



EDDIE

EUROPEAN DISTRIBUTED
DATA INFRASTRUCTURE
FOR ENERGY

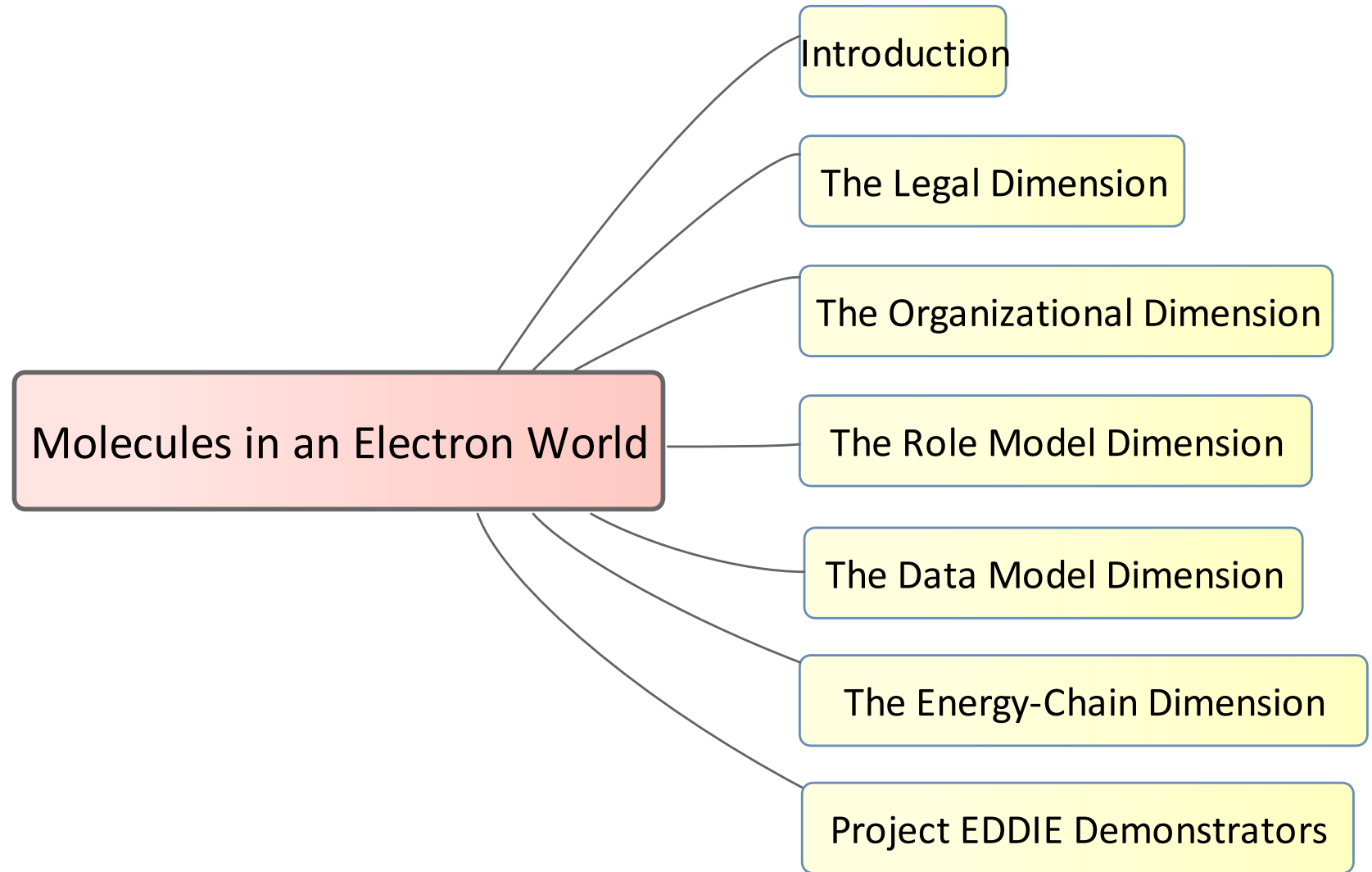
MOLECULES IN AN ELECTRON WORLD

An Intersectorial approach

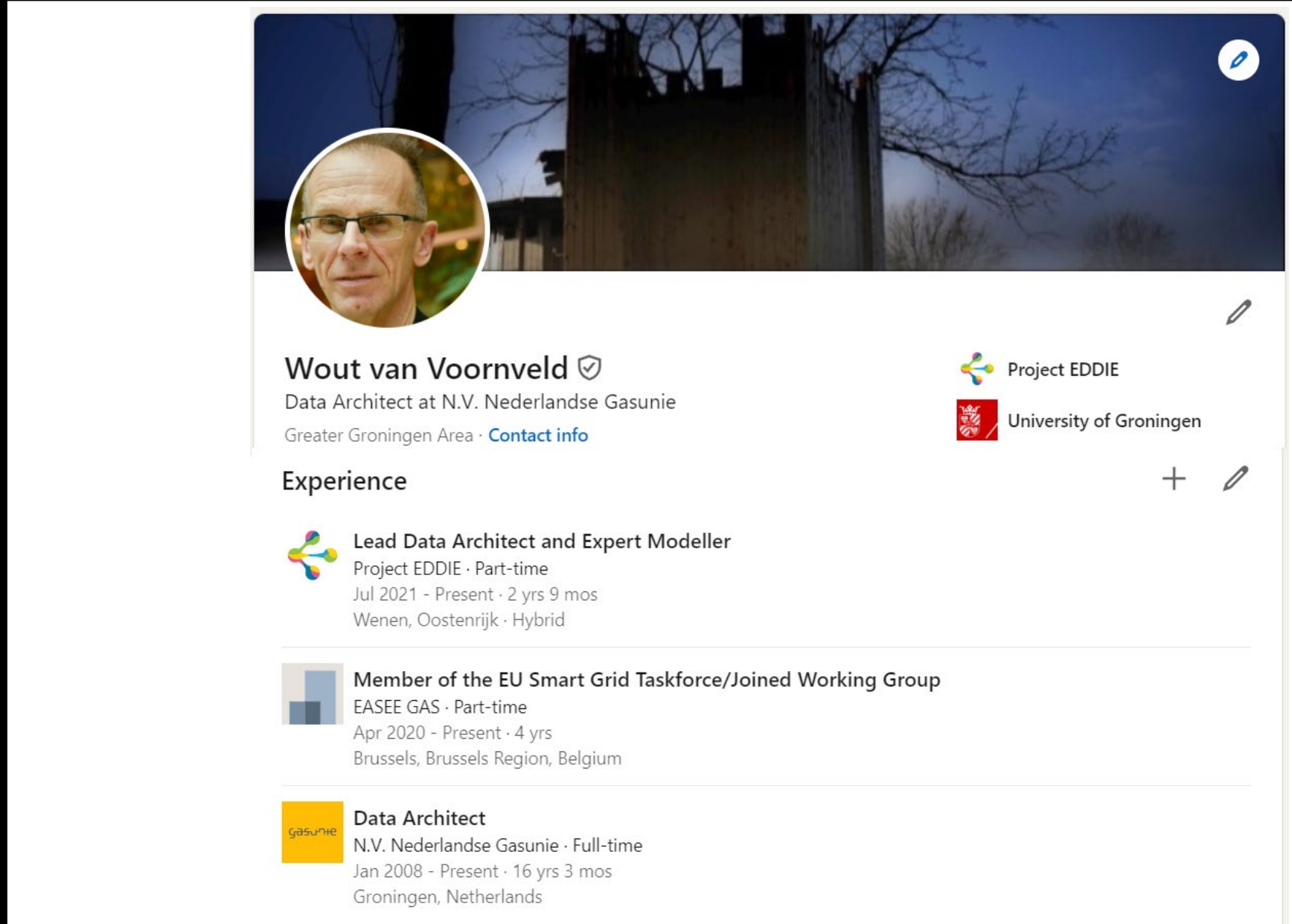


AGENDA

Upcoming
changes and
how it impacts
US



ABOUT ME






LinkedIn profile of Wout van Voornveld, a Data Architect at N.V. Nederlandse Gasunie. The profile includes a profile picture, a cover photo of a building at dusk, and a list of work experiences. The work experiences are: Lead Data Architect and Expert Modeller at Project EDDIE (Jul 2021 - Present, 2 yrs 9 mos, Wenen, Oostenrijk, Hybrid); Member of the EU Smart Grid Taskforce/Joined Working Group at EASEE GAS (Apr 2020 - Present, 4 yrs, Brussels, Brussels Region, Belgium); and Data Architect at N.V. Nederlandse Gasunie (Jan 2008 - Present, 16 yrs 3 mos, Groningen, Netherlands).

