



**InvestCEC**

# **Model and tools for urban/regional circular economy projects-Version 1**

Fundación Cartif



Funded by  
the European Union

## Project information

Project name	InvestCEC
Full project name	Supporting the transition towards circular economy in European cities and regions: Development of a replicable model for local circular economy projects
Grant number	101082131
Project coordinator	Dana Chudy, Enspire Science Ltd. <a href="mailto:Dana.chudy@enspire-science.com">Dana.chudy@enspire-science.com</a>
Project duration	01/11/2022 – 31/10/2025

## Document information

Deliverable name and number	D2.1. Model and tools for urban/regional circular economy projects-Version 1		
Due date	30 April 2023		
Actual submission date			
Contributing partners	Investornet Gate2Growth APS; Venionaire Capital GMBH (VENCAP); Statwerke Klagenfurt Aktiengesellschaft (STW-AG); Fundación CARTIF		
Deliverable type			
R	Document, report		X
DEM	Demonstrator, pilot, prototype		
DEC	Websites, patent fillings, videos etc.		
OTHER			
Dissemination level			
PU	Public		X
SEN	Sensitive, limited under the conditions of the Grant Agreement		

Version	Date	Author	Comments
1	28.04.2023	Bárbara Díez, Jorge Calvo (CAR); Nikolaj Sørensen (G2G); Lisa Wimmer (VENCAP)	Version sent to all partners for feedback
2	22.05.2023	Bárbara Díez, Jorge Calvo (CAR); Nikolaj Sørensen, Uffe Bungaard-Jørgensen (G2G), Lisa Wimmer (VENCAP)	Version sent to all partners for feedback
3	24.05.2023	Bárbara Díez, Jorge Calvo (CAR); Nikolaj Sørensen, Uffe Bungaard-Jørgensen (G2G); Lisa Wimmer (VENCAP)	Final version after integrating feedback from partners

## Disclaimer

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

# Table of Contents

<b>1. INTRODUCTION .....</b>	<b>7</b>
<b>1.1. The InvestCEC project .....</b>	<b>7</b>
<b>1.2. Aim of this deliverable.....</b>	<b>7</b>
<b>2. DEVELOPING AND DEMONSTRATING A MODEL FOR CIRCULAR ECONOMY PROJECTS .....</b>	<b>8</b>
<b>3. THE INVESTCEC MODEL .....</b>	<b>9</b>
<b>3.1. Needs definition .....</b>	<b>9</b>
<b>3.2. Selection process.....</b>	<b>9</b>
3.2.1. TEMPLATE FOR CITIES/REGIONS .....	10
3.2.2. TEMPLATE FOR ENTREPRENEURS .....	14
3.2.3. SELECTION CRITERIA.....	18
<b>3.3. Investment readiness .....</b>	<b>19</b>
<b>3.4. Investment program .....</b>	<b>25</b>
3.4.1. GUIDELINES TO DEFINE AN INVESTMENT FOCUS .....	26
3.4.2. TEMPLATE FUND QUESTIONNAIRE.....	28
<b>4. WORKED EXAMPLE: THE CASE OF KLAGENFURT .....</b>	<b>30</b>
<b>4.1. Needs and objectives of the city of Klagenfurt .....</b>	<b>30</b>
<b>4.2. Selection process.....</b>	<b>33</b>
4.2.1. TEMPLATE FOR CITIES/REGIONS .....	33
4.2.2. TEMPLATE FOR ENTREPRENEURS .....	41
<b>4.3. Investment readiness .....</b>	<b>46</b>



**4.4. Investment program .....46**

**5. ANNEX I. MARKET ANALYSIS RESULTS.....47**

**5.1. Green Technology and Sustainability .....47**

**5.2. Renewable Energy .....49**

**5.3. Waste management .....70**

**5.4. Water purification .....73**



# List of Tables

Table 1. Template for citizens/regions.....	10
Table 2. Template for entrepreneurs .....	15
Table 3. Template fund questionnaire .....	28
Table 4. Template for cities/regions.....	33
Table 5. Startups in the category green technology and sustainability .....	47
Table 6. Startups in the category renewable energy .....	49
Table 7. Startups in the category waste management.....	70
Table 8. Startups in the category water purification.....	73

## List of Figures

Figure 1: Logo of the Business plan writer tool.....	20
Figure 2. Screenshot of creating a customized template.....	21
Figure 3. Predefined template with the 25 elements and an enlarged example of Chapter 2.....	22
Figure 4. Example of the writing model .....	22
Figure 5. The 5 main areas of a business plan from the book "How to attract investors" .....	23
Figure 6. The 9 elements of the Business Model Canvas .....	23
Figure 7.Overview of the Budget module elements (mock-up).....	24
Figure 8.Overview over the scoring page for each of the 25 elements in the business plan .....	25
Figure 9. Outline of the stages of the investment program.....	26
Figure 10.Summary of the result of the market analysis .....	32

# 1. Introduction

## 1.1. The InvestCEC project

Circular economy is one of the core principles of the EU's Green Deal. A significant hurdle in getting circular economy projects off the ground is funding, as many of these projects are often classified as high-risk, either due to technical immaturity, lack of track record or uncertain market conditions. The Horizon Europe project InvestCEC aims at developing one or more replicable models for the initiation of circular economy projects in cities and regions. The purpose is to demonstrate ways to improve collaboration between entrepreneurs, investors, public service operators and policy makers. InvestCEC wants to test and demonstrate the effectiveness of this approach in Klagenfurt (Austria) and make it available for replication in other European cities and regions, with the objective to ensure that the solutions, measures and processes developed in the project can be utilized across Europe.

## 1.2. Aim of this deliverable

This deliverable aims to explain the model to be tested. The document includes a description of the model and guidelines for the implementation of the different stages and materials to be used for each stage

- *Stage 1: template for needs definition,*
- *Stage 2: template for interested entrepreneurs to describe their offered solution*
- *Stage 3: guidelines for preparing business case and business plans,*
- *Stage 4: guidelines on applying the model's investment program*

This document corresponds to the first version of the deliverable, and as such some of the sections may be limited or partly incomplete. The consortium partners are aware of them and any possible issues will be considered for the following version of the investment model. Within the InvestCEC project, this deliverable is associated to the tasks T2.1 Model development and its sub-tasks T2.1.1 Definition of needs; T2.1.2 Selection procedure; T2.1.3. Preparation for investment; T2.1.4 Investment program; T2.1.5 Feedback and Monitoring.



## 2. Developing and demonstrating a model for circular economy projects

InvestCEC will develop and demonstrate a model that can assist the city/region in structuring and aligning its needs definition to support implementation of circular economy solutions. The processes outlined in the model aim at making it easier to identify potential suppliers (Entrepreneurs/SME's) that can deliver solutions meeting the identified needs of cities and regions. To the extent that funding barriers prevent the delivery of relevant solutions, the InvestCEC model aims at assisting entrepreneurs/SME's in accessing potential funding sources and to support developing the investment readiness of their business cases. In parallel InvestCEC will implement an investment program that combines fundraising through venture capital, local and national co-investments and crowd co-investment. The processes developed by the consortium will secure close monitoring of the identified cases. When needed, external experts and local stakeholders will provide experience and evidence-based knowledge and insights to secure successful implementation of new solutions. This knowledge will be used to optimize the model and the additional support measures that will be provided in the project. The measures, guidelines, practices, and models created in the project can be adjusted and applied in other local and regional contexts. This will allow for replication of the model developed during the InvestCEC project, potentially increasing the sustainability and the impact of the project's results. The effectiveness of the general model developed will be tested and demonstrated for the case in Klagenfurt, and a worked example of the first stages of the model is explained in section 4 of this deliverable.

## 3. The InvestCEC model

### 3.1. Needs definition

The first stage in our model is a structured process to describe the identified needs by the city or the region, screen for potential solutions and make an initial assessment of costs required for a successful implementation. Here, the target city/region should identify/prioritize areas, sections or industries in which have special needs or which they would like to promote a circular economy transformation.

The objective of such circular economy initiatives is to create potential long-term benefits related to, for example, sustainability, quality of life, costs reduction, environmental welfare, etc. which should be identified and defined during this first stage of the process. The focus of the InvestCEC model includes solutions for meeting cross-cities and cross-regions needs for circular economy and bioeconomy transitions, as adjacent cities/regions may form collaborations to co-initiate circular economy projects. To support the replicability of this stage of the model, we will provide generic tools that will assist municipal/regional public institutions to support the transition to circular economy. During the project, guidelines will be developed for the transition to circular economy based on the needs and objectives. This will simplify the process for cities and regions to define the size and scope of circular economy projects, and provide strategies and milestones for achieving these objectives, and identify potential challenges (e.g. legal, structural, financial) that should be overcome.

In addition, InvestCEC will provide generic guides and information to cities/regions on circular economy solutions available for various local settings (e.g., prominent industries, material supply, local conditions, etc.) and their potential benefits. These materials can be used and adjusted according to the specific context and conditions of the city or region where the replication takes place.

### 3.2. Selection process

The second step in the model is the selection of solution providers, who can deliver – and/or if needed develop the desired circular economy solution for the relevant city/region. The selection procedure to be developed shall take into account the interest of all relevant stakeholders (i.e. needs and conditions of the city/region, entrepreneurs, investors, citizens), as well as involving external circular economy experts through the InvestCEC online platforms and activities. The selection criteria (See section 3.2.1) will be based on a set of criteria to be developed, including (but not limited to) fit-for-purpose solution, tangible signs of success and achievements (e.g. investors, customers, profitability), business models and cases, as well as entrepreneurial and professional capacity to carry out the identified solution/project. To enable replication of this stage in other local and regional settings, a generic and replicable template was developed for the

description of the city/region's needs, objectives and required solution and it's being tested. A process is under development for screening relevant solutions, and for distributing of information identified high priority "needs" to potential solution providers (SME's, entrepreneurs, innovators) in a structured and comprehensive way. In addition, a template has also been developed to be used by interested solution providers to describe the solution they offer and the relevant information to be considered in the selection process. At the last phase of the InvestCEC project the practical experiences and knowledge gained during the project will be disseminated via open access resources, guidelines and documentation.

### 3.2.1. TEMPLATE FOR CITIES/REGIONS

The purpose of this template is to collect and structure general information about the city/regions vision, targets, and initiatives towards circular economy solution so it can be distributed to SME's/entrepreneurs in a structured and comprehensive manner. SME/Entrepreneurs will in turn be able to propose solutions, or contribution to solutions that meet the vision, specific needs and/or requirements of the city.

The template is structured in three parts: general information, overall vision & targets, and description of more concrete projects planned. The template thereby follows a funnel structure by addressing broad visions and ideas before moving towards more specific projects and requirements. SME/Entrepreneurs thereby have the opportunity to propose new solutions relating to the overall vision and targets set by the city/region, and propose solutions that can contribute to the existing plans of the city/region. Finally, the template also requests that the city/region describes how their planned projects fit in the concept of circular economy.

*Table 1. Template for citizens/regions*

GENERAL INFORMATION	
City/Municipality	
Location (region it is part of)	
Name of municipal organization	
Please provide links to city websites for	

more information	
GENERAL VISION, TARGETS & STRATEGIES	
<b>VISION</b>  What is the circular economy vision of your city/region	
<b>TARGETS</b>  What targets have been set to work to follow this vision	
<b>STRATEGIES</b>  What measures and strategies have been set to achieve these targets	
<b>Other measures discussed</b>	
<b>STRENGTHS</b>  Regional Strengths and resources available	
<b>NEEDS</b>  What resources are less present and could serve to	

realize the city's circular economy vision	
<b>CIRCULAR ECONOMY ACHIEVEMENTS</b>  Do you have any existing or past examples of circular economy projects or initiatives in your city/region?	
<b>PLANNED PROJECT 1</b>	
<b>Project NAME</b>	
<b>LEAD person to contact</b>	
<b>DESCRIPTION</b>  Project Description	
<b>TASKS</b>  Projects actions/tasks	
<b>BUDGET</b>	
<b>STAKEHOLDERS</b>  Who are the	



stakeholders and actors in this project, what are their role	
<b>RESSOURCES</b>  Strengths of project: actors, technology	
<b>NEEDS</b>  Missing elements / actors / technology/ supply chain	
<b>MIRROR PROJECTS</b>  Examples of eventual successful similar/inspiring solutions	
<b>CIRCULARITY</b>  How does the solution in question qualify as circular? E.g.:  <u>"Eliminates waste and pollution"</u>  <u>"Circulate products"</u>	

<u>and materials (at their highest value)”</u>  <u>“Regenerate nature”</u>	
<b>BUTTERFLY DIAGRAM</b>  Does the solution’s value chain operate on the technical or biological side of the <u>butterfly diagram</u> ? (explain)	

### 3.2.2. TEMPLATE FOR ENTREPRENEURS

The purpose of this template is for SME/entrepreneurs to be able propose ideas to solutions based on the information provided by the cities/regions in the previous template. The aim of the template is thereby to collect initial descriptions of solution proposals, which will allow for a first round of selection for entrepreneurs to move to the next stage of the model (Investment readiness).

The template is structured in three parts: solution and value-chain description, development stage and requirements, and finally a description of the degrees of innovation and circularity. The template thereby follows a structure that will fit the 3 main criteria of the selection process: 1) the fit for the city/regions’ needs, 2) the commercial viability of the value chain and team and 3) the degree of innovation and circular economy characteristics of the solution.

Table 2. Template for entrepreneurs

COMPANY INFO	
NAME	
LOCATION	
WEBSITE	
<b>FIELD</b>  Please describe your general expertise and current operations	
ACHIEVEMENTS	
YOUR SOLUTION	
NAME	
<b>DESCRIPTION</b>  Please provide a short description of your project/solution	
<b>VALUE CHAIN</b>  Describe the value chain of your solution	



<b>STAKEHOLDERS</b>  Please list the stakeholders, their roles and interests	
<b>YOUR ROLE</b>  What is your role in this project and value chain?	
<b>STRENGTHS</b>  Please describe the strengths of your solution to meet the needs identified by the municipality/region. What do you think will make it successful?	
<b>NEEDS</b>  Are there any missing elements, or elements that could be strengthened to better meet the needs identified by the municipality/region?	
<b>DEVELOPMENT STAGE</b>	

<b>PROGRESS</b>  Please describe the current state of development of your solution	
<b>FINANCIAL NEEDS</b>  Please provide an estimate of the investments needed to bring your solution to maturity	
<b>TIMELINE</b>  How long would it take to develop and deploy your solution?	
<b>INNOVATION &amp; CIRCULARITY</b>	
<b>REFERENCE PROJECTS</b>  Have you or any of the partners created/participated in other similar projects? Are you inspired by any other projects?	
<b>INNOVATION</b>  How does your solution differ from existing solutions?	

<p><b>CIRCULARITY</b></p> <p>How does the solution in question qualify as circular? E.g.:</p> <p><u>“Eliminates waste and pollution”</u></p> <p><u>“Circulate products and materials (at their highest value)”</u></p> <p><u>“Regenerate nature”</u></p>	
<p><b>BUTTERFLY DIAGRAM</b></p> <p>Does the solution’s value chain operate on the technical or biological side of the <u>butterfly diagram</u>? (explain)</p>	

### 3.2.3. SELECTION CRITERIA

The following criteria serve as overall guidelines for cities and regions to select solutions and SME/entrepreneurs. The ones with investment needs will be able to move to the next stage of the InvestCEC model: Investment Readiness. The criteria revolve around three overall categories that are detailed with a list of sub-criteria. These will also be made available to SME/entrepreneurs as guidance for completing their presentation templates.

#### A. FIT FOR PURPOSE

- Fit with the city/region's needs.
- Value added
- Needs addressed.

#### B. COMMERCIAL VIABILITY

- Company(ies) business profile(s) and team
- Past achievements and success indicators (experience, traction, investors)
- Viability of the value-chain presented.
- Alignment of interests for the stakeholders involved.
- "Cost-benefit" assessment of the resources needed to deliver solution vs value added

#### C. INNOVATION & CIRCULARITY

- Does the solution differ from existing solution and provide added value across the value chain?
- The degree of innovation of the solution compared to existing ones
- How much value does the solution bring in terms of circularity:
  - o For technical side: how long does the solution remain in use with maximum value?
  - o For biodegradable side: the level of biological regeneration permitted by the solution.

### 3.3. Investment readiness

The following section describes the tools that will be made available to entrepreneurs with a funding need, and who will be invited into the InvestCEC project in relation to Tasks 2.1.3: Investment Readiness, to make their business case investment ready and attract private and/or public funding.

The G2G Business Plan Tool has been designed to help interested entrepreneurs to turn their ideas into realistic business models and to assist entrepreneurs in their business plan writing efforts. The following components make up the tool:

- A. Online business plan writer tool
- B. Budget module
- C. Business Plan self-assessment/quality assessment tool

This online tool provides a clear framework to cover all important aspects of a business model. The entrepreneur will be able to convert a conceptual business idea into a comprehensive business plan by



*Figure 1: Logo of the Business plan writer tool*

working through all of the tool's sections, as well as evaluating the viability and credibility of the business strategy. All three components are important when creating a business plan for a product or service. Component A ensures that the business model has a narrative and that all relevant areas are thoroughly explained in written text. Component B strengthens the financial background of the business plan and as a result, secures that the visions and assumptions in the business plan are compared and converted into monetary terms. For the system, it is not necessary to fill in both Component A and B for evaluation (C), however, it is strongly advised as the business plan will only be ready for the market and investors when the written text is reflected in numbers as well. The result of using the G2G Business Plan Writer Tool is a complete written business plan supported by a comprehensive budget overview.

