

SPEAKERS

From Insight to Impact: How Shared Data Drives Smarter Decisions in Food Waste Reduction



Capwell F. Echo

Scientific Researcher at
ILVO



Sissi Koronaïou

Project Manager at Inlecom



Erik Cornelisse

Senior Project Manager at
TNO



Saša Štraus

Senior Expert at ITC –
Innovation Technology
Cluster & DIH AGRIFOOD

Zero Waste Dataspace

Version 2.0

Connecting the food supply chain through shared data and collective intelligence.
Breaking down silos to create synergized solutions for zero food loss and waste.

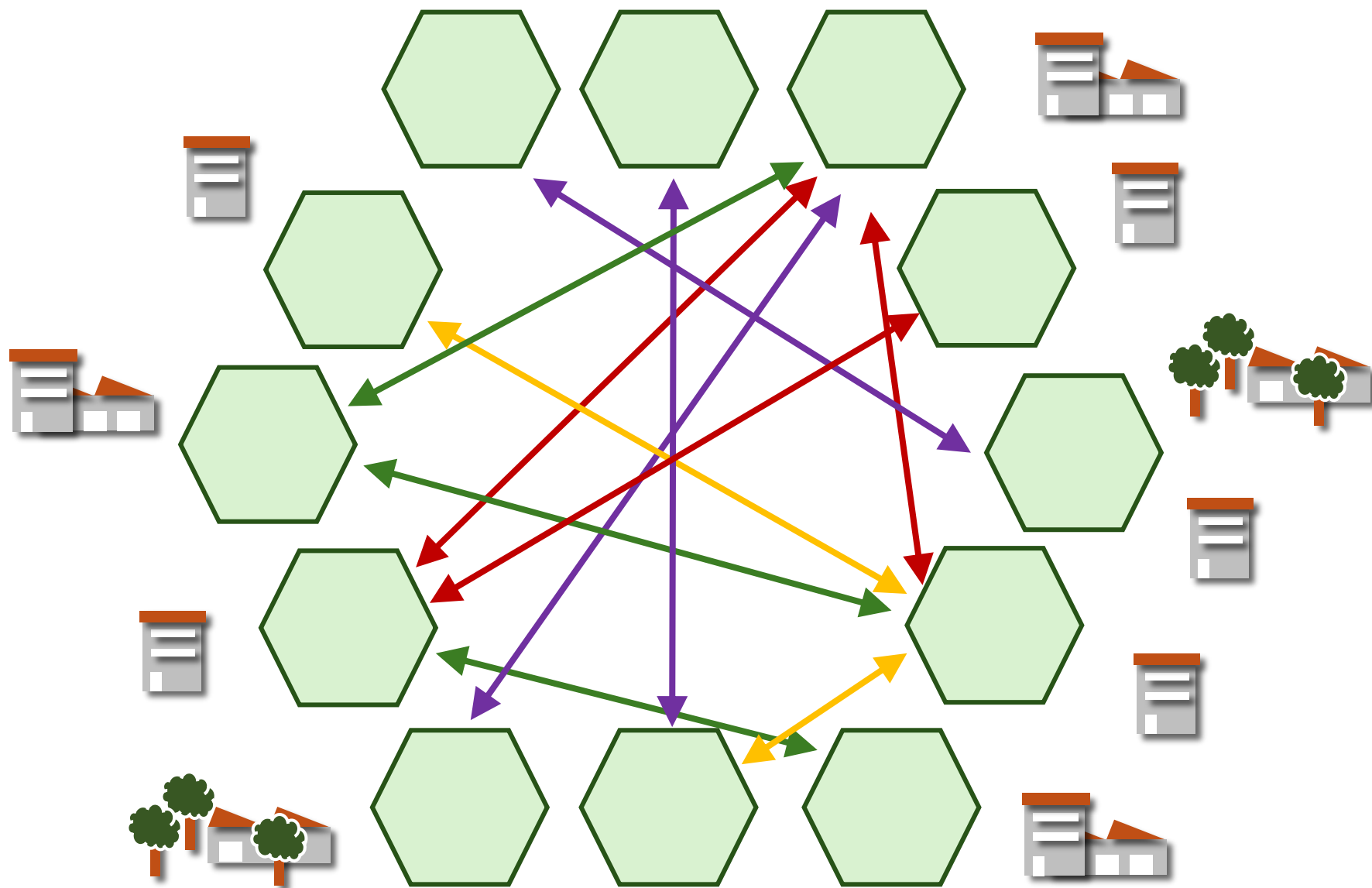
→ Explore Demo

📘 Learn More

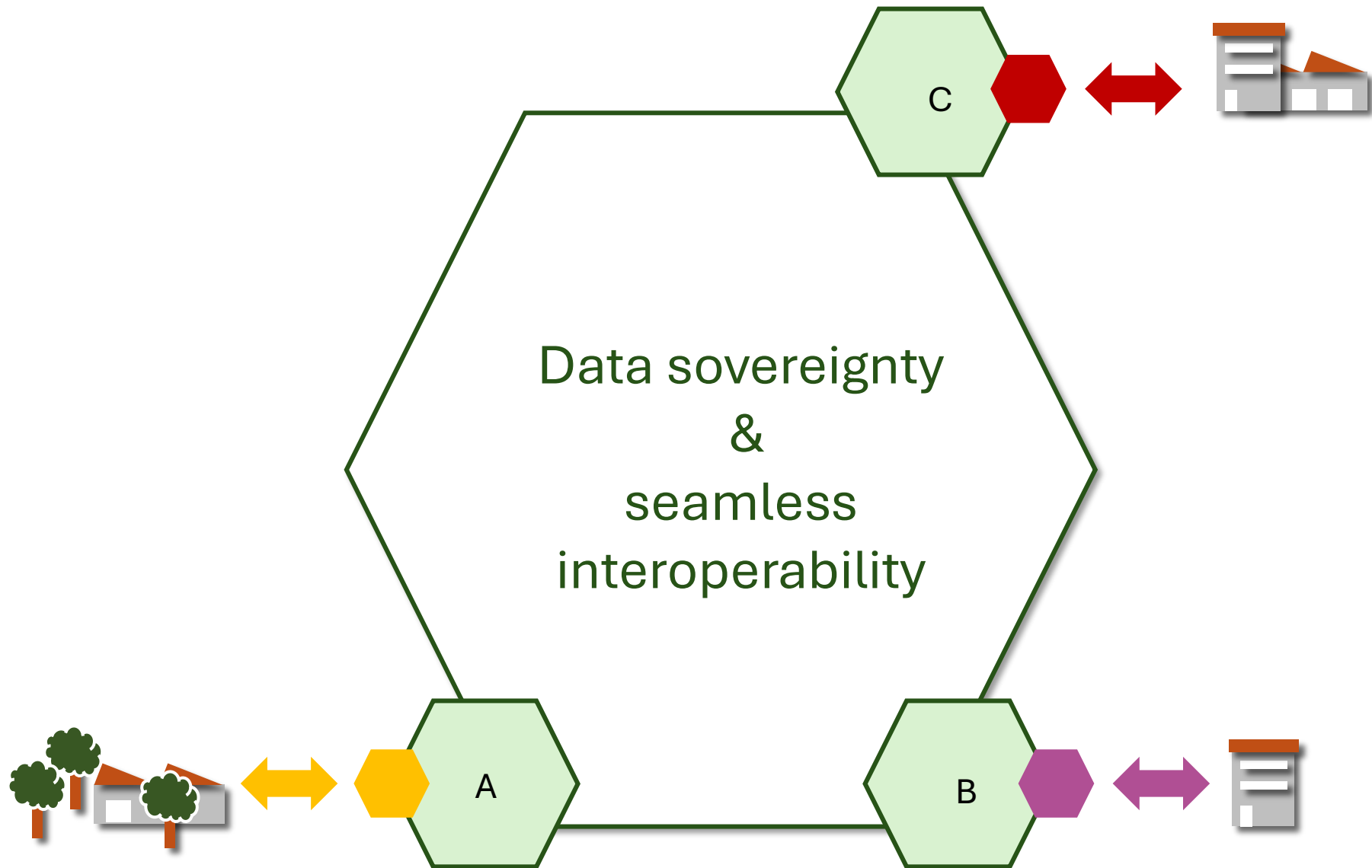


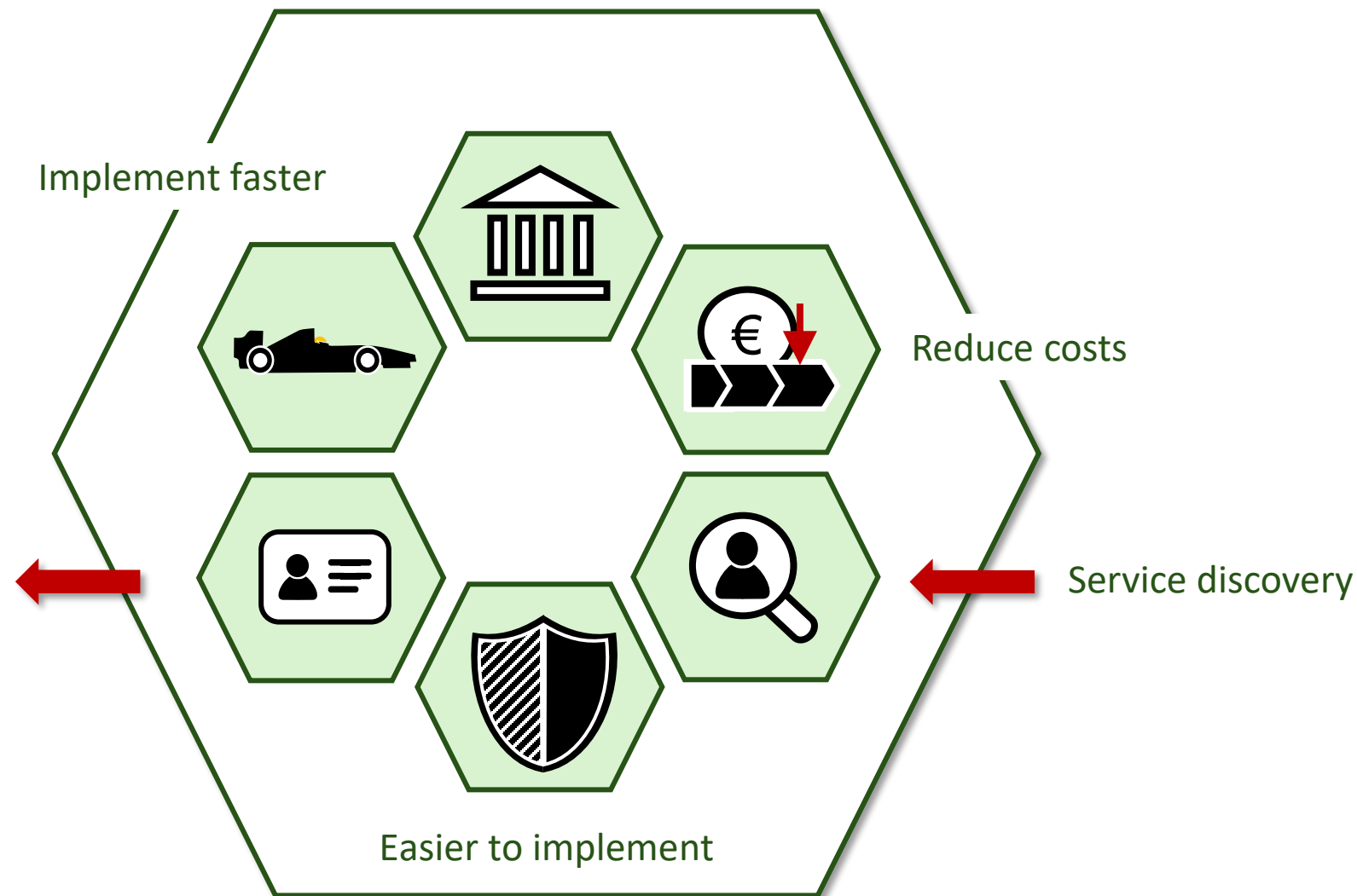
“

Connecting systems is time consuming,
requires specialized knowledge and
cost a lot of money and resources.









ZeroW dataspace



Zero Waste Dataspace

Version 2.0

Connecting the food supply chain through shared data and collective intelligence.
Breaking down silos to create synergized solutions for zero food loss and waste.