Wout van Voornveld ✓
Data Architect at N.V. Nederlandse Gasunie
Greater Groningen Area · [Contact info](#)

Project EDDIE
University of Groningen

Experience

-  **Lead Data Architect and Expert Modeller**
Project EDDIE · Part-time
Jul 2021 - Present · 2 yrs 9 mos
Wenen, Oostenrijk · Hybrid
-  **Member of the EU Smart Grid Taskforce/Joined Working Group**
EASEE GAS · Part-time
Apr 2020 - Present · 4 yrs
Brussels, Brussels Region, Belgium
-  **Data Architect**
N.V. Nederlandse Gasunie · Full-time
Jan 2008 - Present · 16 yrs 3 mos
Groningen, Netherlands

LEGAL DIMENSION

Legal:
Electricity



EUR-Lex

Document 32019L0944

Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast) (Text with EEA relevance.)



English Search

Energy Menu

Home > Publications >

Implementing Regulation on interoperability requirements : non-discriminatory and transparent procedures for access metering and consumption data

Details

Publication date
6 June 2023

Files

6 JUNE 2023

 **Implementing Regulation for access to metering and consumption data C(2023)3477** [Download](#) 

English (545.83 KB - PDF)






6 JUNE 2023



 **Implementing Regulation for access to metering and consumption data C(2023)3477** [Download](#) 

English (545.83 KB - PDF)



LEGAL DIMENSION

Legal:
Gas directive
proposed
update (2021)

 EUR-Lex EN    

 Document 32009L0073 

Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (Text with EEA relevance)

 Document 52021PC0803 

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on common rules for the internal markets in renewable and natural gases and in hydrogen
COM/2021/803 final

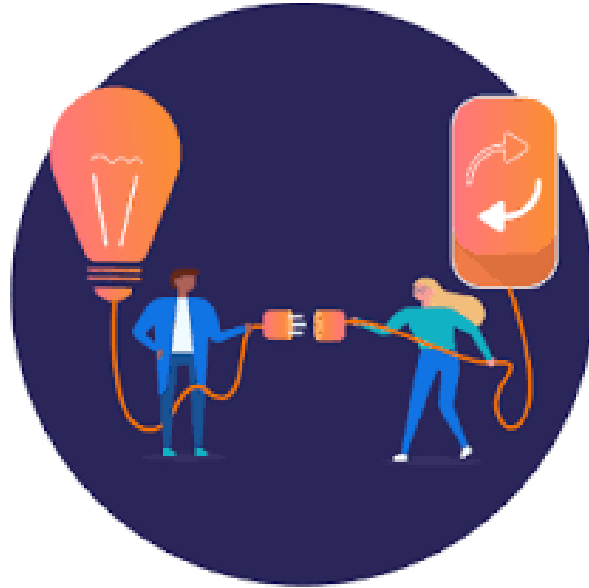
Article 21

Data management

1. When laying down the rules regarding the management and exchange of data, Member States or, where a Member State has so provided, the designated competent authorities shall specify the rules on the access to data of the final customer by eligible parties in accordance with this Article and the applicable Union legal framework. For the purpose of this Directive, data shall be understood to include metering and consumption data as well as data required for customer switching, and other services.