The intent behind the tool is to assist interested entrepreneurs in determining how their solution/circular economy project could be realistically implemented into their own business strategy. The tool can be helpful for business owners of all levels of expertise, both seasoned, as well as those with little to no prior business plan writing skills. The tool is self-guided, meaning that the user can go through the different sections and fill in the required details without external help or guidance. Ensuring all components and relevant concerns related to a business plan are defined, potential difficulties addressed, and fundamental assumptions supported are recognised as a challenge when creating businesses and plans.

Using a unique approach, based on Gate2Growth's extensive experience as a strategic advisor on business development and access to funding and financing, the G2G Business Plan Writer is designed to help connect the many elements of starting a new business and receive quality feedback on it. This way, the tool offers basic support for the business plan writing process and thus helps the entrepreneurs to put their plans into action and make their idea a reality. Once the business plan is completed, it can be used to steer a company's strategy, presented to investors or included as an annex in a grant application. Additionally, the budget module and the written business plan together can be used to create a compelling narrative about the business perspective for meetings with business associates, investors, banks, or other financial organizations, increasing the chance to get funded or to receive attractive investment opportunities. The lack of "business history or lack of track record" is often an issue that young or recently founded companies must overcome, and a well-written, comprehensive business plan is potentially a solution for that challenge. One of the biggest finance accounting services, PwC, also highlighted in a recent Start-up evaluation report *that companies without historical financial data or proof of concept can counteract this perceived weakness with a strong, thorough market and business strategy. With a clearly defined business plan, it is more likely that investors and potential key partners will see the value and investment/partnership opportunity in the company.* (PwC News, 2021)

### A. The online business plan writer

Users can select a predefined or customized template to start their business plan. Both templates include all the elements needed to structure a final business plan.

The advantage of the customized template is that the user can make their own structure and/or rearrange the elements to fit their needs, e.g., if the product cannot be protected, the IPR section can be taken out (Figure 2).

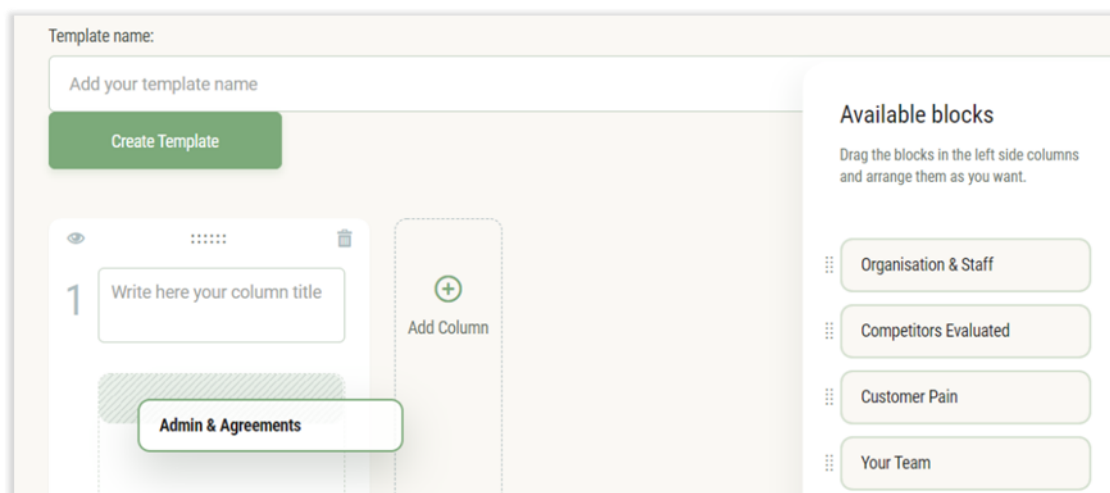
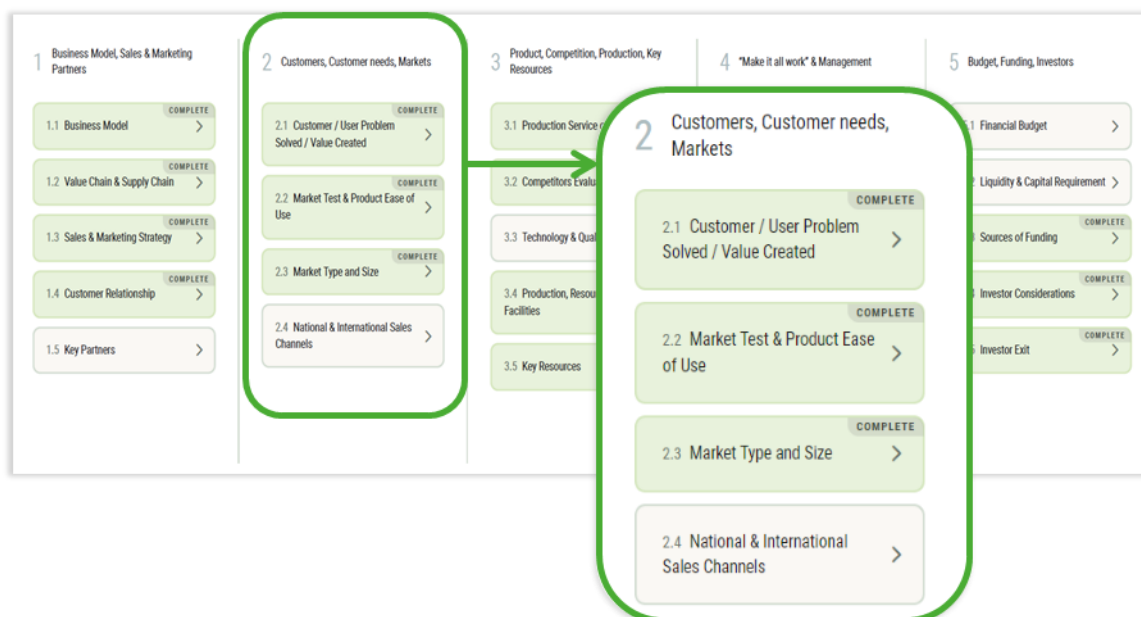


Figure 2. Screenshot of creating a customized template

The predefined template is sectioned into 5 main areas that overall consist of 25 writing elements (explained in detail later). The predefined template is a safe choice for all as it has been structured to include all

relevant elements of a business plan and thus ensures that all key points are covered and explained (Figure



3).

Figure 3. Predefined template with the 25 elements and an enlarged example of Chapter 2

The content and structure of the writing part include findings from real-life cases and relevant business theories. The five main sections, namely Business model; Customers and Market; Product and Competition; Management and Budget are inspired by the book “How to attract investors” (Bundgaard-Jørgensen, 2016) illustrated in Figure 4.

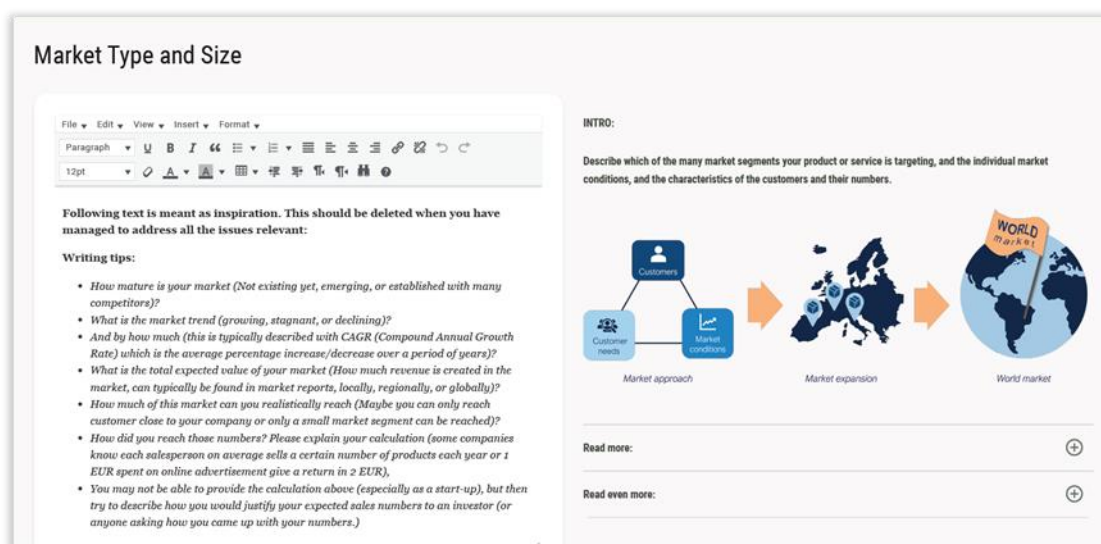


Figure 4. Example of the writing model

The 25 elements to be completed focus on identifying the following five main areas:

1. *Business model, Sales & Marketing partners*
  2. *Customer, Customer needs, Market*
  3. *Product, Competition, Production, Key resources*
  4. *"Make it all work", Management*
  5. *Budget, Funding, Investors*
- Osterwalder's "Business Model Canvas" methodology, featured in the book "Business Model Generation" (Osterwalder et al., 2010), also influenced the structure and the description of the elements of the tool (**Error! Reference source not found.**).

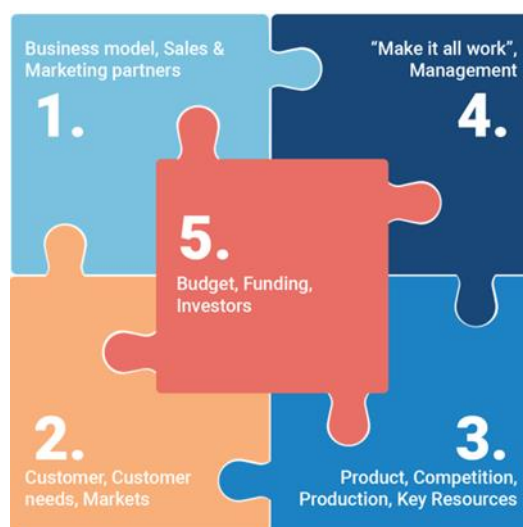


Figure 5. The 5 main areas of a business plan from the book "How to attract investors"



Figure 6. The 9 elements of the Business Model Canvas

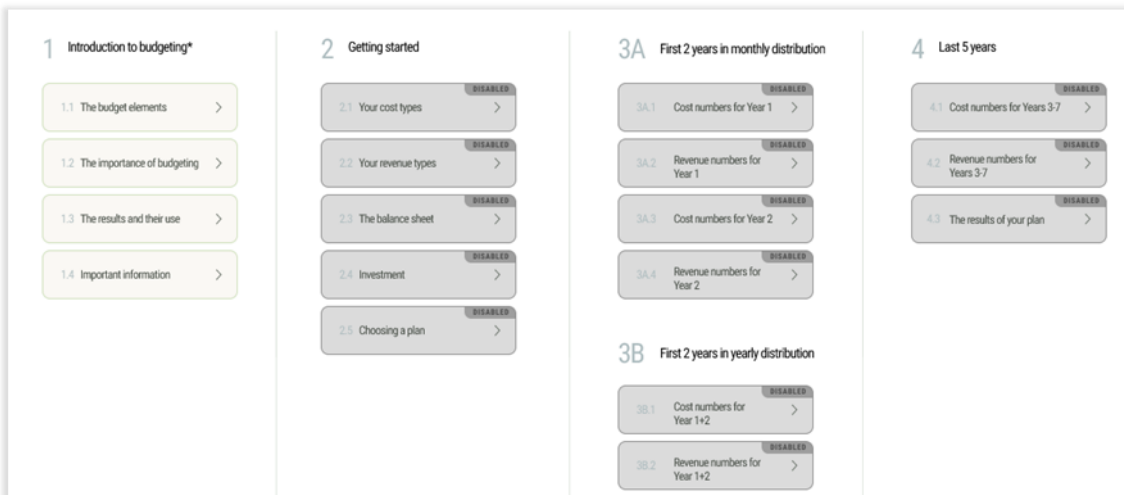


The elements focusing on the identification of customer needs and business model development are also inspired by the findings in the book “Blue Ocean Strategy” by Kim and Mobogne (W. Chan Kim & Renee Mauborgne, 2005). The authors emphasize that it is crucial to analyze and understand how and why a new product, solution, or service is better equipped to satisfy customer needs than other products, solutions, or services currently on the market. The instructions in the online business plan writer are meant to support such analyses and the consideration of customers' actual needs in a competitive strategy.

## B. The budget module

The budget module is closely connected to the writing part. Although it is not compulsory to fill out, it is recommended to strengthen the business plan in the making. This optional module will allow the user to forecast 24 months + 5 years of cost and revenue, and this serves as a strengthening addition to the business plan. The reason behind planning for this specific period is to help companies see potential liquidity challenges. For some (mostly young) companies liquidity planning is essential in the short term, as such, they need to be able to plan for costs in the actual month it occurs and not only have it on a yearly average (as is done beyond the initial 24 months). The lifespan of investment funds and investment horizon is typically between 7-10 years, so the forecast used in the Budget module is corresponding to said requirements.

It has a similar layout to the G2G Business Plan Writer, as the user is able to get an overview of the necessary steps and see progress. A significant difference with the budget module is that its elements have a defined order that has to be followed while filling in and elements are disabled until the previous ones are filled in (7). This is due to the fact that the calculated financial information is heavily dependent on the numbers submitted by the user.



The mock-up displays a sequential flow of steps for the budget module, organized into four main sections:

- 1 Introduction to budgeting\***
  - 1.1 The budget elements >
  - 1.2 The importance of budgeting >
  - 1.3 The results and their use >
  - 1.4 Important information >
- 2 Getting started**
  - 2.1 Your cost types > (DISABLED)
  - 2.2 Your revenue types > (DISABLED)
  - 2.3 The balance sheet > (DISABLED)
  - 2.4 Investment > (DISABLED)
  - 2.5 Choosing a plan > (DISABLED)
- 3A First 2 years in monthly distribution**
  - 3A.1 Cost numbers for Year 1 > (DISABLED)
  - 3A.2 Revenue numbers for Year 1 > (DISABLED)
  - 3A.3 Cost numbers for Year 2 > (DISABLED)
  - 3A.4 Revenue numbers for Year 2 > (DISABLED)
- 3B First 2 years in yearly distribution**
  - 3B.1 Cost numbers for Year 1+2 > (DISABLED)
  - 3B.2 Revenue numbers for Year 1+2 > (DISABLED)
- 4 Last 5 years**
  - 4.1 Cost numbers for Years 3-7 > (DISABLED)
  - 4.2 Revenue numbers for Years 3-7 > (DISABLED)
  - 4.3 The results of your plan > (DISABLED)

Figure 7. Overview of the Budget module elements (mock-up)

### C. Business Plan self-assessment

This last part of the tool is inspired by the H2020 SME Instrument (now EIC Accelerator) evaluation principles created by the European Commission, but it has been modified to be used for commercial business plans. It is formed around the 25 elements (also used for the Online business plan writer (A)) that should be covered in a typical business plan to help the entrepreneur determine how complete the plan is and, ultimately, whether it is investor-ready or not.

The Quality assessment tool provides a structured approach to the evaluation process. Each of the 25 components addressed in the business plan must be scored on "completeness & quality" by the evaluator. It is possible to skip scoring factors that are unimportant in the actual context. The basis for the "total quality scoring" results is altered if a step in the scoring procedure is skipped.

In addition to the official scoring of each component, comments may be added if the evaluator considers them relevant. The "Business Plan quality assessment tool" translates the final scoring/assessment into clear and thorough written feedback that is delivered to the entrepreneur when the evaluation process is complete. Moreover, the user also gets a colour-coded overview of the template and its elements (Figure 8), where "green" means that content was relevant, "yellow" indicates that the content needs to be improved, and where the evaluator does not find the content relevant or is missing, "red" will be chosen. Thus, the user will also get a visual representation of the progress of the business plan.

