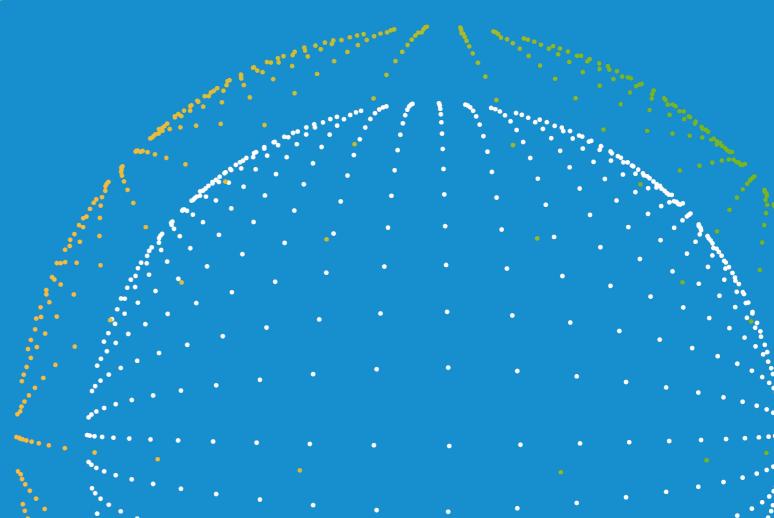
# Data Spaces Symposium

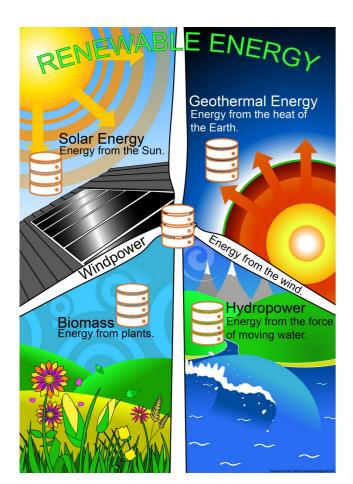


Trust Framework in dataspaces

Rajiv Rajani Chief Technology Officer iSHARE Foundation



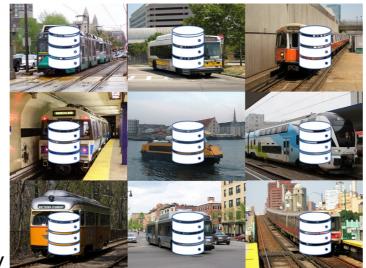
Data silos everywhere?

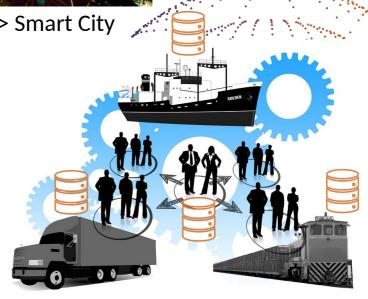


Energy => Data sharing => Smart Energy



City => Data sharing => Smart City





**iSHARE** 

Research shows

TRUST may

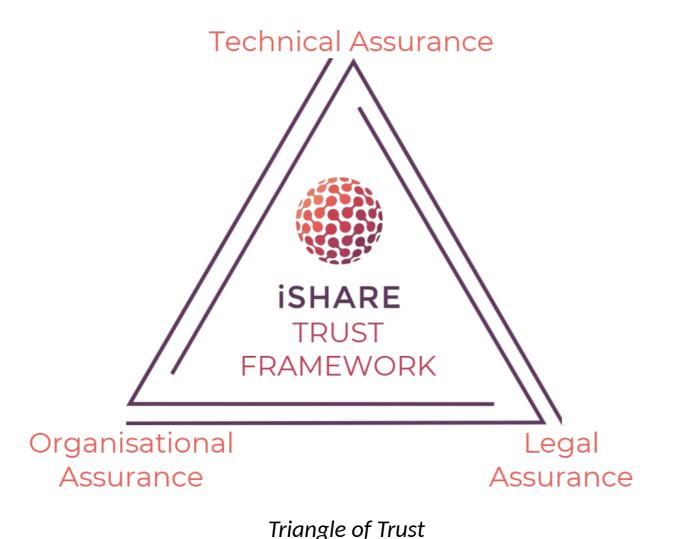
break data silos

Mobility => Data sharing => Smart Mobility

Logistics => Data sharing => Smart Logistics

## **iSHARE Trust Framework - Triangle of Trust**





- Technical Assurance via specifications and compliancy checks
- Organisational Assurance via proven frameworks and validations
- Legal Assurance via iSHARE framework agreements