→ Explore Demo

🔗 Learn More



Explore the Network

Access live data endpoints from different participants in the ZeroW federated catalog

What is a Federated Catalog?

A federated catalog connects multiple independent data providers while each maintains control over their own resources. In ZeroW, participants across the food supply chain can share and retrieve data offerings through their own endpoints.

Each endpoint represents a different organization - farmers, processors, distributors, and food banks - working together to reduce food waste.

Key Benefits:

- ✔ Decentralized data control
- ✔ Scalable network growth
- ✔ Cross-organizational collaboration

Live Catalog Explorer

Choose an endpoint to explore live data from ZeroW participants:

FLW Monitor

FLW Monitor

SILL1 - OPLW Monitor

<https://sill1.zerow.dataspace.es/control-plane>

🔗 Explore API Endpoint

🔗 Live APIs: These are real endpoints from active ZeroW participants.

ZEROW ZeroW

Dataspace v2.0

Creating synergised solutions for food loss and waste problems through shared data, knowledge, and collective intelligence.

Architecture

Built on:

[Database Protocol](#)

Using:

[Decentralized Claims Protocol](#)

Source:

[Available on GitHub](#)

Contact

Project Team:

Erik Cornelisse

Maarten Kollenstijn

Wimien Damsa

ZEROW

ZeroW Apps

Explore what the Zero Waste Data Space has to offer to help Europe reduce food waste.

1 Get Credential > 2 Choose App > 3 Start Using

Get Started

First, retrieve your credentials to access the ZeroW platform



Retrieve Credential

Gain your access to the ZeroW Data Space services

GET CREDENTIALS →



HOME

🏠 Home

📄 Retrieve app credential

Retrieve Credential

To retrieve a credential for the TSG Wallet app, fill in the form to proceed.

Credential Type

Email

☐ I agree to the [terms and conditions](#)

Send Email

📘 Why do I need this credential?

A credential can be used to authenticate yourself in the dataspace. You can use it to access services, prove your identity, and interact with components in the dataspace.

The TSG Wallet app allows you to manage your credentials securely and conveniently on your mobile device.

Use your credential to present the validation of your identity and use it to log in to the data space services.

Download TSG Mobile Wallet

Get the app on your mobile device by scanning the QR code



🍏 App Store

Scan with your iPhone

🍏 Download



▶️ Google Play

Scan with your Android device

▶️ Download

Explorer Applications

Explorer applications for example data from the Chorizo project and SILL1



Chorizo Explorer

Explorer for data from the Chorizo project

[ACCESS PLATFORM →](#)



SILL1 FLW Data Explorer

Dashboard on 0FLW data from SILL1

[ACCESS PLATFORM →](#)

SILL4 Applications

End-to-end solutions for agricultural management, food processing, and distribution to minimize waste across the supply chain.



SILL4 - Farmer

Manage and monitor agricultural activities



SILL4 - Mobile Press

Mobile application for managing press operations



SILL4 - Foodbank

Manage food donations and distributions



CHORIZO Actions Explorer

ZeroW demo application

View the Food Loss and Waste reduction activities collected by the Chorizo Project by clicking on one of the categories below.

Click on the Chorizo logo for more information. Use the Home button below to return to the ZeroW Data Space.

This application demonstrates how information can be found and shared in an easy and controlled way by making use of standardized protocols for a data space. The CHORIZO project is a sister project of the ZeroW project with the same mission but complementary goals.

The CHORIZO project

CHORIZO is a project co-funded by Horizon Europe programme that aims to improve the understanding between social norms, consumer behaviours and economic actor decisions and FLW generation and use this knowledge to improve the effectiveness of decision-making and engagement of food chain actors, towards zero food waste.

The project's main goal is to address existing research gaps and will use its outcomes to deliver and advance innovations helping actors to engage more effectively in food waste prevention and reduction activities.



You need access to the ZeroW Data Space to continue

To view the activities, you need to be logged in to the ZeroW Data Space. Please click the button below to log in.

Log in

After login, you can return to this application and explore the activities.

ZeroW dataspace



Zero Waste Dataspace

Version 2.0

Connecting the food supply chain through shared data and collective intelligence.
Breaking down silos to create synergized solutions for zero food loss and waste.

→ Explore Demo

🔗 Learn More



Explore the Network

Access live data endpoints from different participants in the ZeroW federated catalog

What is a Federated Catalog?

A federated catalog connects multiple independent data providers while each maintains control over their own resources. In ZeroW, participants across the food supply chain can share and retrieve data offerings through their own endpoints.

Each endpoint represents a different organization - farmers, processors, distributors, and food banks - working together to reduce food waste.

Key Benefits:

- ✔ Decentralized data control
- ✔ Scalable network growth
- ✔ Cross-organizational collaboration

Live Catalog Explorer

Choose an endpoint to explore live data from ZeroW participants:

FLW Monitor

FLW Monitor

SILL1 - OPLW Monitor

<https://sill1.zerow.dataspace.es/control-plane>

🔗 Explore API Endpoint

🔗 Live APIs: These are real endpoints from active ZeroW participants.

ZEROW ZeroW

Dataspace v2.0

Creating synergised solutions for food loss and waste problems through shared data, knowledge, and collective intelligence.

Architecture

Built on:

[Database Protocol](#)

Using:

[Decentralized Claims Protocol](#)

Source:

[Available on GitHub](#)

Contact

Project Team:

Eric Cornelisse

Maarten Kollenstijn

Wimien Damsa

ZEROW

Explore the Network

Access live data endpoints from different participants in the ZeroW federated catalog

What is a Federated Catalog?

A **federated catalog** connects multiple independent data providers while each maintains control over their own resources. In ZeroW, participants across the food supply chain can share and retrieve data offerings through their own endpoints.

Each endpoint represents a different organization - farmers, processors, distributors, and food banks - working together to reduce food waste.

Key Benefits:

- ✓ Decentralized data control
- ✓ Scalable network growth
- ✓ Cross-organizational collaboration

Live Catalog Explorer

Choose an endpoint to explore live data from ZeroW participants:

FLW Monitor



FLW Monitor

SILL1 - 0FLW Monitor

<https://sill1.zerow.dataspac.es/control-plane>

 Explore API Endpoint

 **Live APIs:** These are real endpoints from active ZeroW participants.





HOME

Dashboard

Own Catalog

Dataplanes

Federated Catalog

DATASPACE PROTOCOL

Catalog Request

Negotiations

Transfers

Control Plane - Own Catalog

This page displays the Catalog that is available through your control plane. It shows the datasets that are part of your catalog.