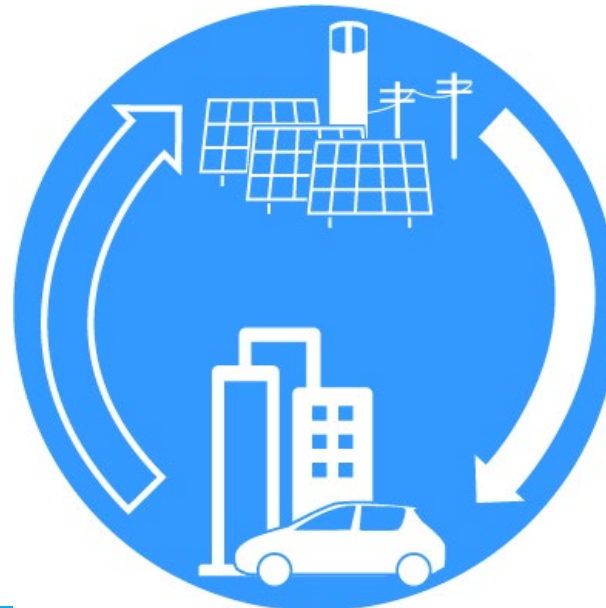
ORGANISATION DIMENSION

Legal:
new
implementing
acts /
new players



CHANGE OF SUPPLIER

IMPLEMENTING ACT



DEMAND RESPONSE

IMPLEMENTING ACTS
NETWORK CODE

HARMONISE ROLE MODEL INITIATIVE

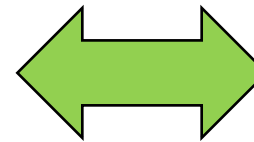
Harmonised Gas Role Model Specification
From the Business Process perspective

Number:	2017-001/01.2
Subject:	Harmonised Gas Role Model – Business perspective
Approved:	30 May 2018
<i>Stable Release</i>	

**THE
HARMONISED
ELECTRICITY MARKET
ROLE MODEL**

VERSION: 2020-01

HARMONISED GAS
ROLE MODEL
(HGRM)



HARMONISED ELECTRICITY
MARKET ROLE MODEL
(HEMRM)