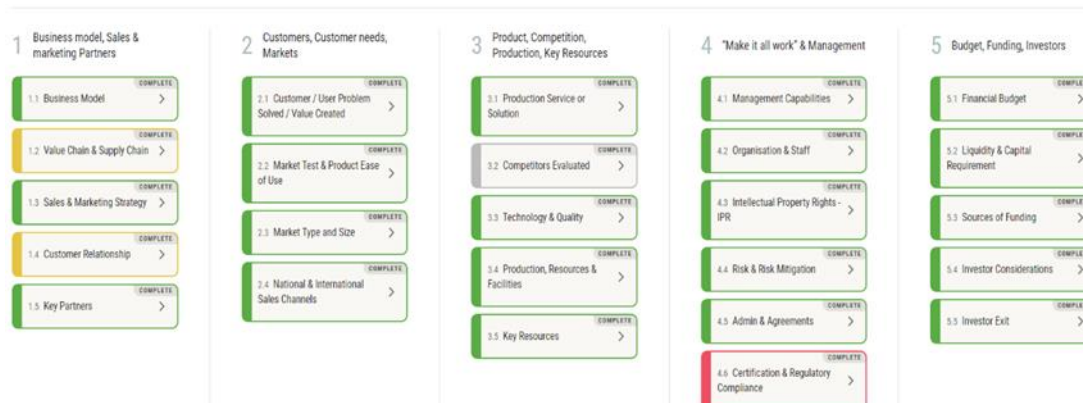
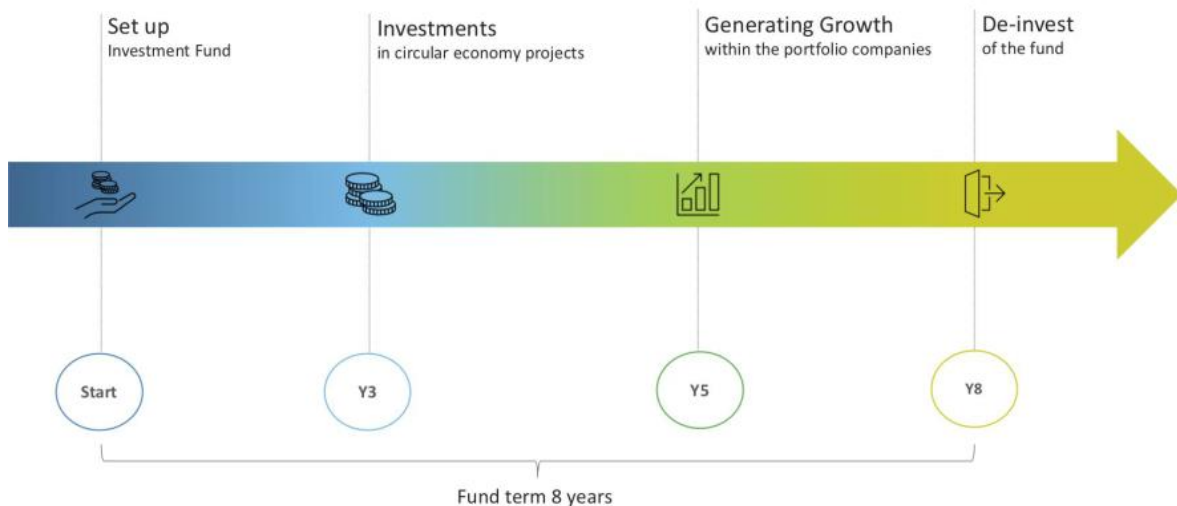


Figure 8. Overview over the scoring page for each of the 25 elements in the business plan

## 3.4. Investment program

This section explains the fourth stage of the InvestCEC model and provides guidelines to support the development of an investment program. The focus will be especially on setting up a venture capital fund (AIF) for circular economy projects, as well as establishing an investor network that allows deal sharing and

co-investment opportunities. This investor network will include a variety of stakeholders, such as Business Angels, Venture Capitalists, and Corporate Venture Funds, with the option to be facilitated through a crowd investment web platform. Additionally, this project aims to identify and set standards for circular economy impact investments. This means that the guidelines and materials produced will not only support the setup of the AIF and investor network, but will also ensure that the investments align with the principles and goals of circular economy.



*Figure 9. Outline of the stages of the investment program*

The investment program will employ a harvesting strategy within the fund. The implementation will last 8 years, starting with an investment in the local circular economy project(s) over three years generate growth over five years, then de-invest over three years.

### 3.4.1. GUIDELINES TO DEFINE AN INVESTMENT FOCUS

To allow the replication of this stage in other local and regional settings, a set of guidelines have been drafted and explained next:

#### **Step 1: Detailed market analysis**

A detailed market analysis will provide a market overview of startups and investors active in circular economy. Startups can be analysed based on the following criteria:

- Industry/Category
- Age

- Funding Amount
- Blurb (qualitative, short description of business model)
- Stage of Company based on Investment Round Title
- Age & Funding Amount
- Geographical location of HQ
- Investors.

All startups can then get classified according to the following sectors of circular economy:

- Greentech & Sustainability
- Renewable Energy
- Smart City Logistics
- Sharing Economy
- Waste Management
- Car Sharing
- Other.

### **Step 2: Define relevant categories**

Based on a previous needs definition of the pilot city, relevant categories need to be defined based on the individual local needs and circumstances.

### **Step 3: Define cooperation opportunities with SMEs/startups**

Discussing how potential SMEs/startups can support the needs of the pilot city in the area of circular economy. The aim is to create added value in the context of circular economy through innovative and new business solutions.

### **Step 4: Define evaluation criteria**

Market standard valuation criteria are applied to identify a potentially attractive business case.

- Team: Expertise and experience of the team as well as successful internal collaboration and complementary skills.

- Market: Size and dynamics of the market, growth potential, competitor analysis.
- Product/Product-Market Fit: validation of the product concept in the target market and differentiation of the product from competitors or similar products in the market.
- Value Proposition, the extent to which the product is needed by the customer - in the specific case also whether the product meets STW's criteria.
- Scalability: ability to expand a business model
- Technology: stability and progress of the technology and its scalability.
- Financials and KPIs: Traceability of business plan, return on investment, cash flow.

### 3.4.2. TEMPLATE FUND QUESTIONNAIRE

The purpose of this template is to provide information from the investors.

*Table 3. Template fund questionnaire*

PROPOSED PARTIES	
Proposed portfolio manager	
Proposed depository	
Proposed auditor (if any)	
Proposed advisors	
BASIC FUND INFORMATION	
Proposed name of the investment fund	
Fund type (respective law)(e.g. AIF, UCITS)	

Legal Type (e.g. SICAV)	
Is the fund a single fund or an umbrella fund?	
Expected Fund volume	On first issue: After 12 months: After 24 months:
Duration of the fund	<input type="checkbox"/> Unlimited <input type="checkbox"/> Limited (..... years)
Open or Closed	<input type="checkbox"/> Open-ended <input type="checkbox"/> Closed-ended
In case of an open-ended structure what are the redemption cut-off dates / exit restrictions to be implemented?	<input type="checkbox"/> 1 day <input type="checkbox"/> 1 week <input type="checkbox"/> 1 month <input type="checkbox"/> 6 month <input type="checkbox"/> Other: .....
Reference currency of the fund	
Appropriation of income	<input type="checkbox"/> Reinvesting <input type="checkbox"/> Distribution
Share classes	Number of share classes (per segment, if multiple):
If multiple share classes, please provide guidance on the proposed differences	
Initial Issue price in reference currency	
Subscription minimum in reference currency Valuation frequency	
Valuation frequency	<input type="checkbox"/> Annually <input type="checkbox"/> Semi-annually <input type="checkbox"/> Monthly <input type="checkbox"/> Other: .....
Accounting year end	<input type="checkbox"/> 31st Dec <input type="checkbox"/> Other: .....
Subscriptions in kind? (If yes, please specify)	

# 4. Worked example: The case of Klagenfurt

## 4.1. Needs and objectives of the city of Klagenfurt

As a starting point for the demonstration of the InvestCEC model in Klagenfurt, we will built on the aims of the city to reduce greenhouse gas emissions by at least 90% by 2050 through efficient use or renewable energy resources, enhancing circularity in the following waste-management areas:

1. *Wastewater – sewage sludge incineration for the production of waste heat.*
2. *Biogenic waste – Making biogenic waste available for biogas production*
3. *Residuals, plywood and furniture waste – Waste management and recycling for power-Heat-Coupling-Process*

Innovation is essential for developing solutions for the transformation towards a circular economy. Funding is often one of the barriers for developing innovative solutions or for carrying on the circular economy transition process. Examples are the optimisation or replacement of old plants, but also the modernisation of existing methods and technologies. If the funding is not provided through public sources, funding from investors is often crucial for the success of the project. However, to attract funding from investors, they need to be presented by business cases which can secure an acceptable risk adjusted return of investment, comparable to alternative investment opportunities.

### Research Overview of the market Startups and Investors

To get an overview of potential relevant companies providing “circular economy” solutions, Venionaire Capital have prepared a detailed market analysis as a first step towards the current market overview of startups and investors active in the Circular Economy. The research approach selected was to conduct an analysis and to drill down on secondary data of active Ventures, and their respective Investment Rounds and Investors, obtained from Crunchbase. In total, 680 companies remained after cleaning the data based on several criteria to keep the data as relevant as possible. The selection of criteria to source the secondary data was based on the outcome of the Kick-off Meeting at Magdalensberg. The preliminary understanding of the segregation of industries and verticals Stadtwerke Klagenfurt are operating in was used as a basis to

conduct this research. Furthermore, only active companies based in the European Union were recognized. The companies were subsequently grouped in the following categories:

- Green technology and sustainability
- Renewable Energy
- Water purification
- Collaborative economy
- Waste management
- Car sharing

Within these categories, all companies that met the criteria were included in the research. On this basis, the following data were analysed:

- Sector/Category
- Age
- Amount of financing
- Blurb (qualitative and brief description of the business model)
- Stage of the company according to the title of the investment round, the age and the amount of funding
- Geographical location of headquarters
- Investors

This overview of companies will in subsequent internal InvestCEC analysis be combined with other companies or entrepreneurial initiatives identified through other sources.

## Market analysis results

### STW selection of high priority areas

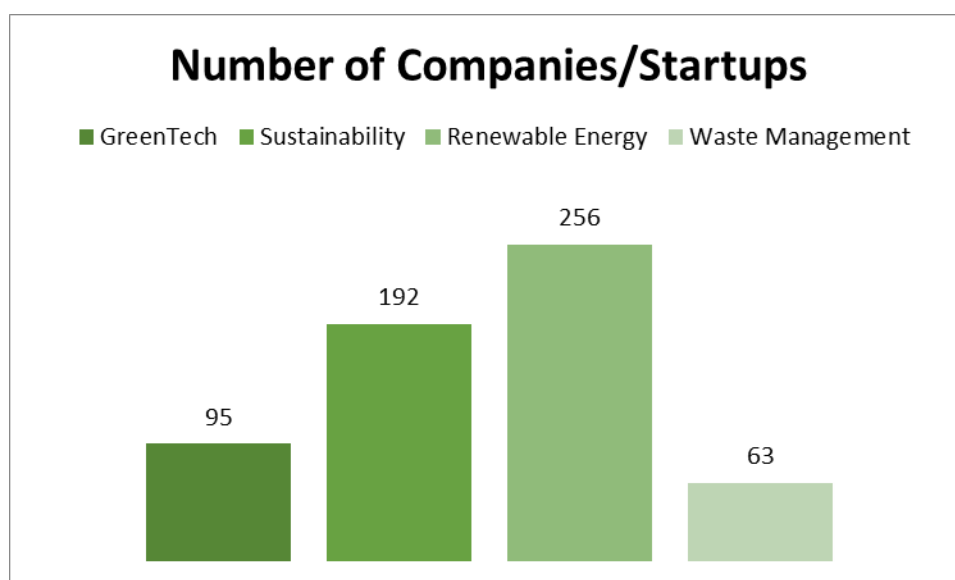
For the 680 companies analysed, as well as for each of the individual categories, STW identified the most relevant categories:



Inspired by the wealth of information provided on the 680 companies analysed, STW has decided, when combining with their own needs analysis, that the most relevant “problem” areas where STW have identified the greatest needs are the following:

- Green technology and sustainability
- Renewable energy
- Waste management
- Water purification

**Annex I** of this document contains a selection of companies belonging to these 4 final categories, but the results are summarized below.



*Figure 10. Summary of the result of the market analysis*

Of the 680 companies and startups analysed, more than a third can be classified under Renewable Energy, around a fourth are classified under the Sustainability category and only a tenth fall under Green Tech or Waste Management. However, there is some overlap, as is the case with entities that fall under both the Green Tech and Sustainability categories.

## 4.2. Selection process

### 4.2.1. TEMPLATE FOR CITIES/REGIONS

This template is completed with the information (in grey) presented by Stadtwerke Klagenfurt during the kick-of-meeting of the InvestCEC project.

*Table 4. Template for cities/regions*

GENERAL INFORMATION	
City/Municipality	Klagenfurt am Wörthersee
Location (region it is part of)	Carinthia, Austria
Name of municipal organization	STW Stadtwerke Klagenfurt
Please provide links to city websites for more information	<a href="https://www.stw.at/">https://www.stw.at/</a>
GENERAL VISION, TARGETS & STRATEGIES	
<b>VISION</b>  What is the vision of your city/region	Smart City Klagenfurt am Wörthersee will be an emission-neutral, energy-efficient and resource-saving habitat with a high urban quality of life and responsible citizens, which is very well connected in the Alps-Adriatic region.

<b>TARGETS</b>  <b>What targets have been set to work to follow this vision</b>	<ul style="list-style-type: none"> <li>- Reduce GHG emissions by min. 90% by 2050</li> <li>- Phase out all fossil energy by year x</li> <li>- ..</li> <li>- Increase modal Split in public transportation</li> <li>- Provide sustainable and affordable energy</li> </ul>
<b>STRATEGIES</b>  <b>What measures and strategies have been set to achieve these targets</b>	<ul style="list-style-type: none"> <li>- Substitute natural gas and oil with renewables by 2050</li> <li>- Make biogenic waste available for biogas-production: e.g. heat production or as fuel</li> <li>- Maximize the yield of biogas</li> <li>- Improve waste management systems to harness value of waste</li> <li>- Optimization of the municipal wastewater treatment plant</li> </ul>
<b>Other measures discussed</b>	<ul style="list-style-type: none"> <li>- Reduce traffic-related emissions and noise</li> <li>- Increasing road safety</li> <li>- Blue city – water ...</li> </ul>
<b>STRENGTHS</b>  <b>Regional Strengths and resources available</b>	<ul style="list-style-type: none"> <li>- Good inter-municipal cooperation</li> </ul>
<b>NEEDS</b>  <b>What resources are less present and could serve to realize the city's vision</b>	<ul style="list-style-type: none"> <li>-</li> </ul>
<b>CIRCULAR ECONOMY ACHIEVEMENTS</b>  <b>Do you have any existing or past examples of circular economy projects or initiatives in your city/region?</b>	<ul style="list-style-type: none"> <li>- 1<sup>st</sup> Peace forest in Austria</li> </ul>

PLANNED PROJECT 1	
NAME	Heat production through recycling-measures
LEAD	STW “energy production” department
DESCRIPTION Project Description	Heat-production with waste management cycle  Recycling of residuals, plywood and furniture
TASKS Projects actions/tasks	<ul style="list-style-type: none"> <li>- Construction of sorting plant</li> <li>- Construction of a power-heat-coupling fluidized bed oven</li> <li>- Connection to existing district heating and power-grid</li> </ul>
BUDGET	Investment volume 2024-2026: €50M
STAKEHOLDERS  Who are the stakeholders and actors in this project, what are their role	<p><b>Citizens and businesses:</b> end-users of energy + disposed plywood and furniture</p> <p><b>Waste management plants:</b> handle waste</p> <p><b>District heating plants:</b> operate oven</p> <p><b>District heating grid managers ...</b></p>
RESSOURCES  Strengths of project: actors, technology	
NEEDS  Missing elements / actors / technology/ supply chain	<ul style="list-style-type: none"> <li>- Analysis of local waste flows</li> <li>- Localizing the usable mass</li> <li>- Identifying the types of best types of waste</li> <li>- Determining the optimal dimension and technology of waste combustion</li> </ul>

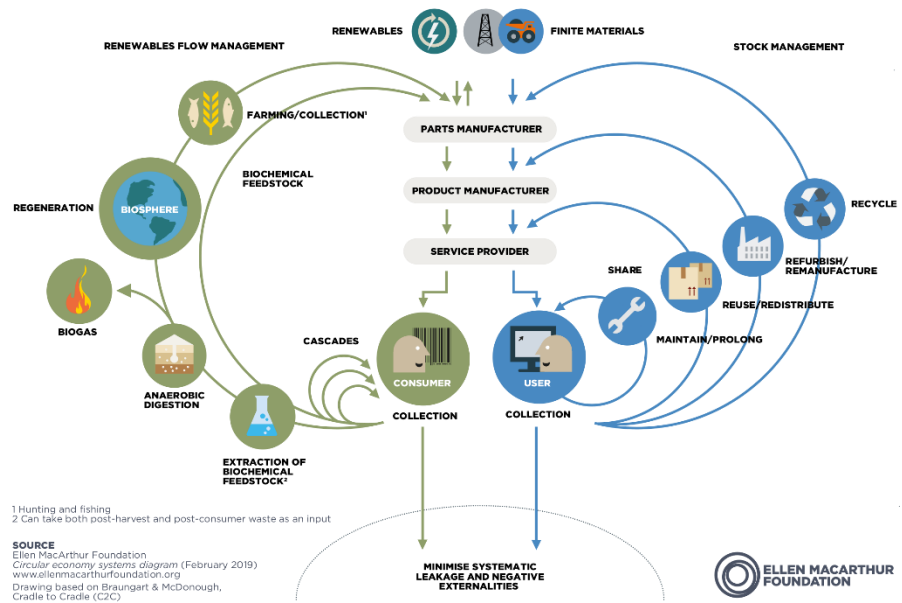


<p><b>MIRROR PROJECTS</b></p> <p>Examples of successful similar/inspiring solutions</p>	
<p><b>CIRCULARITY</b></p> <p>How does the solution in question qualify as circular? E.g.:</p> <p><u>“Eliminates waste and pollution”</u></p> <p><u>“Circulate products and materials (at their highest value)”</u></p> <p><u>“Regenerate nature”</u></p>	