SILL1

SILL1 connector

Parsed View ☒

Publisher

did:web:sill1.zerow.dataspac.es

SILL1 explorer

Current version: v0.1.0

HTTP

1 Policies

References

All versions ▾



Demo application



SILL1 FLW Data Explorer

SILL1 FLW Data Explorer

Explore Food Loss and Waste (FLW) data from the SILL1 dataset. This interactive dashboard shows data across different stakeholders in the food supply chain including consumers, farmers, processors, and households.

Select a stakeholder category below to view detailed charts and analytics about food waste patterns, GHG emissions, and other metrics.

The data demonstrates quantitative insights into food waste across the supply chain, helping identify key areas for intervention.

Data Categories

Consumer: Food waste and GHG emissions data from consumers

Farmer: Storage loss, technological losses, and vegetable waste at farm level

Processor: Food waste and GHG emissions from processing facilities

Household: Individual household food disposal data with categories and reasons



Stakeholder Categories

Overview

Comprehensive overview of food loss and waste across all data sources and stakeholders

78

total data points

7

meat/fish entries

Supply-chain

Food waste from farmers, processors, and consumers in the commercial supply chain

27

waste entries

15

GHG entries

Households

Individual household and domestic food disposal patterns including all waste categories

19

disposal records

3

disposal reasons





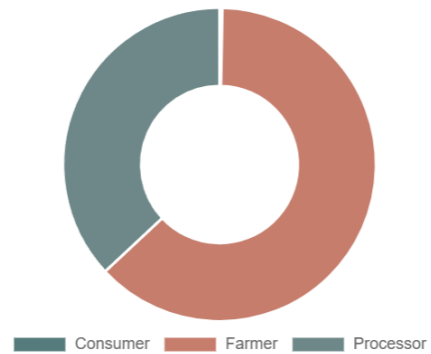
SILL1 FLW Data Explorer

[← Back to Categories](#)

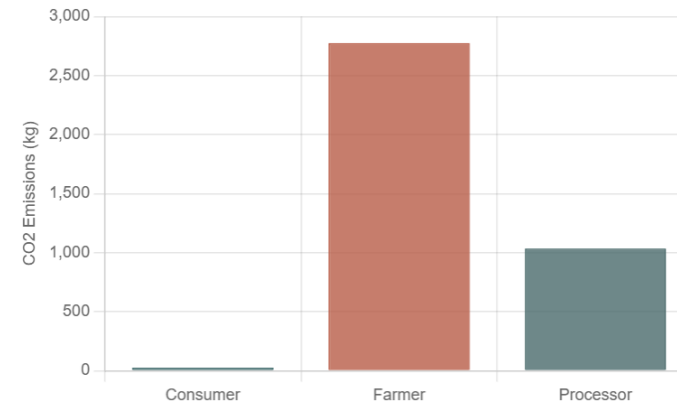
Overview Data Analysis

Total Food Waste by Stakeholder

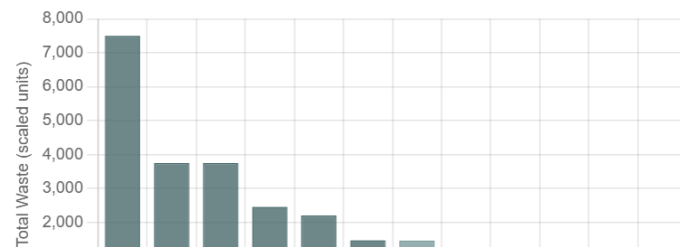
Distribution of Food Waste (kg)



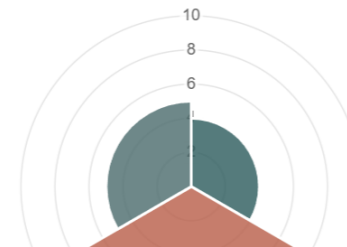
GHG Emissions by Stakeholder



Food Waste by Product Type (All Categories)



Supply Chain vs Household Waste Patterns



HOME

🏠 Dashboard

📖 Own Catalog

📖 Dataplanes

📖 **Federated Catalog**

DATASPACE PROTOCOL

📖 Catalog Request

🗨 Negotiations

↔ Transfers

📖 **Chorizo actions explorer**

🔗 Current version: v0.1.0 [HTTP](#)

🛡 1 Policies

🔗 References

🕒 All versions ▾

Chorizo



Demo application

📖 **Farmer**

🔗 Current version: v0.1.0 [HTTP](#)

🛡 1 Policies

🔗 References

Abstract model [🔗](#)

Version model [🔗](#)

🕒 All versions ▾

Farmer





CHORIZO Actions Explorer

ZeroW demo application

View the Food Loss and Waste reduction activities collected by the Chorizo Project by clicking on one of the categories below.

Click on the Chorizo logo for more information. Use the Home button below to return to the ZeroW Data Space.

This application demonstrates how information can be found and shared in an easy and controlled way by making use of standardized protocols for a data space. The CHORIZO project is a sister project of the ZeroW project with the same mission but complementary goals.

The CHORIZO project

CHORIZO is a project co-funded by Horizon Europe programme that aims to improve the understanding between social norms, consumer behaviours and economic actor decisions and FLW generation and use this knowledge to improve the effectiveness of decision-making and engagement of food chain actors, towards zero food waste.

The project's main goal is to address existing research gaps and will use its outcomes to deliver and advance innovations helping actors to engage more effectively in food waste prevention and reduction activities.



Categories

Primary production

14 activities

Activities related to the initial stage of food production, including farming, fishing, and harvesting.



Processing and manufacturing (including valorisation)

45 activities

Actions involving the transformation of raw agricultural products into food items, and valorisation of by-products.



Transportation

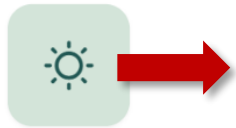
2 activities

Initiatives focused on the movement of food products through the supply chain.



SILL4 Applications

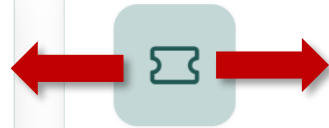
End-to-end solutions for agricultural management, food processing, and distribution to minimize waste across the supply chain.