## Distributed and Federated onboarding



Enable organisations to enrol themselves in a dataspace



#### **Compliancy checks**

- Technical compliance
- Non-technical compliance

#### **Legal cover**

- Terms of use
- Accede to comply

**Technical Assurance** 



Organisational Assurance



Legal Assurance



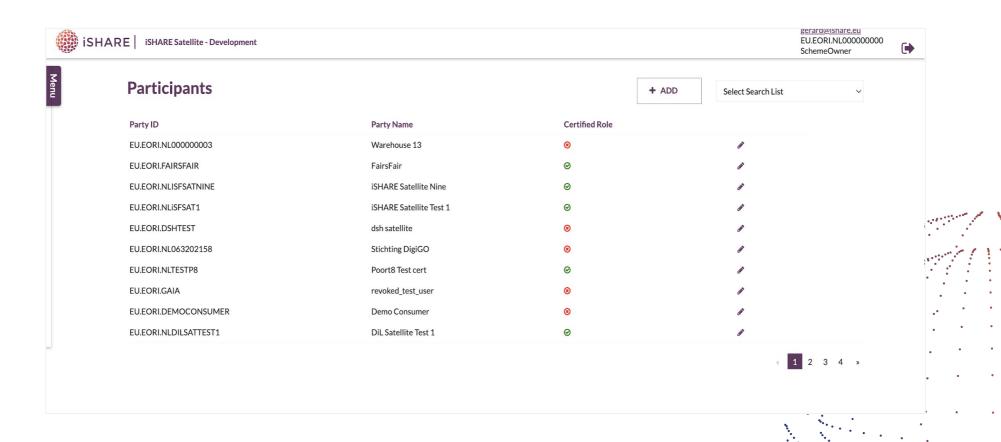
Organisation chosen Certification body / Participant Register



Trusted Dataspace participant

# Trusted list of participants in the network operated by dataspace governance authorities.





#### Distributed and Federated Access and Usage Control



**Enable Data Owners to** control access and use of their data across an open network



#### Attribute Based Access Control

- Energy data of Building
- For period of 1 hour

#### **Usage** control

- Legal Licence (Library)
- Policy (ODRL)

Technical Assurance



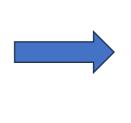
Organisational Assurance



Legal Assurance



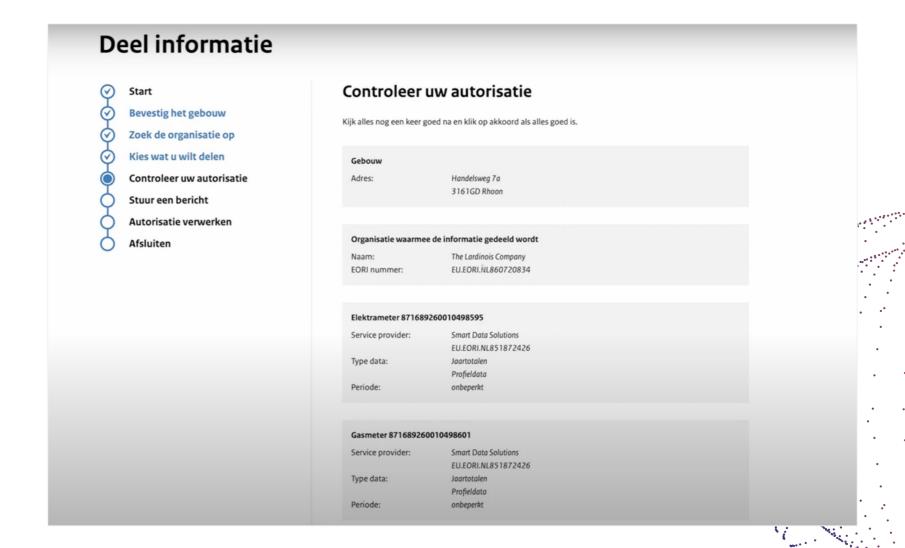
**Data Owner** Controlled **Authorisation** Registry



Data Consumer

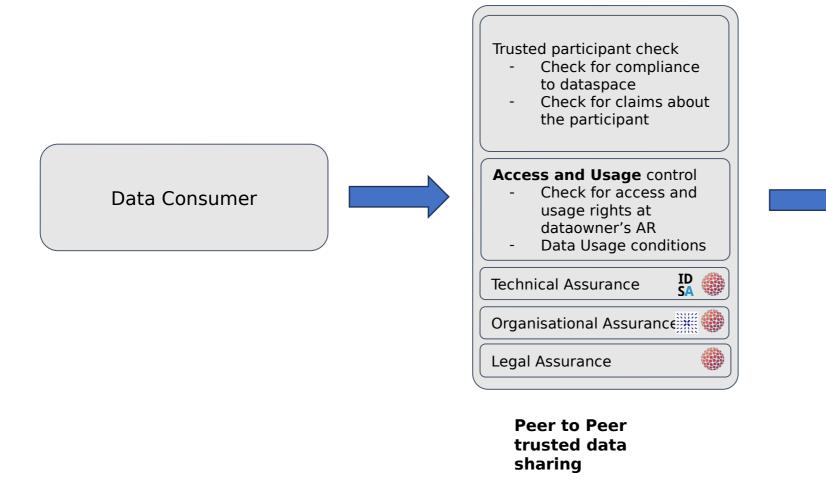
# These components form the foundation for Data Authorization, Access Policies, and Usage Licenses