## BUTTERFLY DIAGRAM

Does the solution's value chain operate on the technical or biological side of the butterfly diagram? (explain)



Can you place your solution on the butterfly diagram? Please explain

## PLANNED PROJECT 2

NAME	Extraction of green gas from sludge
LEAD	STW "energy production" department
DESCRIPTION Project Description	Combustion of sewage sludge Sludge incineration for the production of waste heat
TASKS Projects actions/tasks	<ul style="list-style-type: none"> <li>- Construction of biogas plant as part of the planned renewal of the existing wastewater treatment plant</li> <li>- Connection to the existing district gas grid</li> <li>- Setting up storage facilities</li> <li>- Adaption of filling stations</li> </ul>
BUDGET	Investment volume 2024-2026: €20M

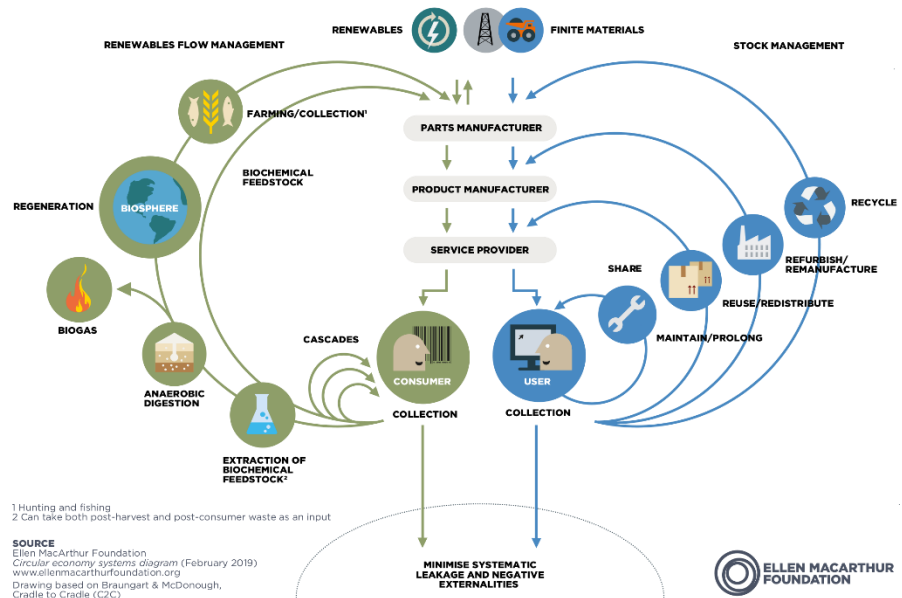
<b>STAKEHOLDERS</b>  Who are the stakeholders and actors in this project, what are their role	
<b>RESSOURCES</b>  Strengths of project: actors, technology	
<b>NEEDS</b>  Missing elements / actors / technology/ supply chain	
<b>MIRROR PROJECTS</b>  Examples of successful similar/inspiring solutions	
<b>CIRCULARITY</b>  How does the solution in question qualify as circular? E.g.:  <u>"Eliminates waste and pollution"</u>  <u>"Circulate products and materials (at their highest</u>	

value)”

“Regenerate nature”

### BUTTERFLY DIAGRAM

Does the solution’s value chain operate on the technical or biological side of the butterfly diagram? (explain)



Can you place your solution on the butterfly diagram? Please explain

### PLANNED PROJECT 3

NAME

Green gas production from biomass waste

LEAD

STW gas department

DESCRIPTION

Project Description

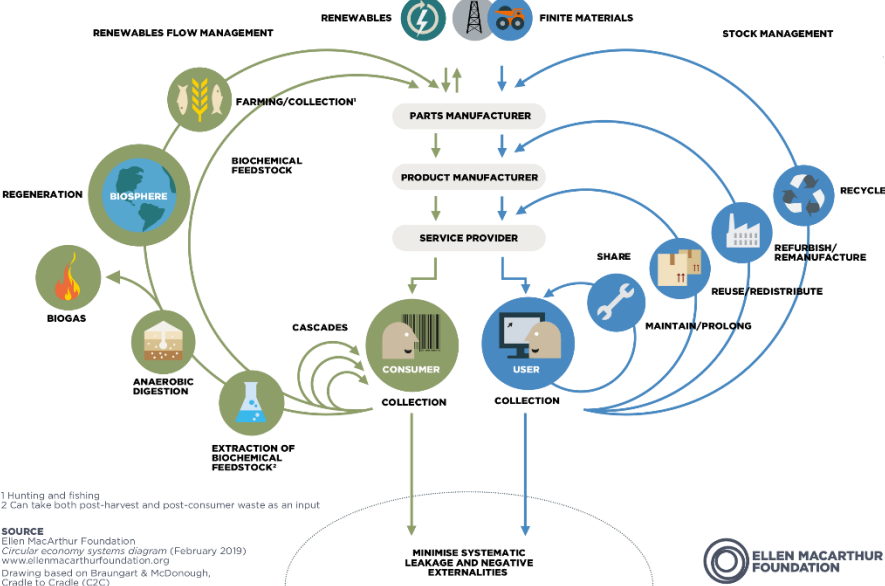
Combined fermentation & composting plant for organic waste first produces methane and then produces compost and fertilizer The compost is produced in the intensive rotting boxes

The plant is equipped with a hygienization device for the percolate water. The system in boxes with the batch operation is perfect for a continuous biogas production.

Biomethane is fed into the gas grid, the fresh compost is made available to the



	<p>surrounding farmers and collected by private individuals, the percolate that is produced is hygienized and can be used as liquid fertilizer.</p> <p>The plant is expandable.</p>
<b>TASKS</b>  Projects actions/tasks	
<b>BUDGET</b>	Investment volume 2024-2026: €10M
<b>STAKEHOLDERS</b>  Who are the stakeholders and actors in this project, what are their role	
<b>RESSOURCES</b>  Strengths of project: actors, technology	
<b>NEEDS</b>  Missing elements / actors / technology/ supply chain	
<b>MIRROR PROJECTS</b>  Examples of successful similar/inspiring	

<p>solutions.</p>	
<p><b>CIRCULARITY</b></p> <p>How does the solution in question qualify as circular? E.g.:</p> <p><u>“Eliminates waste and pollution”</u></p> <p><u>“Circulate products and materials (at their highest value)”</u></p> <p><u>“Regenerate nature”</u></p>	
<p><b>BUTTERFLY DIAGRAM</b></p> <p>Does the solution’s value chain operate on the technical or biological side of the <u>butterfly diagram</u>? (explain)</p>	 <p>1 Hunting and fishing 2 Can take both post-harvest and post-consumer waste as an input</p> <p><b>SOURCE</b> Ellen MacArthur Foundation Circular economy systems diagram (February 2019) www.ellenmacarthurfoundation.org Drawing based on Braungart &amp; McDonough, Cradle to Cradle (C2C)</p> <p>ELLEN MACARTHUR FOUNDATION</p> <p><i>Can you place your solution on the butterfly diagram? Please explain</i></p>

#### 4.2.2. TEMPLATE FOR ENTREPRENEURS

This template is completed with information (in green) collected from the website of one of the companies (Aquagreen) found in the search and analysis performed by Venionaire (partner in InvestCEC) listing

European circular economy startups found through Crunchbase.com. This has been done without contact with the company, and is thus so far only serving as an example.

COMPANY INFO	
NAME	AquaGreen
LOCATION	Roskilde, Denmark
WEBSITE	<a href="https://aquagreen.dk/">https://aquagreen.dk/</a>
FIELD  Please describe your general expertise and current operations	AquaGreen is a Danish engineering company within cleantech.
ACHIEVEMENTS	backed by various investors hereunder the Danish Workers Pension Fund (ATP), developed and patented with the Technical University of Denmark (DTU), and recognized by innovation awards
YOUR SOLUTION	
NAME	Turn your waste into resources
DESCRIPTION  Please provide a short description of your project	<p>INTEGRATED STEAM-DRYING AND PYROLYSIS</p> <p>Fully automated, continuous process</p> <p>With AquaGreen's HECLA® 1,000 plant, you can treat 1,000 metric tons dry matter annually. Doing so, will reduce greenhouse gas emissions by 1,800 ton CO<sub>2</sub>e, produce 2,000 MWh sustainable energy, and store 500 ton carbon in biochar. The resulting biochar is odorless and has a content of 5-6% plant-accessible phosphorus.</p>
VALUE CHAIN  Describe the value chain	<p>Wastewater is produced and contains sludge (106K tons in DK in 2028)</p> <p>The sludge is separated in utility plants</p> <p>The sludge is treated with steam dryers and pyrolysis oven to remove microplastics, medicine residues and heavy metals.</p> <p>This produces eco-friendly biochar full of nutrients.</p>

of your solution	The biochar is sold to farmers and nutrients reintroduced to the ground, or can also be used in other treatment plants as activated carbon for water purification
<b>STAKEHOLDERS</b>  Please list the stakeholders, their roles and interests	<ul style="list-style-type: none"> <li>- Citizens: produce sludge</li> <li>- Utility plants: waste-water management</li> <li>- AquaGreen: deliver and service technology</li> <li>- Municipal organization/partnerships: sell and distribute biochar</li> <li>- Farmers: buy biochar as environmentally friendly fertilizer</li> </ul>
<b>YOUR ROLE</b>  What is your role in this value chain?	Aquagreen can provide the technology and service it. They can also help design the right solutions tailored to the specific requirements of the utility plant in question.
<b>STRENGTHS</b>  Please describe the strengths of your solution. What do you think will make it successful?	Solid technology with proven through installations in Sweden and Denmark
<b>NEEDS</b>  Are there any missing elements, or elements that could be strengthened?	Knowledge and partnerships to define and adapt to the needs of Klagenfurt
<b>DEVELOPMENT STAGE</b>	
<b>PROGRESS</b>  Please describe the current state of	Technology is fully developed and ready to be installed for a project tailored by the city's needs

development of your solution	
<b>FINANCIAL NEEDS</b>  Please provide an estimate of the investments needed to bring your solution to maturity	The tech costs xxx € per Ton of sludge capacity
<b>TIMELINE</b>  How long would it take to develop and deploy your solution?	The Aquagreen technology can be produced and set up within x months/years
<b>INNOVATION &amp; CIRCULARITY</b>	
<b>REFERENCE PROJECTS</b>  Have you or any of the partners created/participated in other similar projects? Are you inspired by any other projects?	Sludge treatment plant attracts great interest  In an interview with sn.dk, the CEO of Odsherred Forsyning, Fanny Villadsen, states that the interest in their newly installed steam-drying and pyrolysis plant has been great. They have had more than 450 visitors during the last 12 months who wanted to see the plant and hear more about the technology.  The plant has been installed at Fårevejle wastewater treatment plant and handles all the sludge from the municipality's 50,000 households.
<b>INNOVATION</b>  How does your solution differ from existing solutions?	Sludge is currently used directly on fields and fertilizer, and contains harmful elements for the soil (microplastics...). Aquagreen's technology produces clean and environmentally friendly biochar.
<b>CIRCULARITY</b>  How does the solution in	Our solution offers a way to "Eliminate and pollution" by valorizing sludge and reintroducing it to the soil without the harmful substances.

question qualify as circular? E.g.:

“Eliminates waste and pollution”

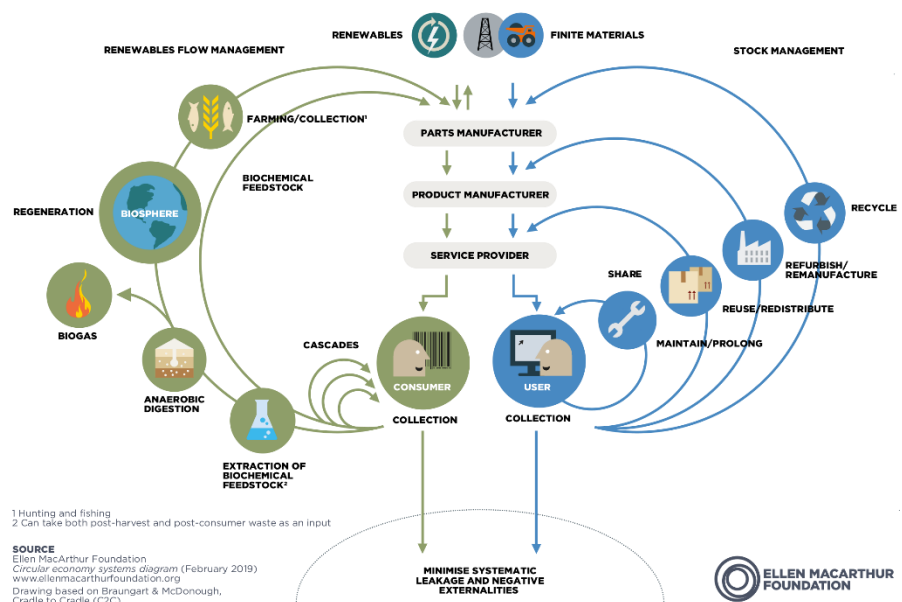
“Circulate products and materials (at their highest value)”

“Regenerate nature”

It also offers a contribution to “regenerate nature”, as the biochar produced allows to reintroduce nutrients from sludge into the ground without using artificial/chemical fertilizer

## BUTTERFLY DIAGRAM

Does the solution’s value chain operate on the technical or biological side of the butterfly diagram? (explain)



The solution fits on the biological cycle (left-hand side) of the butterfly diagram, by offering a way to farm with positive outcomes for nature by contributing to:

- *healthy and stable soils,*
- *improved air and water quality,*
- *and storing more carbon in the soil.*

### 4.3. Investment readiness

More information will be added to this section as the InvestCEC model is developed.

### 4.4. Investment program

For the demonstration in Klagenfurt, Venionnaire Capital will set up a venture capital alternative investment Fund (FAIF). The investments in the fund will be collected through fundraising by the project's Venture Capital partner and the European Super Angels Club. In order to involve a wider community, an additional co-investments plan will be set up via white-labelling the CONDA AG crowd-investment-platform. More information will be added to this section as the InvestCEC model is developed.

# 5. Annex I. Market analysis results

## 5.1. Green Technology and Sustainability

Table 5. Startups in the category green technology and sustainability

Organization Name	Industries	Headquarters Location	Total Funding Amount Currency (in USD)	Founded Date	Age in years	Top 5 Investors
AgreenCulture	Agriculture, AgTech, Artificial Intelligence, Autonomous Vehicles, Farming, GPS, GreenTech, Hardware, Sustainability	Ramonville-saint-agne, Midi-Pyrenees, France	233.370,00	16/03/2016	7,1	
AirForestry	Drones, Environmental Engineering, Forestry, GreenTech, Sustainability	Uppsala, Uppsala Lan, Sweden	230.464,00	01/01/2019	4,3	Walerud Ventures, Tomas Rudenstam
apiday	GreenTech, SaaS, Software, Sustainability	Paris, Ile-de-France, France	3.290.249,00	01/09/2021	1,7	Speedinvest, Revent, Rand Hindi
Lokalist	CleanTech, GreenTech, Recycling, Sustainability, Telecommunications	Copenhagen, Hovedstaden, Denmark	70.000,00	03/07/2017	5,8	Overkill Ventures
BIO-LUTIONS	Advanced Materials, CleanTech, GreenTech, Industrial, Packaging Services, Sustainability	Hamburg, Hamburg, Germany	11.209.814,00	01/01/2017	6,3	Delivery Hero, KFW DEG
Bringly	Delivery Service, E-Commerce, GreenTech, Logistics, Same Day Delivery, Sustainability	Amsterdam, Noord-Holland, The Netherlands		01/01/2019	4,3	ASIF Ventures, Ponooc
Carmino	B2B, Environmental	Potsdam,	407.463,00	01/01/2020	3,3	



	Consulting, GreenTech, Software, Sustainability	Brandenburg, Germany				
Dedalo	Artificial Intelligence, Brand Marketing, GreenTech, Information Technology, Social Media, Software, Sustainability, Web Design	Turin, Piemonte, Italy	209.903,00	01/03/2022	1,2	Fondazione Links, SkyDeck Berkeley, Compagnia di San Paolo, Regione Piemonte
eAgronom	Agriculture, AgTech, CleanTech, Farming, GreenTech, Software, Sustainability	Tartu, Tartumaa, Estonia	10.461.776,00	01/10/2016	6,6	European Union, TMT Investments, Superangel, LIFT99, Specialist VC
eevie - accelerating climate action	CleanTech, GreenTech, Mobile, Mobile Apps, Social Impact, Sustainability	Düsseldorf, Nordrhein-Westfalen, Germany	413.694,00	15/01/2019	4,3	NRW.BANK, Capacura
GerneOhne	E-Commerce, Food and Beverage, GreenTech, Grocery, Sustainability	Munich, Bayern, Germany		28/04/2021	1,6	APX
Inoqo	Apps, CleanTech, GreenTech, Information Technology, Sustainability	Vienna, Wien, Austria	2.374.781,00	01/01/2020	3,3	The Austrian Research Promotion Agency (FFG), Alfred Luger, Vienna Business Agency, Christian Kaar, AWS Double Equity
LIFEdat AI	Analytics, Artificial Intelligence, E-Commerce, GreenTech, Machine Learning, Predictive Analytics, Sustainability	Milan, Lombardia, Italy	1.488.851,00	13/02/2019	3,8	
Magic Forest	Biotechnology, GreenTech, Sustainability	Grubisno Polje, Bjelovarsko-Bilogorska, Croatia	55.243,00	09/02/2021	2,2	Fil Rouge Capital (FRC)
MakeGrowLab	Advanced Materials, CleanTech, GreenTech, Manufacturing, Sustainability	Pulawy, Lubelskie, Poland	350.000,00	20/03/2019	4,1	
Swoopin	Delivery, GreenTech, Information Technology, Last Mile Transportation, Logistics, Software, Sustainability	Paris, Ile-de-France, France	5.933.148,00	01/01/2019	3,9	Hi Inov - Dentressangle
Plan A	Data Integration, GreenTech, Machine Learning, Software,	Berlin, Berlin, Germany	14.988.861,00	01/04/2017	6,1	SoftBank, Demeter, HV Capital, Keen Venture Partners, coparion