SILL4 - Farmer

Manage and monitor agricultural activities

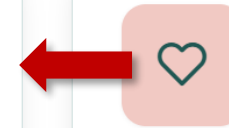
[ACCESS PLATFORM →](#)



SILL4 - Mobile Press

Mobile application for managing press operations

[ACCESS PLATFORM →](#)



SILL4 - Foodbank

Manage food donations and distributions

[ACCESS PLATFORM →](#)

HOME

[Dashboard](#)
[Own Catalog](#)
[Dataplanes](#)
[Federated Catalog](#)

DATASPACE PROTOCOL

[Catalog Request](#)
[Negotiations](#)
[Transfers](#)

Control Plane - Own Catalog

This page displays the Catalog that is available through your control plane. It shows the datasets that are part of your catalog.

Product Catalog

Product Catalog connector

Parsed View ☒

Publisher

did:web:productcatalog.dsp.zerow.dataspace.es

Product Catalog


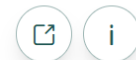
Current version: v0.1.0

[HTTP](#)

1 Policies

References

[Abstract model](#)
[Version model](#)
[Format](#)

All versions 


Link to semantic model



Specifications

Codelists

Validator

Issues

Groups

People

Organizations

Accounts

Business rules

Message mappings

Uploads

Ontology



FoodFacts datamodel :

Available information for the example service: ZeroW Product database based on information from the Open Food Facts database. (<https://world.openfoodfacts.org/>)

Version	Publication date	Documentation	See also
FoodFacts datamodel v0.0.1 draft	2024-07-23		

Graph view

Tree view

Export ttl

Release notes

Acknowledgements

0.0.1

The objective of the ontology is to provide an example for educational purposes for using the ZeroW Vocabulary hub and the use of Service Self-descriptions as part of the demo application Product Database.

The ontology is derived by ChatGPT 4o from Open Food Facts API as described here: [API Fields - Open Food Facts wiki](#), [Data fields - Open Food Facts](#) and world.openfoodfacts.org/data.

It is not the intention to provide an ontology for Open Food Facts, but merely to have a similar ontology available to support the workshops.

When it becomes available, this ontology will be replaced with the official Open Food Facts ontology.

Note:

For operational use of Open Food Facts information, please use the corresponding API which can be found here: world.openfoodfacts.org/data





Specifications

Codelists

Validator

Issues

Groups

People

Organizations

Accounts

Business rules

Message mappings

Uploads

Specifications

Vocabularies

public

ONTOLOGY



ZeroW Ontology

ZeroW Demo

v2-clean-customized

Graph view • Tree view •

Export ttl

ONTOLOGY

DEMETER AIM - AgriProduct

The DEMETER AgriProduct is one of the agri profiles of DEMETER AIM. This profile was created by...

v3.0

Graph view • Tree view •

Export ttl

ONTOLOGY

DEMETER AIM - AgriPest

The DEMETER AgriPest is one of the agri profiles of DEMETER AIM. This profile was created by...

v3.0

Graph view • Tree view •

Export ttl

Data models

public

JSON SCHEMA



OpenFoodFacts Product JSON Schema

The JSON Schema used to represent an OpenFoodFacts product in the SILL9 data...

ONTOLOGY



FoodFacts datamodel

ZeroW Product Demo database based on the Open Food Facts.

v0.0.1 - 2024-07-23

Graph view • Tree view •

Export ttl



CTRL+K



ZeroW
ontology
library



Service data model description



Zero Waste Dataspace

Version 2.0

Connecting the food supply chain through shared data and collective intelligence.
Breaking down silos to create synergized solutions for zero food loss and waste.

→ Explore Demo

📘 Learn More



More information



zerow-project.eu



linkedin.com/company/zerow-project



twitter.com/ZeroW_EU

ZEROW

From Insight to Impact

How Shared Data Drives Smarter Decision in Food Waste Reduction

The CHORIZO Food Loss and Waste Datahub and
Insighter



Challenges Addressed by the CHORIZO FLW Datahub & “Insighter”

Fragmented Data

FLW data is scattered, unstructured, or not stored accessibly.

Slow or Ineffective Decision-Making

Stakeholders lack timely, relevant information to act on FLW issues.

Limited Access to Information

Existing data is hard to retrieve or share across actors in the food supply chain.

Inadequate Collaboration Across the Food Supply Chain

Efforts to prevent and reduce food waste are siloed and uncoordinated.

Lack of Actionable Intelligence

Raw data is not transformed into insights that inform decision-making.

✓ What the CHORIZO FLW Datahub & “Insighter” does

📁 Centralized Data Storage

- ✓ Easy Access to Resources
- ✓ Cross-Sector Collaboration

🤖 AI-Enhanced Usability

- ✓ Business Intelligence Integration
- ✓ Decision Support Tools

The screenshot displays the CHORIZO Project website. The header features the CHORIZO PROJECT logo, navigation links for Home, Datasets, and About, and a search bar. The main content area has a green background with a collage of food items. A large banner reads "Welcome to the Food Loss and Waste datahub". Below this is a "Search datasets" section with a search bar containing the text "E.g. food waste". A red rectangular box highlights the "ChatFLW" section, which is a chat interface. It includes a "Step 1 Choose your persona" section with buttons for Researcher, Policy Maker, Consumer, Restaurant/Hotel Manager, and NGO/Food Bank Manager. Below these buttons is a large green input field. To the right of the input field is a vertical sidebar with "Step 2 Ask your question". At the bottom of the ChatFLW section is a green button labeled "Submit question".



User Profiles for the CHORIZO Datahub

For whom

Choose one of the following user profiles to guide your search. Unsure? No problem, explore all our datasets!

SCIENTIFIC COMMUNITY



Access our carefully curated datasets, detailed reports, and insightful analyses. Perfect for researchers, academics, and data scientists, these resources are designed to help you explore new ideas and enhance further research.

FOOD SERVICES



Whether you are working in hospitality or managing HORECA operations, boost your culinary business and address food waste with practical insights, and the latest data in our reports.

NGOs



Drive impactful change with resources that put data at the heart of your mission. Our reports, datasets, and newsletters help NGOs and consumer associations enhance food distribution, support communities, and reduce food waste.

