόλαος Τσονιώτης POP MACHINA	11.00 – 11.15
Ερωτήσεις - Συζήτηση		11.15 – 11.45

15 min coffee break

Βιομηχανική Συμβίωση στη Θεσσαλονίκη – Πιλοτική Δράση έργου CIRCLE	Ευαγγελία Σκουρτανιώτη DRAXIS	12.00 – 12.15
	Απόστολος Μαλαμάκης	
Έργο Βιομηχανικής Συμβίωσης	Ινστιτούτο Βιο- Οικονομίας και Αγροτεχνολογίας, ΕΚΕΤΑ	12.15 – 12.30
Ανοιχτή συζήτηση για τη βιομηχανική συμβίωση		12.30 – 13.30

Ελαφρύ γεύμα και δικτύωση 14.00-15.00

3 Results of the CIRCLab Camp

The first day, **9th December 2021**, the topic was the Urban Waste Management and the Circular Economy Initiatives. As an introduction to the day the CIRCLE Project and the CIRCLab of Thessaloniki were presented. Emphasis was given to the regional and local needs on waste management that were identified in the framework of the Project as well as to the actions organised and the outcomes of the actions during the CIRCLab operation until today.

In the next presentations, the current waste management practices and the future planning for the Municipalities of Pylaia-Chortiati and the Municipality of Thermi were described. The presentations were focused on the current waste management of local municipalities and the problems and challenges faced. It was highlighted during the presentations the lack of central treatment facilities and collection system especially for biowaste as well as the lack of updated information both to the municipal employees and the citizens about the new circular economy principles integrated in the management of waste in the municipal level.

Following, there was a presentation about the Circular Economy Action Plan for the Municipality of Amideo. It described the need for a Municipal Circular Economy Action Plan and the methodology to develop it. Additionally, the interconnection with the Waste Management Plans was discussed as well as the wider scope of a Circular Economy Action Plan which integrates various municipal issues (such as the transportation, energy, air pollution etc). As emerged from the discussion, Municipalities were interested in developing Circular Economy Action Plans but simultaneously they were not informed about this possibility and the objectives of the National Circular Economy Action Plan regarding circular planning at local level.

Finally, in the last part there were 2 presentations from ANAKEM, the Producer Responsibility Organisation (PPO) for CDW and from Appliances Recycling S.A., the Producer Responsibility Organisations (PPO) for WEEE. Emphasis laid on the need for further improving the waste management of these types of waste, since they are produced in large amounts and they are expected to increase also in the next years. Specifically, for CDW it was highlighted the need for a legal provision where at least 15% of the materials used in the construction sector should come from recovered aggregates during the conclusion of Green Public Procurement. As mentioned also for the recovered aggregates, the cost of this secondary raw material is in most cases cheaper than the corresponding conventional raw material. Moreover, for both types of waste the lack of information and engagement of the citizens and the professional groups was noted. In many cases the professionals do not comply with their obligation to deliver these waste in the approved Schemes and on the other hand citizens often are not adequately informed about their responsibilities as well as their alternatives regarding waste disposal (e.g. where the special bins are located, how they could recycle or dispose for reuse these waste).

The second day, **10th December 2021**, the main topic was Industrial Symbiosis in the region of Eastern Thessaloniki as well as in other regions of the country. In the first part The CIRCLab of Patra was presented and in particular feasible and innovative ways of recycling and exploiting CDW in the region of Western Greece (e.g. recycling and reuse of wallboards, production of aggregates from recycled concrete). Following, the case of POP MACHINA Project and the makerspaces promoted by the project was presented. Both presenters discussed for their domain the circularity initiatives in their region and the future prospects.

In the second part of the presentations the focus was on specific cases in the field of industrial symbiosis. More specifically, the pilot action for the industrial symbiosis in the Municipality of Thermi was introduced. In the framework of this action, selected companies operating in the wider area of the Municipality of Thermi participated in an industrial symbiosis platform in order to cooperate with each other in waste valorisation aspects. Additionally, a presentation about the case of integration of food by-products into pig nutrition and in particular in the production of animal feed was made.

In the discussion during the second day of the event, it was highlighted that industries may have a serious concern about their waste management, however there may be lack of information regarding the possible solutions that could be applied in order to address their waste management problem. Moreover, in industrial symbiosis, factors such as the quality, quantity and proximity of waste that are intended for exploitation are strongly considered. Industrial symbiosis, in the majority of the cases, is feasible when the availability of waste is ensured and the cost of transportation is reduced. Taking the above into consideration, the exploitation of the Electronic Waste Register platform towards the implementation of Industrial Symbiosis was suggested. Electronic Waste Register is a platform where all waste producers are registered and report the type and the amount of their waste every year. Furthermore, the different alternative/competitive uses of a waste as a secondary raw material seem essential for a successful synergy between industries (e.g. the use of food by products for biogas production or for animal feed production). Finally, the price in which waste shall be provided is fundamental for their exploitation.

After the discussion time in both days, light lunch was provided and the participants could continue networking and discussing further with each other.

3.1 Photographs



Figure 3-1: Presentation of Mrs Rizopoulou (1st day)

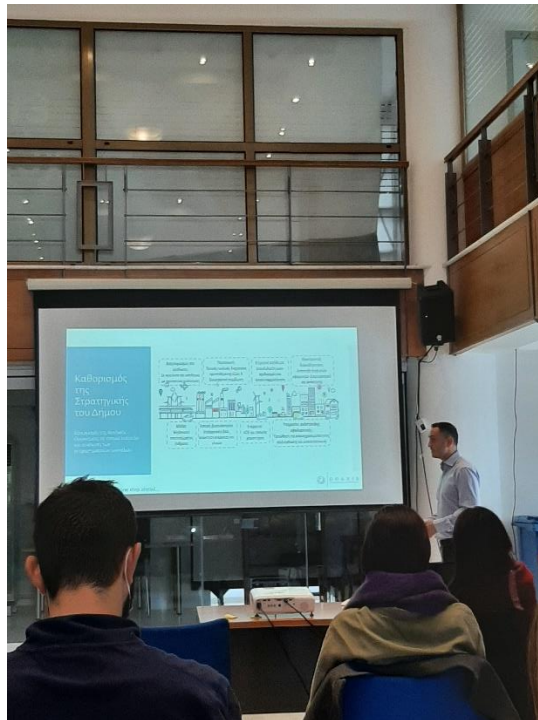


Figure 3-2: Presentation of Mr Pekakis (1st day)



Figure 3-3: Presentation of Mrs Skourtanioti (2nd day)



Figure 3-4: Presentation of Mr Papadakis (2nd day)