	Sustainability					
Skytree	AgTech, Air Transportation, GreenTech, Sustainability	Amsterdam, Noord-Holland, The Netherlands	521.551,00	01/01/2010	12,9	Startupbootcamp, FUND FOR SUSTAINABILITY AND ENERGY (F4SE), Startupbootcamp Amsterdam
SolarMente	Blockchain, Energy, Environmental Engineering, GreenTech, Solar, Sustainability	Barcelona, Catalonia, Spain	2.125.000,00	01/01/2020	3,3	Y Combinator, Telegraph Hill Capital
Swapp!	GreenTech, Retail, Retail Technology, Sustainability	Warsaw, Mazowieckie, Poland	303.271,00	01/09/2020	2,2	SpeedUp Venture Capital Group
Sweep	Environmental Engineering, GreenTech, Software, Sustainability	Montpellier, Languedoc-Roussillon, France	99.936.764,00	01/01/2020	3,3	Coatue, La Famiglia, Balderton Capital, 2050, Future Shape
Thermosphr	CleanTech, Commercial Real Estate, Energy Efficiency, Energy Management, Facility Management, GreenTech, Real Estate, SaaS, Sustainability	Berlin, Berlin, Germany		01/01/2020	2,9	Entrepreneur First, seed + speed Ventures, Wi Venture, High Rise Ventures
Traace	GreenTech, Software, Sustainability, Test and Measurement	Paris, Ile-de-France, France	2.608.207,00	01/01/2020	2,9	Orange Ventures, ArchÃ©o Gruppe
Triqbriq	Construction, GreenTech, Sustainability	Stuttgart, Baden-Wurttemberg, Germany	980.200,00	01/01/2021	1,9	
VitiBot	Agriculture, AgTech, CleanTech, GreenTech, Hardware, Robotics, Sustainability	Reims, Champagne-Ardenne, France	16.294.544,00	01/01/2015	8,3	
Worthmore	CleanTech, GreenTech, Sustainability, Telecommunications	Copenhagen, Hovedstaden, Denmark	160.402,00	01/09/2020	2,7	Antler

## 5.2. Renewable Energy

Table 6. Startups in the category renewable energy

Organization Name	Industries	Headquarters Location	Total Funding Amount Currency (in USD)	Founded Date	Age in years	Top 5 Investors
SAP2Plus	Clean Energy, CleanTech, CRM, Information Technology, Renewable Energy	Nijmegen, Gelderland, The Netherlands	16.030,00			Startupbootcamp, Startupbootcamp Smart Materials
Accure	Analytics, Artificial Intelligence, Battery, Machine Learning, Predictive Analytics, Renewable Energy, Software	Aachen, Nordrhein-Westfalen, Germany	10.685.347,00	01/07/2020	2,8	Capnamic Ventures, 42CAP, Blue Bear Capital
Kwii	Apps, Environmental Consulting, Renewable Energy	Madrid, Madrid, Spain	16.377,00	01/01/2015	8,3	Conector Startup Accelerator
Aegir Insights	Analytics, CleanTech, Energy, Renewable Energy, SaaS, Wind Energy	Copenhagen, Hovedstaden, Denmark	483.007,00	01/01/2020	3,3	Jon Erik Reinhardsen
Agroils	Energy, Fuel, Renewable Energy	Florence, Toscana, Italy	266.702,00	01/01/2011	12,3	Italian Angels for Growth
Airthium	Energy, Energy Management, Energy Storage, Renewable Energy	Les-loges-en-josas, Ile-de-France, France	2.072.000,00	01/03/2016	7,2	Y Combinator, Petit Poucet
AMMP Technologies	Energy, Environmental Engineering, Renewable Energy, SaaS, Software	Amsterdam, Noord-Holland, The Netherlands	1.359.182,00	01/08/2018	4,7	Rockstart, Point Nine, Musha Ventures, Raba, Agile Accelerator
ampere.cloud	Environmental Consulting, Renewable Energy	Berlin, Berlin, Germany		01/05/2019	4,0	Vireo Ventures, HGDF, Business Angels Club Berlin-Brandenburg e.V., Stefan MÄßler, Martin Herrmann
ANNEA.ai GmbH	Artificial Intelligence, Energy, Machine Learning, Predictive Analytics, Renewable Energy, Software	Hamburg, Hamburg, Germany	1.047.338,00	23/08/2019	3,7	Faber, Innoport

Aqua Robur Technologies	CleanTech, Industrial Automation, Renewable Energy, Software	Göteborg, Västra Götaland, Sweden	2.121.491,00	01/01/2015	8,3	Almi Invest, Chalmers Ventures AB
Aquaseek	CleanTech, Energy, Environmental Engineering, Renewable Energy, Water	Torino, Piemonte, Italy	346.785,00	01/01/2019	4,3	LIFTT, Eureka Venture
ARBo-ES Solar	Energy, Environmental Consulting, Renewable Energy, Solar	Sant Pere De Ribes, Catalonia, Spain		15/11/2015	7,4	
Arrecife Systems	Energy, Energy Efficiency, Renewable Energy	Bilbao, País Vasco, Spain	89.364,00	01/01/2016	7,3	EASME - EU Executive Agency for SMEs
AVOB	Environmental Consulting, Renewable Energy, Software	Boulogne-billancourt, Île-de-France, France	3.954.183,00	01/01/2009	14,3	CapHorn Invest
Axibio	Environmental Consulting, Renewable Energy	Saint-cloud, Île-de-France, France	716.006,00	01/01/2016	7,3	
Balance of Storage Systems AG	Renewable Energy	Stuttgart, Baden-Württemberg, Germany		01/01/2014	9,3	Persistent, First Impact
Bamboo Energy	Artificial Intelligence, Energy, PaaS, Renewable Energy, Software	San Adrià de Besòs, Catalonia, Spain	649.627,00	01/01/2020	3,3	InnoEnergy, Institute for Energy Diversification and Saving
BeFC Bioenzymatic Fuel Cells	Electronics, Energy, Fuel Cell, Renewable Energy	Grenoble, Rhône-Alpes, France	3.496.948,00	01/01/2020	3,3	Startupbootcamp Australia, Demeter, Supernova Invest, BNP Paribas Développement
Bettermies	Battery, Energy Storage, Renewable Energy	Berlin, Berlin, Germany	2.471.417,00	01/01/2017	6,3	KIMPA - Impact Investing, Extantia Capital, Factor[e] Ventures
Bi-Energy	Clean Energy, CleanTech, Energy, Renewable Energy	Oegstgeest, Zuid-Holland, The Netherlands	59.190,00			EASME - EU Executive Agency for SMEs
Biofluides	Environmental Consulting, Renewable Energy	Saint-fargeau, Île-de-France, France		01/01/2006	17,3	Starquest Capital
Bird Control Group	Aerospace, Agriculture, Aquaculture, Commercial, Farming, Oil and	Delft, Zuid-Holland, The Netherlands	1.627.960,00	01/01/2012	11,3	Rabobank Food & Agri Innovation Fund, EASME - EU Executive Agency for SMEs

	Gas, Real Estate, Recreation, Renewable Energy					
BladeInsight	Asset Management, Drone Management, Drones, Energy, Industrial Automation, Infrastructure, Renewable Energy, Wind Energy	Porto Salvo, Lisboa, Portugal	2.439.677,00	23/02/2015	8,2	InnoEnergy, EASME - EU Executive Agency for SMEs, Betwixt Ventures, H2020-SME-Instrument program
bloXmove	Information Technology, Public Transportation, Renewable Energy, Software	Dublin, Dublin, Ireland	333.126,00	01/02/2021	2,2	Outlier Ventures, F10, Blockwall
Blue World Technologies	Fuel Cell, Manufacturing, Renewable Energy	Aalborg, Nordjylland, Denmark	61.869.657,00	01/01/2018	5,3	Vækstfonden, Breakthrough Energy Ventures, Cycle Group, DEUTZ AG, Conduit Ventures
Bright Energy	Clean Energy, CleanTech, Electrical Distribution, Energy, Renewable Energy, Solar	Stockholm, Stockholms Lan, Sweden	3.855.467,00	01/01/2010	13,3	Zenith Venture Capital, Zenith Venture Capital, HÅrjeÅns Kraft, Herrfors
BroadBit Batteries	Battery, CleanTech, Electronics, Hardware, Manufacturing, Renewable Energy	Helsinki, Southern Finland, Finland	3.634.195,00	01/12/2015	7,4	EASME - EU Executive Agency for SMEs
Calidity	Information Technology, Renewable Energy, Software	Tartu, Tartumaa, Estonia		12/12/2016	6,4	Startup Wise Guys
Carbyon	Energy, Renewable Energy, Semiconductor	Eindhoven, Noord-Brabant, The Netherlands	3.000.000,00	01/01/2019	4,3	Innovation Industries, Musk Foundation
Celcibus	Clean Energy, Energy, Renewable Energy	GÅtteborg, Vastra Gotaland, Sweden	393.477,00	01/01/2019	4,3	InnoEnergy
Circunomics	Battery, CleanTech, Information Technology, Recycling,	Mainz, Rheinland-Pfalz, Germany	2.728.958,00	01/06/2019	3,9	Next Mobility Labs, TES (Singapore), The Blue Minds Company, Peter Mertens, Kalodion GmbH

	Renewable Energy, Service Industry, Software					
Clever Solar Devices	Renewable Energy, Solar	Soria, Canarias, Spain	272.444,00	01/01/2019	4,3	SODICAL, Soria Futuro, Adolfo Martinez
Schijnerg	Big Data, Consulting, E-Commerce Platforms, Environmental Engineering, Management Consulting, Project Management, Renewable Energy	Amsterdam, Noord-Holland, The Netherlands	334.817,00	20/03/2017	6,1	Sagar Ratilal Bavarva
Cloud&Heat Technologies	Cloud Infrastructure, Data Center, Energy, Information Technology, Open Source, Renewable Energy	Dresden, Sachsen, Germany	17.913.203,00	01/11/2011	11,5	ETF Partners, Inven Capital, Sicav
Cohere	Environmental Engineering, Renewable Energy, Solar	Amsterdam, Noord-Holland, The Netherlands	337.914,00	01/01/2011	12,3	
Colabitoil Sweden AB	Energy, Fossil Fuels, Oil and Gas, Renewable Energy, Solar	Norrundet, Gavleborgs Lan, Sweden		01/01/2013	10,3	Almi Invest
Convion	Energy, Industrial, Power Grid, Renewable Energy, Smart Cities	Espoo, Southern Finland, Finland	50.000,00	01/01/2012	11,3	EASME - EU Executive Agency for SMEs, VNT Management, Springvest
Coolar	Energy, Health Care, Renewable Energy, Solar	Berlin, Berlin, Germany		01/01/2014	9,3	Chivas Venture
CSN Energy	Energy, Renewable Energy	Paris, Ile-de-France, France	6.676.600,00	31/07/2012	10,7	Goldman Sachs
Cycle	Clean Energy, CleanTech, Renewable Energy	Hamburg, Hamburg, Germany		01/01/2015	8,3	High-Tech Grunderfonds, IFB Innovationsstarter, Tim Bode
Demand Side Instruments	Agriculture, AgTech, Energy, Information Technology, Renewable Energy, Wireless	Caen, Basse-Normandie, France	4.898.402,00	01/01/2013	10,3	Gedia Energies et Services
DENS	Energy, Renewable	Helmond, Noord-Brabant, The	14.936.458,0	01/01/2018	5,3	Koolen Industries

	Energy	Netherlands	0			
Desolenator	CleanTech, Renewable Energy, Water, Water Purification	Maastricht, Limburg, The Netherlands		01/01/20 14	8,9	Sustainable Ocean Alliance, Pitch@Palace, EASME - EU Executive Agency for SMEs, AcceliCITY powered by Leading Cities
Dexter Energy Services	Energy Efficiency, Renewable Energy	Amsterdamsche Veld I, Drenthe, The Netherlands	2.383.554,00	01/01/20 16	7,3	Newion, PDENH
DizzitUp	Cryptocurrency, FinTech, Mobile Payments, Renewable Energy	Paris, Ile-de- France, France	382.437,00	13/11/20 18	4,5	Charles de Rudder, Business angels (Groupe of 11 Business angels), Bernard Euverte, DizzitUp Holding, Martin Colin
DS Meritve	Big Data, Information Technology, Renewable Energy, Software	Slovenska Bistrica, Slovenska Bistrica Commune, Slovenia	62.233,00	25/03/20 14	9,1	Ingenium Slovenia Fund
DualSun	Energy, Renewable Energy, Solar	Marseille, Provence-Alpes- Cote d'Azur, France	5.112.772,00	01/01/20 10	13,3	Bpifrance, Noria Invest, Paca Investissement, Provence Business Angels, OPALIC
Easy Smart Grid	Computer, Information Technology, Manufacturing, Renewable Energy, Software	Karlsruhe, Baden- Wurttemberg, Germany		01/01/20 14	9,3	EIT Digital Accelerator
Ecochain Technologies	Business Intelligence, Renewable Energy, Risk Management, Software	Amsterdam, Noord-Holland, The Netherlands	2.378.599,00	08/09/20 11	11,6	Volta Ventures
Ecoligo	Clean Energy, Impact Investing, Renewable Energy, Solar	Berlin, Berlin, Germany	13.801.185,0 0	01/01/20 16	7,3	FRV-X
EkoFachowcy.pl	Energy, Energy Efficiency, Environmental Consulting, Renewable Energy	Szczecin, Zachodniopomors kie, Poland		01/01/20 14	9,3	Xevin Investments, Protos Venture Capital
Elaphe Propulsion Technologies	Automotive, Electronics, Industrial, Manufacturing, Mechanical Engineering, Renewable Energy	Ljubljana, Ljubljana Urban Commune, Slovenia	17.282.672,0 0	26/10/20 06	16,5	InnoEnergy, EASME - EU Executive Agency for SMEs
Electrochaea	Energy, Energy Storage, Recycling, Renewable	Planegg, Bayern, Germany	41.153.560,0 0	01/01/20 10	13,3	Baker Hughes, btov Partners, KfW, Munich Venture Partners, Sirius Venture Partners

	Energy					
Elestor	Energy, Real Estate, Renewable Energy, Solar	Arnhem, Gelderland, The Netherlands	30.070.485,00	01/01/2014	9,3	InnoEnergy, Invest-NL, Equinor Ventures, Somerset Capital, Enfuro Ventures
ELVUSOMARMARES IS ELVOSOLAR	Energy, Renewable Energy, Solar	Bratislava, Bratislava, Slovakia (Slovak Republic)		14/10/2016	6,5	
Enco	Energy, Energy Efficiency, Energy Management, Renewable Energy, Solar	Firenze, Toscana, Italy	120.000,00	04/04/2022	1,1	IKIGAI, Techstars Berlin Accelerator
Enerbrain	Energy, Energy Efficiency, Energy Management, Facility Management, Information Technology, Renewable Energy, Smart Building	Torino, Piemonte, Italy	7.949.536,00	01/01/2015	8,3	GELLIFY, Azimut Libera Impresa, Iren SpA, AcceliCITY powered by Leading Cities, I3P
Energia	Consumer, Energy, Renewable Energy	Dublin, Dublin, Ireland	631.872,00	01/01/1999	24,3	
Energy Dome	Energy, Environmental Engineering, Renewable Energy	Lonate Pozzolo, Lombardia, Italy	22.000.000,00			360 Capital, CDP Venture Capital, Third Derivative, Barclays Sustainable and Impact Banking, Novum Capital Partners
Energy Floors	Construction, Energy, Lighting, Renewable Energy	Rotterdam, Zuid-Holland, The Netherlands	61.470,00			InnoEnergy
Enermeter	Energy, Information Technology, Renewable Energy, Software	Cologne, Nordrhein-Westfalen, Germany		01/01/2016	7,3	M-VC Europe Ltd.
Enerpoly	Energy, Energy Efficiency, Energy Storage, Renewable Energy	Stockholm, Stockholms Lan, Sweden	2.910.651,00	01/01/2018	5,3	European Innovation Council, Angel Investor, Propel Capital, Vinnova, Swedish Energy Agency
Enie.nl	Energy, Renewable Energy, Solar	Groningen, Groningen, The Netherlands		28/06/2013	9,8	Shell Ventures, APG Asset Management
Enpal	Energy, Environmental Consulting, Renewable Energy, Solar	Berlin, Berlin, Germany	782.629.290,00	01/02/2017	6,2	BlackRock, Berenberg, Heliad Equity Partners, Picus Capital, SoftBank Vision Fund
Enspired	Battery, Energy, Power Grid,	Vienna, Wien, Austria	8.508.186,00	01/01/2020	3,3	360 Capital, iInvest, Helen Ventures, Emerald



