Stories of use cases: Open data for the European Green Deal
Rules of the game

- The webinar will be recorded
- Please mute yourselves during the webinar
- Please reserve 3 min after the webinar to help us improve by filling in our feedback form
- For questions, please use the ClickMeeting chat.
## Agenda

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<td>Introduction to the series ‘Stories of use cases’ and the European Green Deal</td>
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<td>10.15 – 10.45</td>
<td>Presentation of work by 3 use cases</td>
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Introduction

Giuseppe Ascone Modica
Knowledge Management, data.europa.eu

Matthias Böck
Environ-Mate

Arnout Sabbe
Geofluxus

Nikola Damjanovic
MyBioEUBuddy
Introducing ‘Stories of use cases’

Sharing experiences from the Use Case Observatory, EU Datathon and data.europa.eu use case repository to share how initiatives contribute to major global priorities

Stories help grasp opportunities and showcase their potential and the impact of open data on innovative business opportunities

Delve into the green transition across Europe through 3 open-data-driven initiatives responding to environmental challenges
The European Green Deal

A European Green Deal (europa.eu)
The European Green Deal is about improving the well-being of people. No one will be left behind.

**The EU will:**

- Become climate-neutral by 2050
- Protect human life, animals and plants, by cutting pollution
- Help companies become world leaders in clean products and technologies
- Help ensure a just and inclusive transition

**WHAT WILL WE DO?**

- **ENERGY**
  Decarbonise the energy sector

- **BUILDINGS**
  Renovate buildings, to help people cut their energy bills and energy use

- **INDUSTRY**
  Support industry to innovate and to become global leaders in the green economy

- **MOBILITY**
  Roll out cleaner, cheaper and healthier forms of private and public transport
Our panellists
Get to know: Environ-mate

Matthias Böck
Marketing input for business output.
Environ-mate

https://environ-mate.feld-m.de

Partner: EU
Author: FELD M
Date: 16/03/2023
Why

In 2019, about half a year after Fridays for Future was started, we decided to participate in the EU Datathon and to find a solution that would help tackle climate change.

Climate is changing and we already feel the consequences

Overwhelming amount of sources of information

A new generation of politically active people

Educate pupils about climate change and means to act.
Who

We set out as a team of four and are/were part of FELD M.

FELD M is a Munich-based consultancy for digital products and strategies founded in 1999 with today 80 people.

Team:
1 x Data Architect
2 x Data Scientists
1 x Working Student
What

We followed a Design Thinking approach to come up with our idea and tried to integrate our target group as much as possible throughout the development. One time-consuming aspect, which we did not account for in the beginning, was the creation of content (explanations).

Our Vision

- Explain cause and effect of climate change to pupils (10-14 years old)
- Interactive and intuitive platform, which uses scientific data
- Learn and act principle
- Open-source platform to allow development of own stories (framework)

Be the platform to go to for recent and reliable information on climate change for your own country and the whole of Europe.
In the intro we briefly explained the effect of climate change and its cause.
For your selected country we showed how the carbon emissions are distributed across different sectors.
We also showed the emissions per country to put it in relation within an European context.
Demo – Carbon Levels over Time

Using the projections from the EEA to show the development over time
Demo – Sea Level Rise

We showed for specific regions in Europe how the sea level rise might effect them.
Giving some tips on how to act as an individuum and the consequences for our future if we do not act now
Learnings

• Also with a small team and a small amount of time we can contribute to global problems

• Finding a sustainability strategy for the solution is difficult and needs additional time, effort and especially funding

• Open data is key for many initiatives and needs dedicated funding to be made accessible to the public

• Today we probably must less think about the younger generation since they are aware and are mostly educated on this topic but in the aging societies of Europe (median age above 44 years in 2022), politics are mostly driven by the older generations.
Get to know: Geofluxus

Arnout Sabbe
Linking open data for a less linear economy
Who we are

Amsterdam Institute for Advanced Metropolitan Solutions

Collaboration MIT, TUDelft, Wageningen University w/ City of Amsterdam

Chair of Environmental Technology & Design

20 FTE

Focus on circular economy and urban metabolism studies

Spin-off company TUDelft and AMS Institute

10 FTE

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 688920 and grant agreement no 776751
+ data cleaning
+ geolocation
+ geospatial data enrichment
+ machine learning for the free text field interpretation
+ semantic reclassification of (waste) materials
89% of all waste comes from companies. Only 11% is household waste.

[Metropoolregio Amsterdam, 2019]
60% of all waste can be processed in a better way.

[Metropoolregio Amsterdam, 2019]
70% of all waste is produced by only 7% of all companies. [Metropoolregio Amsterdam, 2019]
Yearly more than 9 million kms are travelled to transport waste from Amsterdam to processors around the country.

[Metropoolregio Amsterdam, 2019]
Waste → Economic activities → Product → Raw material
Verbeteren van leveringszekerheid van producten, componenten en materialen
+ “Improving security of supply of products, components and materials”

+ “Reducing the environmental impact of material use”

+ “Developing forward-looking European economy”
More questions

arnout@geofluxus.com
Get to know: MyBioEU Buddy

Nikola Damjanovic
Problem

The average EU bio production is 7.5%.

1. The Farm to Fork program aims to increase bio production to 25% by 2030.

2.日益增长的对健康食品的需求。
Proposed Solution

**Interactive visualizations**
Dashboards on EU regions based on geo, agro, climate and bio indicators

**Clustering ML models**
Unsupervised and supervised ML models for identifying clusters

**Data-driven recommendation**
Know-how of "buddy" regions (projects, initiatives, practices...).
Research & Methodology

How do we determine cluster for each region?

- Unsupervised Machine Learning model (clustering) of EU regions.
- Supervised machine learning model for classification of non-EU regions (EU candidate countries).

How do we determine bio-buddy?

- Recommendations are based on the properties of “Very High” and “High Bio” regions from the same cluster (qualitative analysis and benchmarking).
Resource Page

Main Data Sources:

- Eurostat
- European Commission
- data.europa.eu
- FiBL
- ECOZEP
- bioregions.eu
- EGDI
- AppBio
Short analysis on clusters

Climate indicators in January, April, July and October:

- Temperature by clusters (°C)
- Humidity by clusters
- Number of rainy days by clusters
Key Challenges

- Data collection activities on EU level cover only part of our data requirements
- Low level of data governance in EU candidate countries
- Data availability on regional level
- Unified bio projects data base not existing
NEXT STEPS

1. **Improve quality of recommend.**

2. **UI/UX Improvements**

3. **Crossing data with EU fundings for bio-based innovation and bioeconomy**

4. **Structuring list of bio projects**

5. **Collaboration with regional and local governments and biological institutes**
Thank You!

@mybioeubuddy

Let food be thy medicine and medicine be thy food.

HIPPOCRATES
Panel discussion

Leave your questions in the chat!
The panel discussion starts with a few structured questions

1. How does your initiative make an impact on environmental challenges?

2. What open data do you use for your initiative?

3. How do you gather your necessary data and what are the (quality) standards you maintain?
The panel discussion starts with a few structured questions

4. What challenges have you faced when founding your initiative?

5. What tips do you have for the open data community to start their own initiatives?

6. Questions from the audience
Stay up-to-date on our 2023 activities!

• **Webinar series** dedicated to the Open Data Maturity dimensions – *coming soon*

• **Webinar series** 'Stories of use cases' continued – *coming soon*

• Ad-hoc **activities on data spaces and open data** – *coming soon*
Please provide your feedback!
Thank you