# Distributed and Federated data sharing





Data Provider

### **Dataspace Green Deal NL**

Energie besparen begint met inzicht in uw huidige energiegebruik per m<sup>2</sup>. Het datastelsel geeft direct een duidelijk overzicht per gebouw. Het datastelsel is specifiek genoeg om het gebruik af te





Wat is het?

Bekijk in 1 minuut wat DVU voor u kan betekenen.

#### Interoperable with other dataspaces on Data Sovereignty











# Ready building blocks for dataspaces



Existing network of service providers and data holders



**Technical Specifications** for Federated Data Sovereignty



Federated and Open Source
Consent Policy Registry

issuer of credent ials

Trust Framework for onboarding of participants

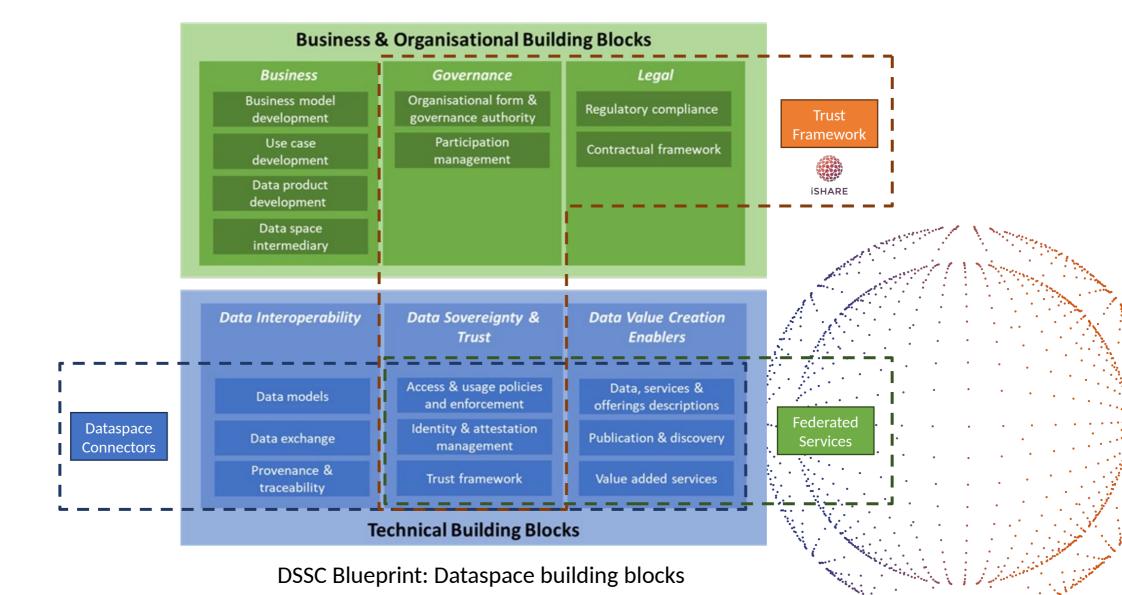
Open Source
Certification Tooling

Federated and
Open Source
Participant Registry

Legal coverage for Data Exchange + Dynamic Terms for every exchange

# Dataspace building blocks







# COOKBOOK FOR DATA SPACES.

Quick Start Guide for Data Spaces

Gerard van der Hoeven & iSHARE Team

Version 1.3 | August 1, 2023 | © iSHARE Foundation 2023





**TRUST** FRAMEWORK **FOUNDED** PROVEN UTILISED DAILY BY

**GOVERNMENTS** 

## **OPEN SOURCE** COMPONENTS

FRAMEWORK

TRUST ----DATA SHARING



S

**GERARD** VAN DER HOEVEN



MONTSE



**RAJIV** 



COST

**SAVINGS** 

**AUTONOMY** 

**GOVERNANCE** 

**GERARD** HUIS IN 'T VELD

#### **NO** NEED OF **NEW**:

**OPERATIONAL PROCEDURES** 

---- LEGAL ----**PROCESSES** 

**SERVER** LEVELS

**TECHNOLOGY** 

#### **FEDERATED**

**AUTHORIZATION** 

PARTICIPANT REGISTRY

iSHARE.eu

**ISO 27001** CERTIFIED

#### **NON-PROFIT**

DOWNLOAD NOW! COOKBOOK FOR DATA SPACES



JOS