	Renewable Energy, Trading Platform					Technology Ventures, EnBW New Ventures
Crosslux	Manufacturing, Renewable Energy, Solar	Rousset, Provence-Alpes-Cote d'Azur, France	861.515,00	01/01/2011	12,3	Paca Investissement, 2C Invest
Enviria	Energy, Renewable Energy	Frankfurt, Hessen, Germany	23.670.258,00	01/01/2017	6,3	Redalpine, Alter Equity 3P, BNP Paribas D&A@veloppement, Galileo Green Energy
Ergosup	Biomass Energy, Innovation Management, Manufacturing, Renewable Energy	Malataverne, Rhone-Alpes, France	18.188.365,00	01/01/2012	11,3	Demeter, GO CAPITAL, Air Liquide ALIAD, Arkea Capital Investissement, Demeter Partners
E-upravnik d.o.o	Energy, Information Technology, Renewable Energy, Software	Ljubljana, Ljubljana Urban Commune, Slovenia		01/01/2016	7,3	ABC Accelerator
Evolution Energie	Energy, Information Technology, Renewable Energy, Robotics, Software	Paris, Ile-de-France, France		01/01/2010	13,3	SAP.iO, EIT Digital Accelerator
Exowave	Clean Energy, Energy, Energy Efficiency, Renewable Energy, Water	Esbjerg, Syddanmark, Denmark	3.504.567,00	01/01/2014	9,3	
Fahrenheit	Developer Platform, Energy, Energy Efficiency, Information Technology, Manufacturing, Renewable Energy	Halle, Sachsen-Anhalt, Germany		01/01/2002	21,3	UVC Partners, Munich Venture Partners, S-Beteiligungen
Fibersail	Information Technology, Renewable Energy, Sensor, Software, Wind Energy	Oporto, Porto, Portugal	6.370.612,00	19/08/2015	7,7	Rockstart, InnoEnergy, FORWARD.one, Caixa Capital, EASME - EU Executive Agency for SMEs
FlexiDAO	Energy, Renewable Energy, Software	Barcelona, Catalonia, Spain	7.317.395,00	01/01/2017	6,3	Google, InnoEnergy, Microsoft Climate Innovation Fund, SET Ventures, Agile Accelerator
Flowbox	Consumer Electronics, CRM, Electronics, Information Technology, Manufacturing, Renewable	Jesenice, Hlavni mesto Praha, Czech Republic				Rockstart

	Energy, Software					
Frequenz	Artificial Intelligence, Renewable Energy	Berlin, Berlin, Germany	12.790.253,00	01/01/2019	4,3	468 Capital, SET Ventures, Alexander Rittweger
Fritts	Renewable Energy, Software	Utrecht, Utrecht, The Netherlands		01/01/2015	8,3	Rockstart
Fundeen	Energy, Energy Storage, Environmental Consulting, Internet, Renewable Energy	Ávila, Castilla y Leon, Spain	139.839,00	01/01/2017	6,3	Adrián Bautista SÁnchez
Globe Green Energy	Biomass Energy, Clean Energy, Energy, Energy Efficiency, Renewable Energy	Stara Iwiczna, Mazowieckie, Poland	1.020.000,00	04/03/2020	3,1	ValueTech Seed, Narodowe Centrum Badan i Rozwoju
GLOG	Building Material, Energy, Green Building, Real Estate, Renewable Energy, Smart Building	Tartu, Tartumaa, Estonia	30.000,00	19/02/2013	10,2	Aleksey Zolotarev
Gouach	Environmental Consulting, Manufacturing, Renewable Energy	Bordeaux, Aquitaine, France	3.750.055,00	01/01/2018	5,3	Bpifrance, Rand Hindi, Bregea
Gramwzielone.pl	Energy, Energy Efficiency, Energy Management, Information Technology, Renewable Energy	Wroclaw, Dolnoslaskie, Poland		01/01/2012	11,3	
GreenDur Technologies	Battery, Energy, Manufacturing, Renewable Energy	Pamplona, Navarra, Spain	127.944,00			SODENA
Greeniant	Computer, Energy, Renewable Energy, Software	Rijswijk, Zuid-Holland, The Netherlands		01/01/2012	11,3	EIT Digital Accelerator
GreenPriz	Energy, Energy Efficiency, Renewable Energy	La Colle-sur-loup, Provence-Alpes-Cote d'Azur, France	291.032,00	01/01/2013	10,3	Starquest Capital
Greenway	Electric Vehicle, Renewable Energy, Transportation	Gdynia, Pomorskie, Poland	96.096.775,00	01/01/2011	12,3	
Gridco	Energy, Manufacturing,	RÅdding, Midtjylland,	12.000.003,00	01/01/2013	10,3	Syddansk Innovation

	Renewable Energy, Solar	Denmark	0			
GX Blocks Energy	Blockchain, Cryptocurrency, Financial Services, Renewable Energy, Wealth Management	Athens, Attiki, Greece		08/08/2020	2,7	Private Investor
H2SITE	Energy, Renewable Energy	Lois, Galicia, Spain	13.098.057,00	01/01/2019	4,3	Breakthrough Energy Ventures, Equinor Ventures, ENGIE New Ventures, Seed Capital Bizkaia, Tecnalia Ventures
Healix Clean Tech	CleanTech, Renewable Energy	Maastricht, Limburg, The Netherlands	11.722.793,00	01/01/2021	2,3	Netherlands Enterprise Agency, Tama, Active Capital Company, FibrXL, ABN AMRO Commercial Finance
Heliatek	Energy, Renewable Energy, Solar	Dresden, Sachsen, Germany	157.004.698,00	01/01/2006	17,3	High-Tech Grunderfonds, Engie, Bosch, BASF, RWE
Hero Balancer	Renewable Energy, Software	Amsterdam, Noord-Holland, The Netherlands		01/01/2015	8,3	Rockstart, Agile Accelerator
HH2E	Electronics, Industrial Manufacturing, Manufacturing, Renewable Energy	Hamburg, Hamburg, Germany	12.526.737,00	01/01/2021	2,3	Foresight Group, HydrogenOne Capital
HPS	Consumer Electronics, Energy, Manufacturing, Renewable Energy, Solar	Berlin, Berlin, Germany	3.503.105,00	01/01/2014	9,3	InnoEnergy, Wi Venture
HURBA	Electric Vehicle, Manufacturing, Renewable Energy, Transportation	Rome, Lazio, Italy	231.542,00	01/01/2017	6,3	Intesa Sanpaolo, Banco BPM
Hybrid Energy Storage Solutions	Clean Energy, Energy, Energy Efficiency, Energy Management, Energy Storage, Power Grid, Renewable Energy, Software	La Rinconada, Andalucia, Spain	3.554.372,00	16/04/2018	5,0	
Hydraloop.com	Recycling, Renewable Energy, Water Purification	Leeuwarden, Friesland, The Netherlands	3.742.121,00	01/01/2016	6,9	Crowdcube
HyMet Thermal Interfaces	Automotive, Battery, Consumer Electronics,	Riga, Riga, Latvia	55.627,00	13/02/2020	3,2	Commercialization Reactor

	Drones, Electric Vehicle, Electronics, Manufacturing, Renewable Energy, Telecommunications					
IBIS Power	CleanTech, Commercial Real Estate, Construction, Energy, Green Building, Property Management, Real Estate, Real Estate Investment, Renewable Energy, Smart Building	Eindhoven, Noord-Brabant, The Netherlands	2.257.908,00	13/11/2012	10,5	Urban Impact Ventures, EASME - EU Executive Agency for SMEs, Informal investors
INERATEC	Chemical Engineering, Energy, Environmental Engineering, Renewable Energy	Karlsruhe, Baden-Württemberg, Germany	22.626.021,00	01/01/2014	9,3	High-Tech Grunderfonds, Engie, Planet A Ventures, Extantia Capital, Safran Corporate Ventures
Ingelia	Clean Energy, Energy, Renewable Energy	Valencia, Comunidad Valenciana, Spain	630.048,00	01/01/2005	18,3	InnoEnergy, EASME - EU Executive Agency for SMEs
Inion software	Battery, Energy, Energy Efficiency, Information Technology, Renewable Energy, SaaS, Software, Solar	Vilnius, Vilniaus Apskritis, Lithuania	647.840,00	02/01/2019	4,3	Contrarian Ventures
InterGrid - Smart Social Energy	Energy Efficiency, Energy Management, Energy Storage, Renewable Energy	Pescara, Abruzzi, Italy	136.078,00	01/01/2017	6,3	Enry's Island
InvenSor GmbH	Customer Service, Electronics, Energy Efficiency, Renewable Energy, Solar	Berlin, Berlin, Germany	921.391,00	01/01/2010	13,3	bmp Ventures, Sirius Venture Partners
Kapacity.io	Renewable Energy, Smart Building	Helsinki, Southern Finland, Finland	125.000,00	01/01/2020	3,3	Y Combinator
Kocliko	Energy, Information Technology,	Paris, Ile-de-France, France		01/01/2016	7,3	

	Renewable Energy					
KRAFTWERK	Energy, Product Design, Renewable Energy	Weingarten, Baden-Württemberg, Germany	40.000,00	01/01/2006	17,3	Start-Up Chile
Kwota	Environmental Engineering, Renewable Energy	Tallinn, Harjumaa, Estonia	1.646.266,00	01/01/2021	2,3	Startup Wise Guys, Change Ventures, Lemonade Stand, Vestman Energia, Janis Krums
Labtrino	Energy, Real Estate, Renewable Energy, Solar	Stockholm, Stockholms Lan, Sweden		21/11/2017	5,4	
LastObject	Environmental Consulting, Renewable Energy	Copenhagen, Hovedstaden, Denmark	2.977.930,00	01/01/2018	5,3	Vækstfonden, Jacob Wolff-Petersen, The Footprint Firm
Lition Energie	Energy, Marketplace, Renewable Energy	Berlin, Berlin, Germany	3.534.485,00	27/12/2017	5,3	Private Investors, Investitionsbank Berlin
LaTherm	Automotive, Hospital, Manufacturing, Real Estate, Renewable Energy, Water	Deutsch, Sachsen, Germany	3.895.792,00	01/01/2007	16,3	High-Tech Grunderfonds
meo Energy	Energy, Online Portals, Renewable Energy, Software	Graz, Steiermark, Austria		07/02/2014	9,2	aws GrÃ¼nderfonds (aws Founders Fund), eQventure
Meva Energy	Energy, Environmental Consulting, Renewable Energy	Backa, Vastmanlands Lan, Sweden	1.213.359,00	01/01/2008	15,3	InnoEnergy
Microwaste	Health Care, Manufacturing, Renewable Energy	Asti, Piemonte, Italy		01/01/2016	7,3	I3P
Mini Green Power	Energy, Renewable Energy	HyÃ¨res, Provence-Alpes-Cote d'Azur, France		01/01/2014	9,3	
MyLight Systems	Environmental Consulting, Renewable Energy, Solar	Saint Priest, Limousin, France	9.298.948,00	01/01/2014	9,3	Elevation Capital Partners, Demeter
NabraWind Technologies	Energy, Environmental Engineering, Renewable Energy, Wind Energy	Pamplona, Navarra, Spain	2.433.942,00	01/01/2015	8,3	InnoEnergy, EASME - EU Executive Agency for SMEs, SODENA, Basarro 2005 SL, Barinaga & Alberdi
Namastree	Android, Manufacturing, Renewable	Capoterra, Sardegna, Italy	23.618,00	01/08/2017	5,7	Clhub

	Energy					
Naoden	Energy, Energy Efficiency, Manufacturing, Renewable Energy	Nantes, Pays de la Loire, France	1.291.666,00	01/01/2015	8,3	InnoEnergy, Investir&+
neoom ag	Clean Energy, CleanTech, Cloud Computing, Energy, Energy Storage, Renewable Energy	Freistadt, Oberosterreich, Austria	18.065.441,00	01/07/2018	4,8	Roman Scharf, Orchilla AG, Burning Issues Impact Fund, ALTERDYNE ENERGY, Blue Value
NestEgg Infrastructure	Crowdfunding, Energy, Renewable Energy	Heerlen, Limburg, The Netherlands		01/03/2017	6,2	APG Asset Management
Nettergy	Renewable Energy	Nettetal, Nordrhein-Westfalen, Germany		01/01/2017	6,3	Agile Accelerator
Nnergix	Analytics, Artificial Intelligence, Energy, Machine Learning, Renewable Energy	Barcelona, Catalonia, Spain	1.033.264,00	01/01/2013	10,3	Elemental Exceleator, InnoEnergy, VICTORIA Venture Capital SCR-Pyme S.A.
Nuventura	Renewable Energy	Berlin, Berlin, Germany	3.063.372,00	01/01/2017	6,3	IBB Ventures, Future Energy Ventures, ADB Ventures, Cycle Capital, Cycle Group
NXT Grid	Clean Energy, CleanTech, Electrical Distribution, Energy Efficiency, Energy Management, Power Grid, Renewable Energy, Solar	Amsterdam, Noord-Holland, The Netherlands	1.400.000,00	01/03/2019	4,2	Katapult, All On
Oceans of Energy	Energy, Marine Technology, Renewable Energy	Katwijk, Zuid-Holland, The Netherlands	493.824,00	01/01/2016	7,3	FMO, UNIIQ
OEEX	Communities, Energy, Renewable Energy, Social Media	Berlin, Berlin, Germany	82.656,00	01/01/2015	8,3	Plug and Play, Axel Springer Plug and Play Accelerator, SpeedUP! Europe
Ogre AI	Artificial Intelligence, Big Data, Cloud Computing, Energy Efficiency, Energy	Bucharest, Bucuresti, Romania	2.261.101,00	01/01/2021	2,3	MMC Ventures, Early Game Ventures

	Management, Machine Learning, Renewable Energy					
Omniflow	Internet of Things, Lighting, Renewable Energy, Smart Cities, Telecommunications	Porto, Lisboa, Portugal	4.162.081,00	01/01/2012	11,3	Wayra, Portugal Ventures, EASME - EU Executive Agency for SMEs, HCapital Partners, AcceliCITY powered by Leading Cities
Orthoponics	Environmental Engineering, Renewable Energy	Bologna, Emilia-Romagna, Italy				Startupbootcamp FoodTech Rome
Parkwind	Renewable Energy, Wind Energy	Leuven, Vlaams-Brabant, Belgium		01/01/2012	11,3	Korys
Peafowl Plasmonics	Energy, Renewable Energy	Uppsala, Uppsala Lan, Sweden	4.582.884,00	01/01/2018	5,3	Almi Invest, Industrifonden, Navigare Ventures
PEAK Wind	Energy, Environmental Consulting, Renewable Energy, Wind Energy	Aarhus, Midtjylland, Denmark		01/01/2017	6,3	
Peeeks	Electronics, Energy, Energy Management, Environmental Engineering, Internet of Things, Renewable Energy, Software	Delft, Zuid-Holland, The Netherlands		01/01/2015	8,3	Eneco Ventures, EIT Digital Accelerator
PersEE	Energy, Renewable Energy	Lyon, Rhone-Alpes, France		01/01/2013	10,3	EIT Digital Accelerator
Perto	Consumer Goods, Energy, Renewable Energy	Berlin, Berlin, Germany		01/11/2016	6,5	Agile Accelerator
Phononic Vibes	Renewable Energy	Milano, Lombardia, Italy	9.433.490,00	01/01/2018	5,3	360 Capital, SkyDeck Berkeley, CDP Venture Capital, Eureka Venture
PHYSEE Technologies	Architecture, CleanTech, Energy, Renewable Energy, Smart Building	Delft, Zuid-Holland, The Netherlands	14.652.119,00	01/01/2014	9,3	European Research Council, Phase2.Earth, EDGE Technologies, EASME - EU Executive Agency for SMEs, Dinko Valerio
Pili	Biotechnology, Commercial, Industrial, Renewable Energy	Paris, Ile-de-France, France	11.810.751,00	01/01/2015	8,3	Bpifrance, SOSV, Fashion For Good, Elaia, WiSEED

