

# Case Studies in Bioeconomy Education, Training and Skills Development

Case study sample: Blue City Circular  
Challenge

Netherlands

BTG



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# Blue City Circular Challenge

## 1 Abstract

The Circular Challenge is a format providing applied training in the circular economy, which combines sustainable business modelling with design. Teams of young professionals are linked to companies that have a waste stream. The young circular brains study this waste, to design a circular product. They have six weeks to come up with an idea, make a prototype and pitch a first draft of a business plan. Thus, participants are at the cradle of promising start-ups and innovations. The Circular Challenge is supervised by circular pioneers, design thinkers and financial experts.

## 2 Target Groups

Young professionals

## 3 Case Study Category

Bioeconomy education, training and retraining in entrepreneurial education

## 4 Training Provider

Blue City (Rotterdam)

## 5 Region

Netherlands

## 6 Language

Dutch and English

## 7 Objectives of the Educational Format

Entrepreneurship education

## 8 Final Objective of the Educational Format

For young professionals:

- acquire a variety of competencies, gain experience, etc.

For companies:

- obtain a design for a circular product
- discussions with young professionals and circular frontrunners
- opportunity to pioneer and apply changes transition
- opportunity to (enlarge the) network with other economic participants from the same sector
- access to external R&D resources and exposure to out-of-the-box ideas
- publicity

## 9 Scope and Context of the Educational Format

The Circular Challenges occur at Blue City, which is located in a former 12,000 m<sup>2</sup> subtropical swimming oasis in Rotterdam (NL). Blue City supports companies and organisations that are active in making their operations more circular. Blue City is an international icon of the circular economy, a national platform for circular entrepreneurs and a visible local accelerator that empowers circular entrepreneurs and inspires citizens.

Blue City is an incubator space in a former swimming pool, which caters to 'innovative companies looking to exchange their residual materials'. It began in 2015 when the Tropicana building was bought by impact investor Wouter Veer (ifund), and it focuses on waste and the concept of outputs from one company forming inputs for another. Blue City offers start-up entrepreneurs space and networks to develop their ideas. The space is known locally and used as an attraction for visitors and companies from all over the world (20,000 annual visitors), as a circular biolab where prototyping and experimenting can take place, as a provider of applied training in the circular economy for students and as an international resource sharing hub and an accelerator where entrepreneurs from the city and region can be connected to large companies and international businesses.

## 10 Specific Skills and Competencies Addressed

No exclusive focus on technical, valorisation or transversal competencies. The first category may be of the most relevance.

Aspects of various competencies are combined with the involvement of students and young professionals.

## 11 European Qualification Framework Level(s)

A range of EQF levels (University of Applied Sciences or higher, i.e. EQF 6 and higher)

## 12 Main Benefit to the Participants

It provides a nice opportunity to:

- gain experience,
- develop a network in the sustainability field and
- set up their own start-up company or join an existing company and work on circular products and solutions

## 13 Main Cost Categories Considered

Costs of organising the product design competition

Costs of supervision and mentorship (provided by circular pioneers, design thinkers and financial experts), both during and after the product design competition

## 14 Importance and Impact

Since the first edition in 2015, 12 or more circular challenges have been organised (several per year), and two are ongoing or will be soon started. To date, >50 companies have participated, and >50 product prototypes have been developed.

## 15 Relevance (of the Format)

It is highly relevant, as it is based on concrete, “useless” waste streams (biogenic or otherwise), which are converted into prototypes of valuable circular products. In principle, it is straightforward to copy the format to other regions/settings.

## 16 How can it Inspire BioGov.net? (Why was it designed in this specific way / what are the success factors?)

Students get to work directly with companies on concrete, real-life challenges. Coaching is provided by mentors from complementary fields of expertise.

## 17 Data Sources

### Online resources:

- [circularchallenge.nl](https://www.circularchallenge.nl)
- <https://www.bluecity.nl/circular-challenge/>
- <https://www.milieu-magazine.nl/wp-content/uploads/2022/06/Van-reststromen-naar-waardevol-producten.pdf>
- <https://www.bluecity.nl/about-bluecity/>
- Roos Altay, Relations Manager, [r.altay@bluecity.nl](mailto:r.altay@bluecity.nl)

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