EDUCATIONAL INSTITUTIONS



Access reports, datasets, and communication tools to encourage innovation, support sustainability, and create smarter curricula.

HOUSEHOLDS



Make confident everyday decisions based on clear insights. Our practical reports and resources help you tackle daily challenges and reduce household food waste.

EXPLORE ALL DATASETS



Not sure where to start? Dive into our complete collection of datasets to discover valuable insights.



Impact So Far



Collaboration with FLW Initiatives

Partnerships formed with food loss and waste projects, including other EC initiatives.



Knowledge Sharing

Ongoing exchange of insights and expertise among stakeholders and user communities.



Data Sharing Agreements

Established plans and agreements to facilitate data uploads, improving content diversity on the datahub.



Expanded Content Reach

Increased variety and representation of FLW-related datasets from diverse sectors and geographies.

Upscaling / Impact Strategy

How does it scale?

Phased roadmap:

pilots → national → EU-wide scaling

- Modular design
- IT integration
- Supports EU compliance (CSRD, SDG 12.3)

What makes it impactful?

- Data-driven FLW reduction
- Research → viable solutions
- Supports circular economy goals

Business model

- Subscription-based consulting services
 - SaaS/API-based AI integration
- Co-financing with policy and industry

Value for stakeholders

- Retailers: Inventory planning + cost-saving
- Policy makers: compliance + reporting
- NGOs/Food Banks: surplus recovery
- SMEs: Low-cost, actionable insights

Visit our datahub and
Insighter, explore
the resources, leave us
your email for a short
feedback survey to help
us improve the platform