Pionierkraft	Energy, Energy Efficiency, Renewable Energy	Munich, Bayern, Germany	1.087.381,00	01/01/2019	4,3	InnoEnergy
powerdoo GmbH	Clean Energy, CleanTech, Energy, Renewable Energy, Software, Solar	Rostock, Mecklenburg-Vorpommern, Germany		01/08/2014	8,7	Agile Accelerator
POWERJames GmbH	Energy, Payments, Renewable Energy	Mannheim, Baden-Württemberg, Germany		16/06/2016	6,9	Agile Accelerator
PowerUp Fuel Cells OÜ	Clean Energy, Energy, Fuel Cell, Manufacturing, Renewable Energy	Tallinn, Harjumaa, Estonia	724.093,00	08/09/2016	6,6	
Powidian	Power Grid, Renewable Energy	Chambray-lès-tours, Centre, France	2.386.692,00	01/01/2014	9,3	Xerys
Pragma Industries	Renewable Energy	Biarritz, Aquitaine, France	571.149,00	01/01/2004	19,3	Capitole Angels, XMP Business Angels, Investment Arm, Finaqui
PV Stream	Renewable Energy, Software, Solar, Web Apps	Riga, Riga, Latvia	114.246,00	15/06/2017	5,9	
PVcase	B2B, Energy, Renewable Energy, Solar	Kaunas, Kauno Apskritis, Lithuania	23.576.369,00	01/09/2017	5,7	Contrarian Ventures, Elephant, Practica Capital
Quelle Energie	Consulting, Energy Efficiency, Renewable Energy	Paris, Ile-de-France, France	719.074,00	01/01/2008	15,3	Alven
QuinLogic	Enterprise Software, Manufacturing, Renewable Energy, Software	Aachen, Nordrhein-Westfalen, Germany	2.296.208,00	01/01/2008	15,3	KfW, Seed Fonds Aachen
re.alto energy	Cloud Data Services, Developer APIs, Energy, Renewable Energy	Brussels, Brussels Hoofdstedelijk Gewest, Belgium	6.256.215,00	05/08/2019	3,7	Elia System Operator
REDS SA	Contact Management, Energy, Power Grid, Renewable Energy, Software	Warszawa, Mazowieckie, Poland		01/01/2015	8,3	Giza Polish Ventures (GPV), Polish Institute for Research and Development
Reel Energy	Renewable Energy	Copenhagen, Hovedstaden, Denmark	2.398.692,00	01/01/2020	3,3	UVC Partners, Bo Wase, Christian Bach, North-East Family Office, The Footprint Firm
Resen Waves	Energy, Renewable Energy	Kongens Lyngby, Hovedstaden, Denmark	1.345.060,00	01/01/2010	13,3	West Hill Capital



resonanz energy	Renewable Energy	Berlin, Berlin, Germany	1.601.950,00	01/01/2019	4,3	
Reuniwatt	Big Data, Energy, Energy Management, Information Technology, Renewable Energy, Solar	Paris, Ile-de-France, France	1.240.471,00	01/01/2010	13,3	Compass Venture Capital, EASME - EU Executive Agency for SMEs
Minu	Energy, Renewable Energy	Zwijndrecht, Antwerpen, Belgium	27.000.000,00	09/04/2011	12,0	LeafHouse Financial
RIFT	Clean Energy, Renewable Energy	Eindhoven, Noord-Brabant, The Netherlands	1.993.007,00	01/01/2020	3,3	Breakthrough Energy Ventures, BOM, Rubio Impact Ventures, Energie transitie fonds Rotterdam
ROSI	Energy, Renewable Energy, Solar	Grenoble, Rhone-Alpes, France	233.431,00	01/01/2015	8,3	InnoEnergy
rvolt.	Clean Energy, Information Technology, Renewable Energy, Smart Home	Berlin, Berlin, Germany		09/01/2019	4,3	
Samara	CleanTech, Renewable Energy	Madrid, Madrid, Spain	2.103.899,00	01/01/2022	1,3	Seaya Ventures, Pelion Green Future
Saule Technologies	Clean Energy, Energy, Manufacturing, Renewable Energy, Solar	Warsaw, Mazowieckie, Poland		01/01/2014	9,3	H.I.S.Energy Holdings Co., Ltd
SeaTwirl	Energy, Manufacturing, Renewable Energy, Wind Energy	Göteborg, Västra Götaland, Sweden	338.849,00	01/01/2012	11,3	Almi Invest
SecondSol	E-Commerce, Energy, Marketplace, Online Auctions, Online Portals, Renewable Energy, Solar	Meiningen, Thuringen, Germany		09/02/2012	11,2	bm-t betriebsmanagement thuringen
Odersun	Manufacturing, Renewable Energy, Solar	Frankfurt An Der Oder, Brandenburg, Germany	90.475.590,00	14/11/2002	20,4	Virgin Green Fund, AGF Investments, Doughty Hanson & Co, Pacific Corporate Group, China Advanced Construction Materials
See You Sun	Environmental Consulting, Renewable Energy	Rennes, Bretagne, France	14.175.483,00	01/01/2017	6,3	Demeter, Banque des Territoires
shape Q	Energy, Renewable Energy, Trading	Amsterdam, Noord-Holland, The Netherlands		09/09/2020	2,6	

	Platform					
Sitemark	Aerospace, Drones, Renewable Energy, Software	Leuven, Vlaams-Brabant, Belgium	6.659.094,00	01/08/2016	6,7	Horizon 2020, Korys, Startupbootcamp Smart Transportation & Energy Berlin, Chroma Impact Investment
Smart Hydro Power	Energy, Manufacturing, Renewable Energy	Feldafing, Bayern, Germany	3.578.764,00	01/01/2010	13,3	High-Tech Grunderfonds, eCAPITAL ENTREPRENEURIAL PARTNERS, EASME - EU Executive Agency for SMEs
smartB	Energy, Energy Efficiency, Energy Management, Renewable Energy	Berlin, Berlin, Germany	5.445.993,00	01/01/2014	9,3	KfW, Phoenix Contact Innovation Ventures, Bilfinger Venture Capital
e3 computing	Construction, Data Center, Information Technology, Renewable Energy	Frankfurt, Hessen, Germany		01/01/2012	11,3	HR Ventures
SOLABLE S.A.S	Energy, Renewable Energy, Water	Lambesc, Provence-Alpes-Cote d'Azur, France	170.660,00	02/06/2015	7,9	InnoEnergy
SolarDuck	Energy, Marine Technology, Renewable Energy, Solar	Nijmegen, Gelderland, The Netherlands	4.388.656,00	14/04/2019	4,0	Katapult, Link Venture Capital
SolarNow	Clean Energy, Energy, Energy Storage, Renewable Energy, Solar	Nijmegen, Gelderland, The Netherlands	29.385.000,00	01/01/2011	12,3	responsAbility, United States Agency for International Development, Shell Global, Oikocredit International, SunFunder
Solarwave	Energy, Renewable Energy, Water, Water Purification, Wellness	Gävle, Gavleborgs Lan, Sweden		01/01/2009	13,9	Almi Invest, Midroc New Technology
SolarWorks!	Energy, Manufacturing, Renewable Energy, Solar	Rotterdam, Zuid-Holland, The Netherlands	4.635.420,00	01/01/2007	16,3	United States Agency for International Development, SunFunder, Persistent Energy Partners, EDP Renewables
Solavinea	Renewable Energy	Stuttgart, Baden-Wurttemberg, Germany	543.265,00	01/01/2016	7,3	
Solfy	Power Grid, Renewable Energy, Solar	Madrid, Madrid, Spain	408.304,00	01/01/2022	1,3	Bonsai Venture Capital SCR, Bcombinator, François Derbaix, David Tomás, Albert Ribera
Solnet Group	Energy, Renewable Energy, Solar	Helsinki, Southern Finland, Finland		01/01/2014	9,3	Verona Consulting

Solum	Energy, Renewable Energy	Sevilla, Andalucia, Spain	888.413,00	01/01/2019	4,3	Wayra, Capital Energy Quantum, Fondo Bolsa Social
Sponsh	Energy, Environmental Engineering, Renewable Energy, Water Purification	Leeuwarden, Friesland, The Netherlands	94.566,00			StartLife
NEBUMA GmbH	Environmental Engineering, Renewable Energy	Saarbrücken, Saarland, Germany		01/01/2014	9,3	Saarländische Wagnisfinanzierungsgesellschaft
suenä	Energy, Energy Storage, Renewable Energy, Software	Hamburg, Hamburg, Germany	1.253.507,00	06/10/2021	1,6	InnoEnergy, SpinLab - The HHL Accelerator, Vireo Ventures, Raakwark Kapitaal
Sunfire	Energy, Fuel, Manufacturing, Renewable Energy	Dresden, Sachsen, Germany	268.734.417,00	01/01/2010	13,3	Neste, Carbon Direct, Lightrock, Copenhagen Infrastructure Partners, Idinvest Partners
Sunhero	Renewable Energy, Solar	Berlin, Berlin, Germany	3.957.101,00	01/01/2021	2,3	Speedinvest, All Iron Ventures
SUNSPEKER	Advertising, CleanTech, Electric Vehicle, Outdoor Advertising, Renewable Energy, Smart Cities	Turin, Piemonte, Italy	119.432,00	01/01/2019	4,3	CDP Venture Capital
Svea Solar	Clean Energy, CleanTech, Energy, Energy Efficiency, Energy Management, Energy Storage, Internet of Things, Renewable Energy, Solar	Sollentuna, Stockholms Lan, Sweden	118.464.376,00	01/01/2014	9,3	Altor, Angel Investor, D-Ax Corporate Venture Capital
Sweetch Energy	Energy, Renewable Energy	Rennes, Bretagne, France	5.982.752,00	01/01/2015	8,3	EDF Renewable Energy, Demeter, GO CAPITAL, Future Positive Capital, Compagnie Nationale du Rhône - CNR
Sympower	Electrical Distribution, Energy, Energy Management, Renewable Energy, Smart Cities, Software	Amsterdam, Noord-Holland, The Netherlands	36.197.555,00	22/06/2015	7,8	Rockstart, Activate Capital Partners, Expon Capital, Prototron, Rubio Impact Ventures
Systovi	Manufacturing, Renewable Energy	Saint-herblain, Pays de la Loire, France		01/12/2008	14,4	ABAB (Atlantic Business Angels Booster)
Tau Group	Artificial Intelligence,	Torino, Piemonte, Italy	15.812.388,00	01/01/2014	9,3	Altana, Private Investor, Russian Direct Investment

	Automotive, Clean Energy, Electric Vehicle, Manufacturing, Renewable Energy, Transportation					Fund, Finindus
Tec Control	Renewable Energy, Solar	Rennes, Bretagne, France		01/01/2013	10,3	Starquest Capital
TechnologyCatalogue.com	Energy, Renewable Energy, Smart Cities	Delft, Zuid-Holland, The Netherlands	1.968.394,00	01/03/2018	5,2	Rockstart
Trueken	Energy, Renewable Energy	Berlin, Berlin, Germany		01/01/2018	5,3	Agile Accelerator
Tespack	Consumer Electronics, Energy, Renewable Energy, Software, Solar, Wearables	Espoo, Southern Finland, Finland	829.499,00	12/03/2015	8,1	Startupbootcamp, Wow Ventures, Startupbootcamp Smart City & IoT Amsterdam
The Mobility House	Electric Vehicle, Power Grid, Renewable Energy	München, Bayern, Germany	51.020.561,00	01/01/2009	14,3	Mercuria, Mercedes Benz, Mitsui & Co, Ventura Capital, Alliance Ventures
Think RE	Environmental Engineering, Renewable Energy	Leipzig, Sachsen, Germany		01/01/2019	4,3	SpinLab - The HHL Accelerator, TGFS - Technologiegründerfonds Sachsen
Thrust	Consumer Electronics, Drones, Renewable Energy	Vilnius, Vilniaus Apskritis, Lithuania	341.079,00	01/01/2018	5,3	Contrarian Ventures
Transition Aps	Environmental Consulting, Renewable Energy	Köpenhamn, Västernorrlands Lan, Sweden		01/01/2014	9,3	
Trovant Technology	Biotechnology, Environmental Engineering, Renewable Energy	Valladolid, Castilla y Leon, Spain	55.403,00	01/07/2018	4,8	Enagas Empreende, EASME - EU Executive Agency for SMEs, FACSA
Tuco Energie	Energy, Manufacturing, Renewable Energy, Solar, Water Purification	La Défense, Ile-de-France, France	16.923.542,00	01/01/2009	13,9	IDI Group, RAISE Impact
ucair GmbH	Drone Management, Drones, Energy, Renewable Energy, Solar	Berlin, Berlin, Germany		20/03/2017	6,1	Future Energy Ventures
Sol Avenir Energie	Clean Energy, Renewable Energy, Solar	Valence, Ile-de-France, France		01/01/1996	27,3	Limousin Business Angels

Upress	Computer, Energy, Renewable Energy, Solar	Ljubljana, Ljubljana Urban Commune, Slovenia	27.614,00	01/01/1907		LAUNCHub Ventures
Ecogriddy	Energy, Information Technology, Renewable Energy	Trento, Trentino-Alto Adige, Italy		01/05/2014	9,0	EIT Digital Accelerator
viamon GmbH	Energy, Environmental Consulting, Manufacturing, Renewable Energy	Kaiserslautern, Rheinland-Pfalz, Germany		10/06/2013	9,9	High-Tech Grunderfonds, Investitions- und Strukturbank Rheinland-Pfalz, Saarländische Wagnisfinanzierungsgesellschaft
Viridi Production	Renewable Energy, Semiconductor, Solar	Goor, Noord-Brabant, The Netherlands		29/10/2015	7,5	
Virunga Power	Energy, Natural Resources, Renewable Energy	Ebene, Bayern, Germany	14.640.000,00	01/01/2011	12,3	CDC Group, Ground Squirrel Ventures, Electrification Financing Initiative, Renewable Energy Performance Platform (REPP)
Visblue	Battery, Energy, Industrial Manufacturing, Renewable Energy	Aarhus, Midtjylland, Denmark	59.465,00	01/01/2014	9,3	EASME - EU Executive Agency for SMEs, Borean Innovation
VoltStorage	Battery, Clean Energy, Electronics, Energy, Energy Management, Energy Storage, Renewable Energy	Munich, Bayern, Germany	37.419.178,00	01/01/2016	7,3	Cummins, SOSV, HAX, InnoEnergy, Bayern Kapital
Vortex Bladeless	Manufacturing, Marketing, Renewable Energy	Las Rozas De Madrid, Madrid, Spain	120.000,00	01/01/2013	10,3	Techstars, Techstars Energy Accelerator in Partnership with Equinor
EnWake	Energy, Energy Management, Renewable Energy	Rotterdam, Zuid-Holland, The Netherlands		01/01/2014	9,3	EIT Digital Accelerator
W & nergy	Energy, Renewable Energy	Saint-nolff, Bretagne, France	8.514.935,00	01/01/2021	2,3	Eiffel Investment Group
Wavepiston	Energy, Energy Management, Renewable Energy, Water	Helsingør, Hovedstaden, Denmark	7.482.427,00	01/01/2009	14,3	EASME - EU Executive Agency for SMEs
Wellsun	Energy, Environmental Consulting, Renewable Energy, Solar	Delft, Zuid-Holland, The Netherlands	719.472,00	01/01/2013	10,3	

White Grid	Energy, Renewable Energy	Hamburg, Hamburg, Germany		01/01/2016	7,3	Agile Accelerator
WIND my ROOF	Energy, Energy Efficiency, Renewable Energy	Vincennes, Ile-de-France, France	220.548,00	01/01/2018	5,3	InnoEnergy, InterBiz
Wohnwagon	Energy, Manufacturing, Renewable Energy	Vienna, Wien, Austria	60.689,00	01/01/2013	10,3	InnoEnergy
WindAlly	Artificial Intelligence, Big Data, Enterprise Software, Machine Learning, Renewable Energy, Software, Wind Energy	Warsaw, Mazowieckie, Poland		10/03/2018	5,1	
Woltair	Apps, Renewable Energy, Solar	Prague, Hlavní město Praha, Czech Republic	20.403.080,00	01/03/2018	5,2	KAYA, The Westly Group, ArcTern Ventures, Presto Ventures, Movens Capital
X1 Wind	CleanTech, Environmental Consulting, Renewable Energy	Barcelona, Catalonia, Spain	4.577.551,00	01/01/2017	6,3	Horizon 2020, EASME - EU Executive Agency for SMEs
XFuel	Biofuel, Biomass Energy, Fuel, Renewable Energy	Dublin, Dublin, Ireland	9.006.535,00	01/01/2010	13,3	Yes VC, SOSV, HAX, AENU, Union Square Ventures
ZE Energy	Energy, Renewable Energy, Solar	Paris, Ile-de-France, France	4.496.878,00	01/01/2018	5,3	High-Tech Grunderfonds, Demeter, Ze Way Invest, EverWatt
Zeleros	Air Transportation, Manufacturing, Public Transportation, Renewable Energy, Transportation	Valencia, Comunidad Valenciana, Spain	9.525.494,00	01/11/2016	6,5	Plug and Play, Centre for the Development of Industrial Technology (CDTI), Angels Capital, Goldacre, Capgemini Engineering
Zensor	Environmental Engineering, Internet of Things, Predictive Analytics, Renewable Energy, Smart Cities	Brussel, Brussels Hoofdstedelijk Gewest, Belgium	705.232,00	29/08/2013	9,7	SHS Ventures
ZEWAY	Automotive, Renewable Energy	Paris, Ile-de-France, France	16.258.312,00	01/01/2019	4,3	Demeter, Allianz France, NCI Gestion