CHORIZO FLW Datahub



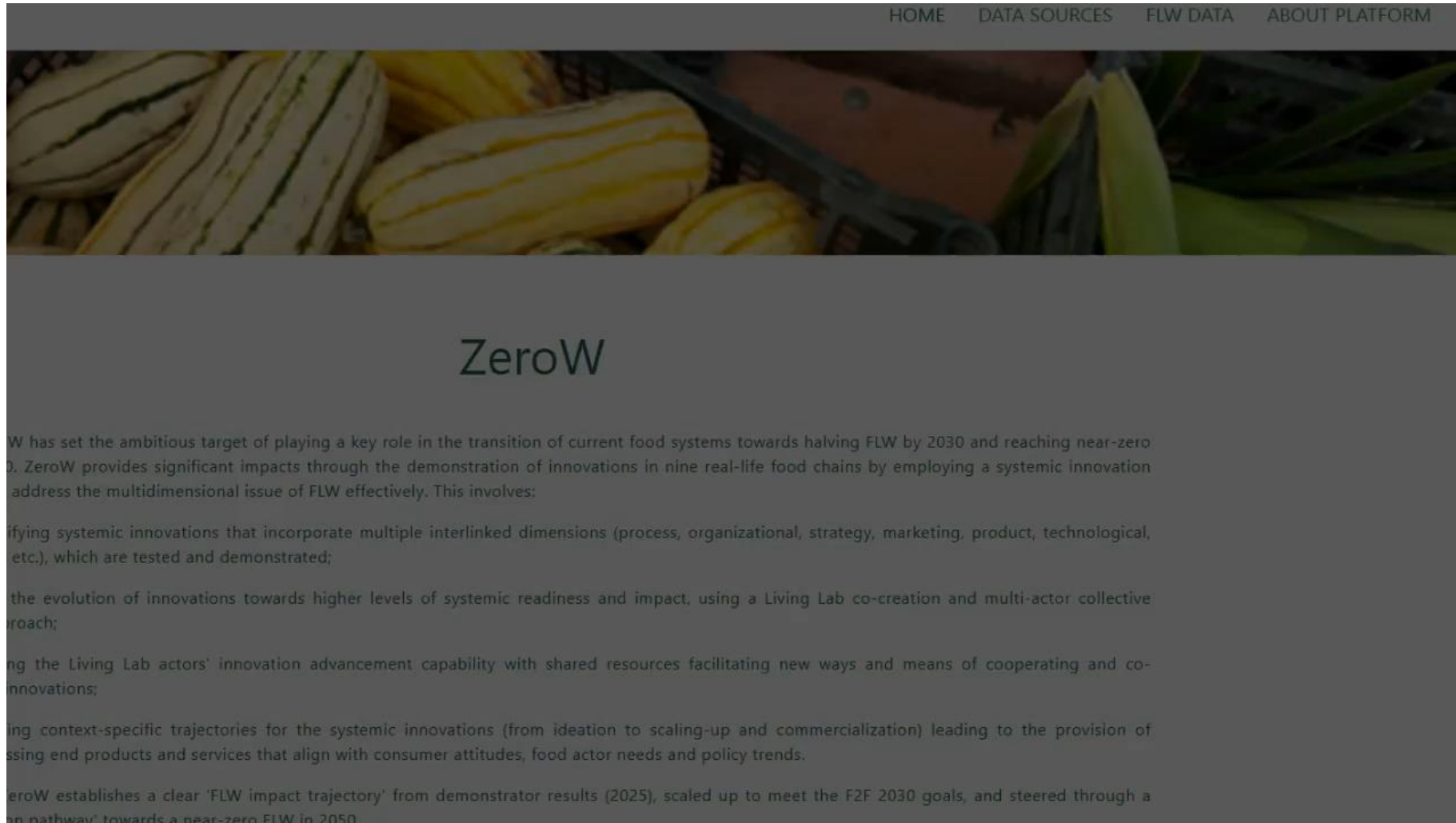


ZeroW FLW Platform – Data in Action

Turning FLW data into insights

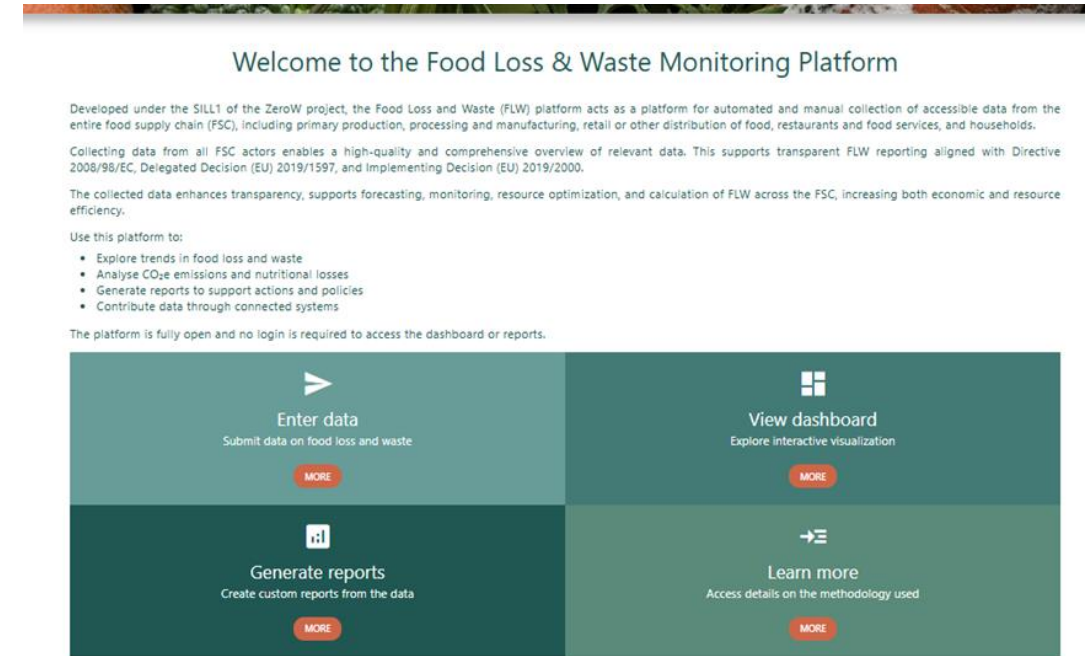
ZeroW SILL 1, FLW Platform

See it in Action:



What you just saw

- Covers the full value chain (Slovenia & Romania pilots)
- Compliance ready (SDG 12.3, EU (2019/1597 and 2020).
- Secure data sharing through DIH AGRIFOOD Data Spaces and linked to ZeroW Data Space

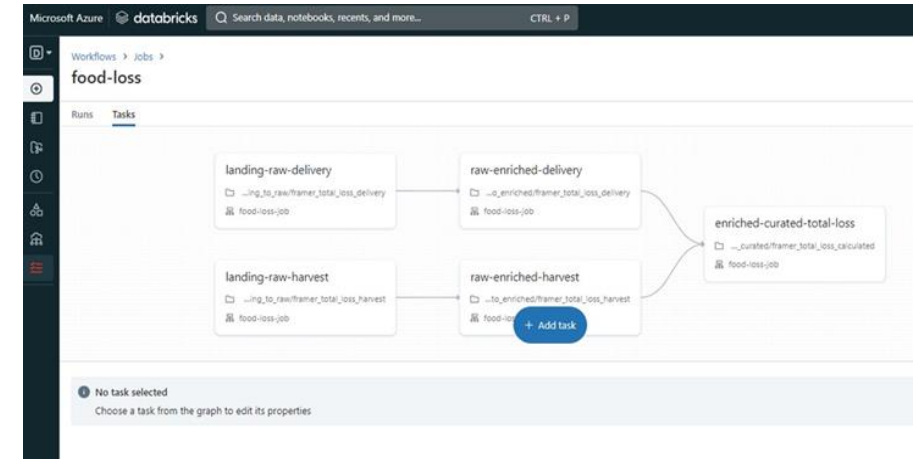


+ Demonst

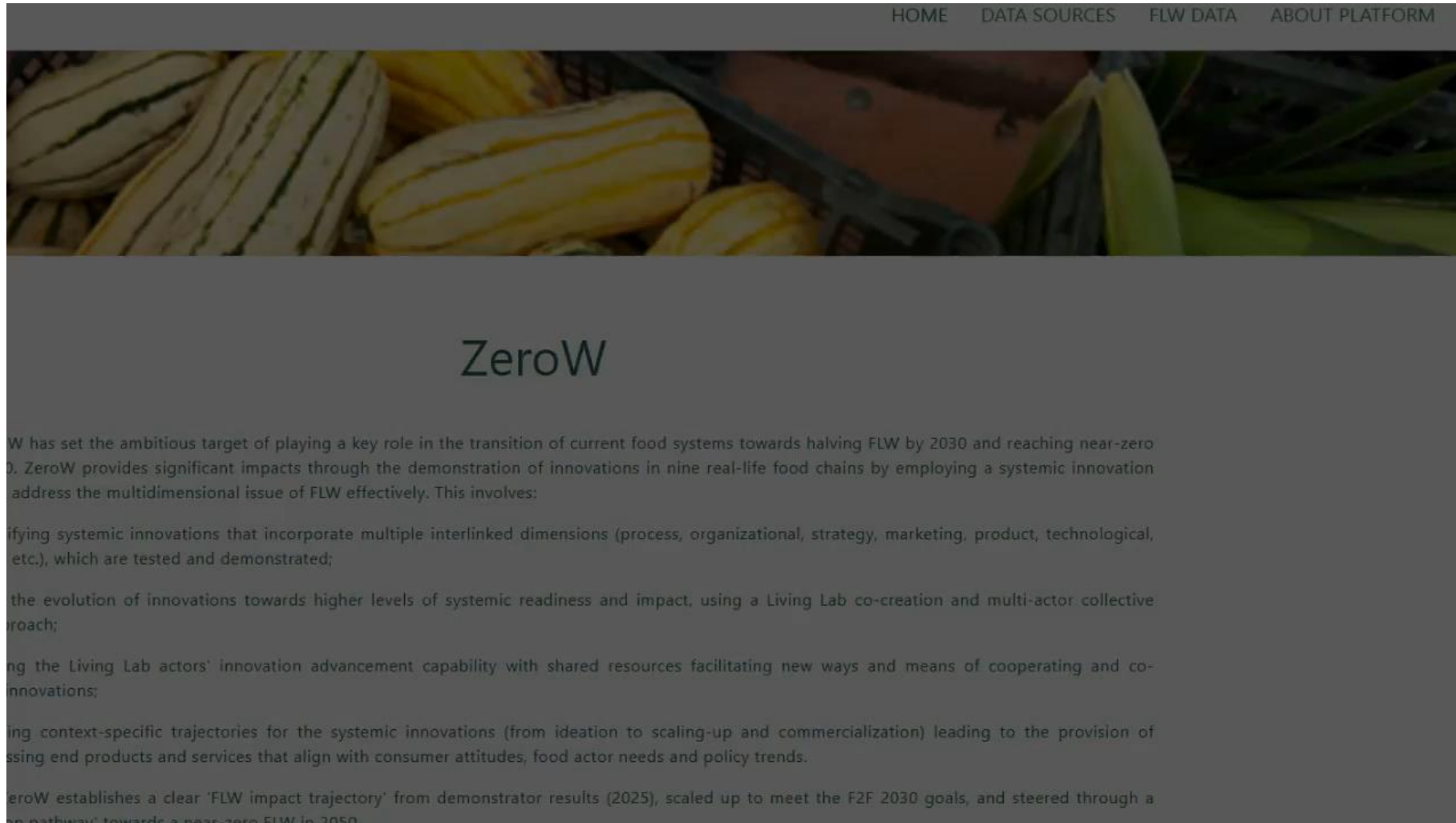


Why it Matters (Value Proposition)

- Track FLW & KPIs in real time
- Enable evidence-based decision making
- Enhance transparency & benchmarking
- Support reporting, certification, and policy input
- Supports both manual and automated data collection.
- Connect to the wider ecosystem

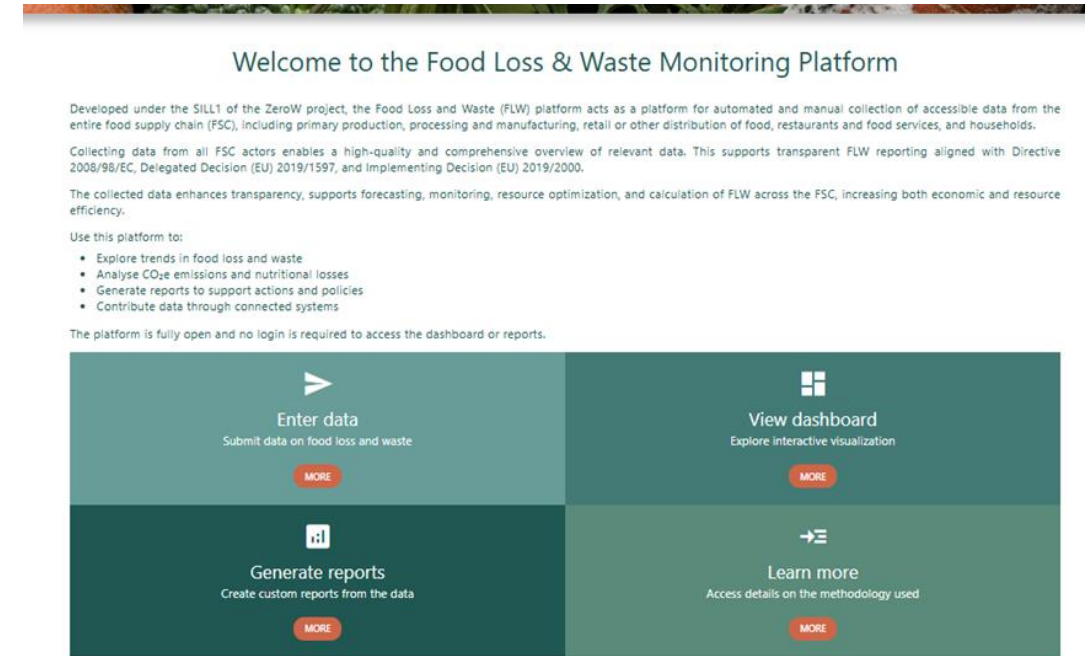


See it in Action:



What you just saw

- Covers the full value chain (Slovenia & Romania pilots)
- Compliance ready (SDG 12.3, EU (2019/1597 and 2020).
- Secure data sharing through DIH AGRIFOOD Data Spaces and linked to ZeroW Data Space

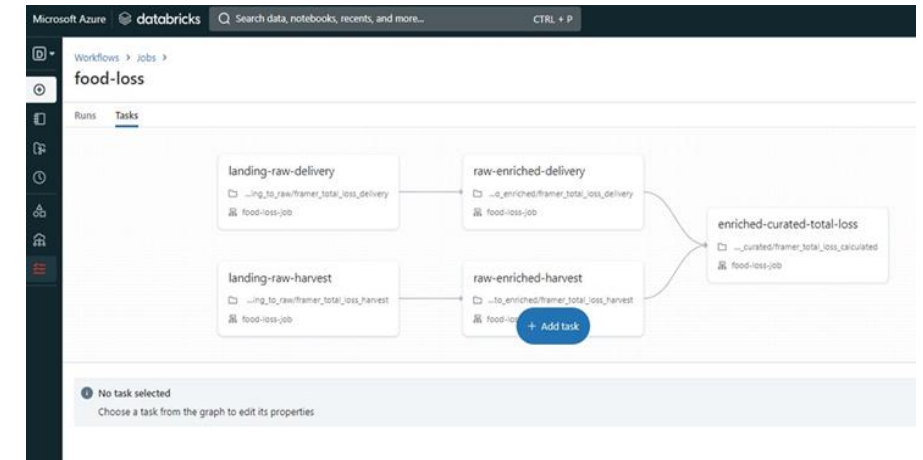


+ Demonst



Why it Matters (Value Proposition)

- Track FLW & KPIs in real time
- Enable evidence-based decision making
- Enhance transparency & benchmarking
- Support reporting, certification, and policy input
- Supports both manual and automated data collection.
- Connect to the wider ecosystem



Lessons learnt

- Actor collaboration is key:

involve actors early

- Technology alone is not enough:

behaviour and incentives matter



Where we are today?

- From measurement to decisions: FLW can only be reduced if data turns into decisions.
- Automation makes it sustainable: less effort, more accuracy, more trust.
- Next step: From TRL7 to full deployment.

Thank you!

- Together we can turn FLW data into action!



Zero Waste Dataspace

Version 2.0

Connecting the food supply chain through shared data and collective intelligence.
Breaking down silos to create synergized solutions for zero food loss and waste.

→ Explore Demo

📘 Learn More



ZERO W

Q&A

JOINT FINAL EVENT

CHORIZO
PROJECT

ZERO^W
innovations for zero food waste