## 5.3. Waste management

Table 7. Startups in the category waste management

Organization Name	Industries	Headquarters Location	Total Funding Amount Currency (in USD)	Founded Date	Age in years	Top 5 Investors
Bin-e	Artificial Intelligence, CleanTech, Facility Management, Information Technology, Internet of Things, Recycling, Smart Building, Software, Waste Management	Poznan, Wielkopolskie, Poland	2.610.305,00	22/01/2009	14,3	InnoEnergy, LT Capital, AcceliCITY powered by Leading Cities, Altamira
Bioento Farm	Animal Feed, Farming, Recycling, Waste Management	Madrid, Madrid, Spain	700.000,00	21/04/2017	6,0	
Bonapp.eco	Waste Management	Bucharest, Bucuresti, Romania	915.229,00	01/01/2021	2,3	Roca X, Early Game Ventures, Impact Ventures Hungary, Up
Bower	CleanTech, Environmental Consulting, Gamification, Recycling, Waste Management	Stockholm, Stockholms Lan, Sweden	5.542.606,00	01/01/2019	4,3	Almi Invest, Verdane, Orkla Ventures, Blq Invest, Almi Invest GreenTech
Brusli	Food and Beverage, Food Processing, Waste Management	Vienna, Wien, Austria	1.023.051,00	01/01/2020	3,3	aws Fondsmanagement GmbH, Steep Ventures
Comerso	E-Commerce, Information Technology, Logistics, Management Information Systems, Retail, Waste Management	Agen, Aquitaine, France	2.489.752,00	25/10/2013	9,5	Bpifrance, AQUITI Gestion, Impact Partenaires
Cyrkl	B2B, Recycling, SaaS, Trading Platform, Waste Management	Prague, Hlavni mesto Praha, Czech Republic	2.154.061,00	18/10/2018	4,5	Tilia Impact Ventures
Ecotech AB	Commercial, Waste Management, Water Purification	Å–vertorneÅ–, Norrbottens Lan, Sweden		01/01/1990	33,3	Almi Invest, Partnerinvest Norr
EPSE	Waste Management, Water Purification	Ylöljörvi, Western Finland, Finland	3.119.790,00	01/01/2011	11,9	EASME - EU Executive Agency for SMEs
geoFluxus	Data Visualization, Geospatial, Information Technology, Mapping Services, Waste Management	Rotterdam, Zuid-Holland, The Netherlands	120.000,00	01/01/2020	3,3	Techstars, Arcadis City of 2030 Accelerator, Powered by Techstars
HOPSTOK	B2B, E-Commerce, Fashion, Information and Communications Technology (ICT), Marketplace, Retail Technology, Waste Management	Treviso, Veneto, Italy	158.440,00	01/06/2015	7,9	
GreenRoutes	Software, Waste Management	Rotterdam,	468.683,00	01/01/201	4,3	Graduate

		Zuid-Holland, The Netherlands		9		Entrepreneur Fund
Harold Waste	Waste Management	Angers, Pays de la Loire, France		01/01/2018	5,3	Fly Ventures, SAP.iO, AGORANOV
HeatMatrix	Energy Efficiency, Waste Management	Geldermalsen, Gelderland, The Netherlands	3.301.379,00	01/01/2008	15,3	SHIFT Invest, Sirius Venture Partners
Helgen Technologies	Agriculture, Consulting, Farming, Mining, Oil and Gas, Robotics, Software, Software Engineering, Waste Management	Shannon, Clare, Ireland	144.173,00	04/05/2021	2,0	
Inge Watertechnologies	Waste Management, Water, Water Purification	Greifenberg, Bayern, Germany	14.979.791,00	01/01/2000	22,9	Next47, Korys, Entrepreneurs Fund, Emerald Technology Ventures, BayTech Venture Capital
Kalea	Food Processing, Manufacturing, Organic Food, Waste Management	Stuttgart, Baden-Württemberg, Germany		01/01/2019	4,3	Kärcher New Venture
Le Floch Depollution	Oil and Gas, Waste Management, Water	Saint-martin-des-champs, Bourgogne, France	15.530.000,00	01/01/1998	25,3	CM-CIC Capital Prive, Ouest Croissance, Demeter Partners
LeafyMade	Green Consumer Goods, Recycling, Waste Management	Uppsala, Uppsala Lan, Sweden		05/02/2017	6,2	SLU Holding, Coop, Uppsala University
MaGie Creations	Food and Beverage, Waste Management	Nieuwe Pekela, Groningen, The Netherlands		01/01/2017	6,3	EIT Food
Matter	Waste Management	Oporto, Porto, Portugal				IKEA Bootcamp
MIWA	Food Processing, Packaging Services, Waste Management	Praha, Hlavní město Praha, Czech Republic	222.318,00	19/08/2015	7,7	Tilia Impact Ventures
MyCleanCity	Waste Management	The Hague, Zuid-Holland, The Netherlands		01/01/2016	7,3	World Startup Factory
Nordsense	Enterprise, Hardware, Internet of Things, SaaS, Software, Waste Management	Copenhagen, Hovedstaden, Denmark	12.625.000,00	01/01/2017	6,3	Bonfire Ventures, Vaekstfonden, New Enterprise Associates, Root Ventures, ACME Capital
Obeo	Food Processing, Recycling, Waste Management	Dublin, Dublin, Ireland	393.980,00	01/01/2014	9,3	Enterprise Ireland
OneThird	Information Services, Information Technology, Waste	Enschede, Overijssel,	1.804.876,00	01/01/2018	5,3	OostNL, SHIFT Invest



	Management	The Netherlands				
Orbisk	Artificial Intelligence, Consulting, Food Processing, Machine Learning, Waste Management	Utrecht, Utrecht, The Netherlands	4.497.965,00	15/03/2019	4,1	European Commission, PeakBridge, EIT Food, StartLife, DOEN Participaties
Pharmafilter	Waste Management, Water Purification	Amsterdam, Noord-Holland, The Netherlands		01/01/2009	13,9	Business Venture Partners
re3CUBE	Environmental Consulting, Environmental Engineering, Waste Management	Torino, Piemonte, Italy	147.103,00	01/01/2016	7,3	
RECUPYL	Battery, Environmental Engineering, Recycling, Waste Management	Domäne, Rhone-Alpes, France	18.687.662,00	01/01/1993	30,3	Idinvest Partners, Aloe Private Equity
ReLearn	Artificial Intelligence, CleanTech, Education, Software, Waste Management	Turin, Piemonte, Italy	203.425,00	21/01/2021	2,3	LVenture Group, B4i - Bocconi for innovation
Reviplast	Manufacturing, Recycling, Waste Management	Couzeix, Limousin, France		01/01/2008	15,3	Limousin Business Angels
RFND Technologies AB	Electronics, Manufacturing, Waste Management	Göteborg, Västra Götaland, Sweden		01/01/2014	9,3	Almi Invest
RoBird	Agriculture, Air Transportation, Drones, Oil and Gas, Robotics, Waste Management	Enschede, Overijssel, The Netherlands	4.841.788,00	11/12/2012	10,4	Cottonwood Technology Fund, EASME - EU Executive Agency for SMEs, AERIUM Analytics
Scanship Holding	Commercial, Waste Management, Water Purification	Lysaker, Akershus, Norway		01/03/2007	15,8	Reiten & Co
Seenons	Recycling, Software, Waste Management	Amsterdam, Noord-Holland, The Netherlands	6.935.703,00	01/01/2019	4,3	CapitalIT, Tablomonto Ventures
Senoptica Technologies	Advanced Materials, Food Processing, Sensor, Waste Management	Dublin, Dublin, Ireland	1.517.101,00	16/07/2019	3,8	Gokhan Guner
SOLAR OUTDOOR MEDIA GmbH	Energy Storage, Environmental Consulting, Internet of Things, Outdoor Advertising, Recycling, Service Industry, Smart Cities, Solar, Waste Management	Berlin, Berlin, Germany		17/06/2016	6,9	
Solwit eko	Software, Waste Management	Gdansk, Pomorskie, Poland	189.700,00	01/01/2015	8,3	Black Pearls VC
Strollme	Internet, Software, Waste Management	Munich, Bayern, Germany		01/01/2020	3,3	Edition.VC, Hanse Ventures
The Littery	Internet of Things, Waste Management	Riga, Riga, Latvia	141.058,00	16/04/2019	4,0	Buildit Accelerator, Envac Group
Tradefox	Business Intelligence, Marketplace, Mineral, Paper Manufacturing, Plastics and	Amsterdam, Noord-Holland, The	1.357.003,00	01/01/2012	11,3	Startupbootcamp, Erik Peterson, Startupbootcamp

	Rubber Manufacturing, Precious Metals, Trading Platform, Waste Management	Netherlands				Amsterdam, Dean Bartosh, Altaf Khan
Trinov	Software, Waste Management	Paris, Ile-de-France, France		01/01/2008	15,3	SAP.iO, Paris&Co Incubateurs
Tvarit	B2B, Consulting, Energy Efficiency, Industrial Automation, Manufacturing, Waste Management	Frankfurt, Hessen, Germany	3.005.220,00	01/03/2019	4,2	Futury Capital, Matterwave Ventures, BM H Beteiligungsgesellschaft Hessen
Unico	CleanTech, Environmental Consulting, Waste Management	Paris, Ile-de-France, France	1.479.398,00	01/01/2019	4,3	Seed4Soft, Holnest, Melting Capital
WasteBox	Consulting, Waste Management	Pescara, Abruzzi, Italy	145.799,00	13/09/2019	3,6	Enry's Island
WasteHero	Fleet Management, Hardware, Information Technology, Logistics, Machine Learning, Software, Waste Management	Copenhagen, Hovedstaden, Denmark	2.650.000,00	15/07/2017	5,8	Momenta, Anorak Ventures, Circles & Squares
Woola	Packaging Services, Waste Management	Tallinn, Harjumaa, Estonia	3.370.547,00	01/01/2019	4,3	Ragnar Sass, Kaarel Kotkas, Lemonade Stand, Atomico's Angel Programme, Bryan Meehan
Zero food waste - Now known as Orbisk	Waste Management	Utrecht, The Netherlands	92.000,00	15/03/2019	4,1	
Zerow	E-Commerce, Fashion, Retail, Waste Management	Scandicci, Toscana, Italy		01/04/2020	3,1	IKIGAI

## 5.4. Water purification

Table 8. Startups in the category water purification

Organization Name	Industries	Headquarters Location	Total Funding Amount Currency (in USD)	Founded Date	Age in years	Top 5 Investors
Add to Water	Food and Beverage, Water Purification	Vienna, Wien, Austria	488.369,00	01/01/2022	0,9	Ottakringer Getraenke
Adionics	Environmental Engineering, Mining, Water Purification	Thiais, Ile-de-France, France	8.491.590,00	01/01/2012	10,9	Bpifrance, Supernova Invest, Celeste Management
akvola Technologies	Industrial Engineering, Mechanical Engineering, Packaging Services, Water	Berlin, Berlin, Germany		01/01/2011	11,9	High-Tech Grunderfonds, FOUNDER.org, Bamac, Detlef Taprogge, VNG Innovation

	Purification					
AQUA.abib	Clean Energy, Water, Water Purification	Barcelona, Catalonia, Spain	1.447.675,00	01/01/2014	8,9	EASME - EU Executive Agency for SMEs
Aquaporin	Biotechnology, Industrial, Water Purification	Lyngby, Hovedstaden, Denmark	8.261.927,00	01/01/2005	17,9	EASME - EU Executive Agency for SMEs, Teknologisk Innovation AS, M. Goldschmidt Capital
Atium	CleanTech, Environmental Engineering, Water Purification	Göteborg, Vastra Gotaland, Sweden	362.625,00	14/08/2018	4,3	Chalmers Ventures AB
BiAqua	Commercial, Water, Water Purification	Badhoevedorp, Noord-Holland, The Netherlands		01/01/2009	13,9	ICOS Capital Management
Biosafelight	Energy, Food and Beverage, Food Processing, Water Purification	Orléans, Centre, France	40.000,00	11/11/2017	5,0	
BluAct Technologies	Water Purification	Zürich, Zurich, Switzerland	83.304,00	01/01/2016	6,9	EASME - EU Executive Agency for SMEs
Blue Foot Membranes	Chemical, Water Purification	Lommel, Limburg, Belgium	2.836.664,00	05/07/2017	5,3	Limburgse Reconversie Maatschappij, Dow Venture Capital, Qbic Fund, Innovation Fund
Blue Ocean Technology	Aquaculture, Machinery Manufacturing, Manufacturing, Water Purification	Bergen, Hordaland, Norway		09/05/2012	10,5	Momentum
Bufferblock	Water Purification	Rotterdam, Zuid-Holland, The Netherlands	81.868,00	01/01/2018	4,9	Navus Ventures, EASME - EU Executive Agency for SMEs
Clarity WTS	Water, Water Purification	Trondheim, Sor-Trondelag, Norway		25/08/2005	17,3	TeleVenture Management
CONDIAS	Chemical, Manufacturing, Mining Technology, Nanotechnology, Oil and Gas, Semiconductor, Water Purification	Itzehoe, Schleswig-Holstein, Germany	5.196.075,00	03/03/2001	21,8	i4g Investment
D-Sécurité Groupe	Industrial, Rental, Water Purification	Genas, Rhone-Alpes, France		01/01/2007	15,9	Garibaldi Participations
ecaVert	Local Business, Water Purification	Bussigny, Vaud, Switzerland	10.403,00	01/12/2010	12,0	Venture Kick
Ecofiltration Nordic	Chemical, Water, Water Purification	Solna, Stockholms Lan, Sweden		01/01/2016	6,9	Almi Invest
ECOLORO	Environmental Consulting, Water, Water Purification	Leeuwarden, Friesland, The Netherlands		01/01/2013	9,9	Doefonds Fryslân
Envotherm	CleanTech, Water, Water Purification	Haderslev, Syddanmark, Denmark		01/01/2007	15,9	Vækstfonden
Geetit	Energy, Energy Management, Facility Management, Service Industry, Water Purification	Bologna, Emilia-Romagna, Italy	1.167.148,00	01/01/2005	17,9	EASME - EU Executive Agency for SMEs

Genaq	Food and Beverage, Industrial Engineering, Mechanical Engineering, Water, Water Purification	Lucena, Andalucia, Spain	1.245.970,00	01/01/2008	14,9	EASME - EU Executive Agency for SMEs
H2ozone	Internet of Things, Water, Water Purification	Wicklow, Wicklow, Ireland	3.579.418,00	01/01/2011	11,9	Focus Capital Partners, Danu Partners, Henry Bolger
InOpSys	Recycling, Water Purification	Mechelen, Antwerpen, Belgium	1.092.913,00	01/01/2015	7,9	Gemma Frisius Fund, Innovation Fund
Legio Group	E-Commerce, Retail, Sales, Water, Water Purification	Reutlingen, Baden-Württemberg, Germany		01/01/2003	19,9	Vendis Capital
MARINOX	Biopharma, Health Care, Water Purification	Reykjavík, Gullbringusysla, Iceland	771.137,00	01/01/2011	11,9	Technology Development Fund
Mitte	Environmental Engineering, Hardware, Internet of Things, Water Purification	Berlin, Berlin, Germany	15.151.053,00	01/06/2015	7,5	FoodLabs, Happiness Capital, Danone Manifesto Venture, Döhler Ventures, Bitburger Ventures
Nanoseen	Energy, Nanotechnology, Water, Water Purification	Sopot, Pomorskie, Poland	450.000,00	01/01/2020	2,9	
Ocedis	Chemical, Manufacturing, Water, Water Purification	Trévoux, Rhone-Alpes, France		01/01/2003	19,9	Capital Transmission
Predect	CleanTech, Water, Water Purification	Huddinge, Stockholms Lan, Sweden		01/01/2006	16,9	Sting Capital
RC LUX / BEHRING	Commercial, Water, Water Purification	Meylan, Rhone-Alpes, France	1.185.154,00	01/01/2006	16,9	Rhone-Alpes Creation, Rhône Dauphiné Développement
SansOx	Agriculture, Industrial, Water, Water Purification	Helsinki, Southern Finland, Finland	154.168,00	01/01/2012	10,9	Loudspring, EASME - EU Executive Agency for SMEs
SensoVANN	Biotechnology, Health Care, Water, Water Purification	Horten, Vestfold, Norway	50.000,00	01/12/2013	9,0	EASME - EU Executive Agency for SMEs
Sofi Filtration	Industrial Engineering, Mechanical Engineering, Water, Water Purification	Espoo, Southern Finland, Finland	3.584.147,00	01/01/2011	11,9	Loudspring, Voima Ventures, EASME - EU Executive Agency for SMEs, Emerald Technology Ventures
SolarSpring	Water, Water Purification	Freiburg, Baden-Württemberg, Germany		01/01/2009	13,9	Fraunhofer Venture
Solvatten	Solar, Water, Water Purification	Stockholm, Stockholms Lan, Sweden	59.378,00	01/01/2008	14,9	EASME - EU Executive Agency for SMEs
The Ocean Cleanup	CleanTech, Marine Technology, Natural Resources, Water, Water Purification	Rotterdam, Zuid-Holland, The Netherlands	35.364.261,00	01/01/2013	9,9	Founders Fund, Lynne Benioff, Marc Benioff
uvoji by T.zic	CleanTech, Manufacturing, Public Safety, Water Purification	Clapiers, Languedoc-Roussillon, France	1.227.544,00	07/07/2016	6,3	WiSEED, WeLikeStartup, Provence Business Angels, Cédric Delorme

Waterdrop	Consumer Goods, Water, Water Purification	Osterreich, Steiermark, Austria	67.376.364,00	01/01/2016	6,9	Temasek Holdings, Founders Future, Bitburger Ventures, Romain Afflelou
Watersprint	Biotechnology, Energy, Environmental Consulting, Manufacturing, Nanotechnology, Water Purification	Lund, Skane Lan, Sweden	503.662,00	01/01/2013	9,9	