HEMRM

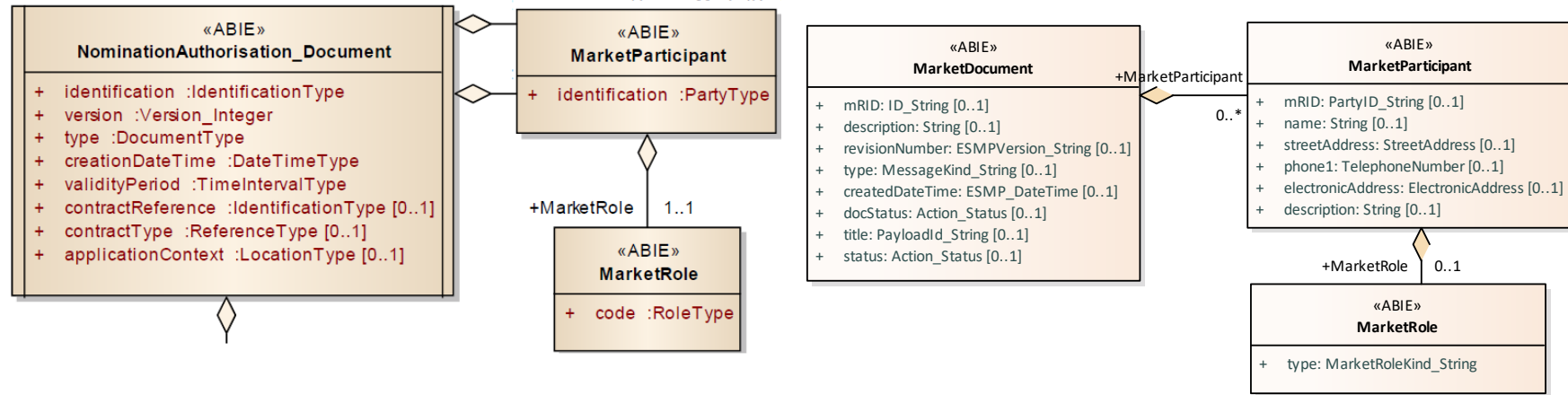
VS

HGRM



ROLE MODEL DIMENSION

DATA DIMENSION



Data:
Standards

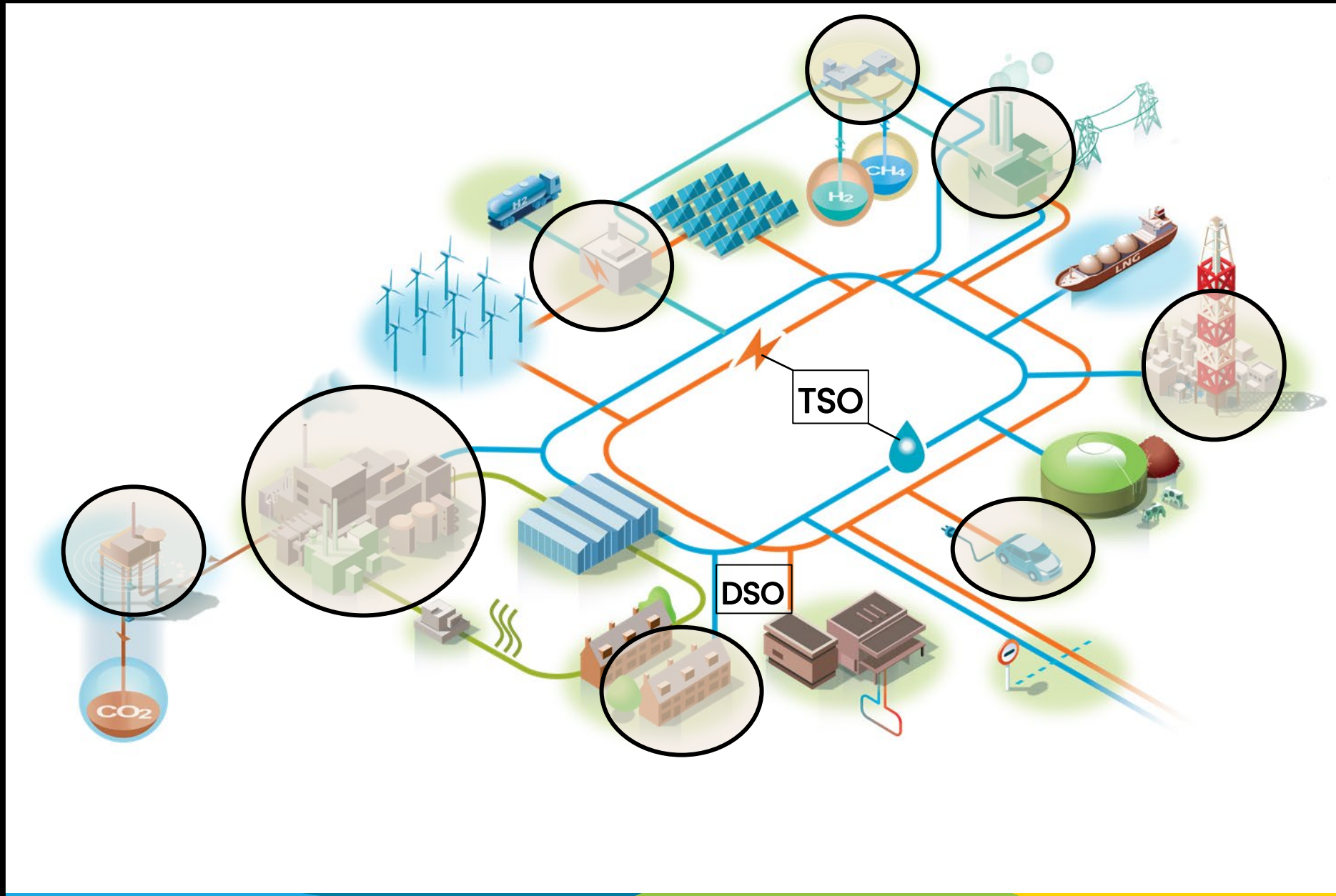


UN/CEFACT
Modelling Methodology
(UMM)

Common Information Model

ENERGY CHAIN DIMENSION

Blind spot?



ENTER PROJECT EDDIE

European Distributed Data Infrastructure for Energy

<p>Key Partners</p> 	<p>Key Activities</p> <ul style="list-style-type: none"> Start: Jan '23, 3 years runtime Develop EDDIE Framework Develop AIIDA - the Administrative Interface for In-house Data Access Intensive Scientific Assessment of <i>The virtuous cycle for energy-data-driven economies</i> Provide expertise and learnings for EU Policy Makers Co-ordinate with other 4 projects of the cluster to complement the <i>European Energy Data Space</i> <p>Key Resources</p> <ul style="list-style-type: none"> Close ties with EU energy market legislation, regulation and administration Close ties with grid operators, data-sharing infrastructures, smart energy actors, and scientific community Outstanding capabilities in and experience with digitalisation, cybersecurity and energy process automation Software development resources covering the whole broad problem spectrum at hand 	<p>Value Propositions</p>  <ul style="list-style-type: none"> Provide a standardised, unified and highly scalable interface to >70% of European connection points Make it as easy and common share energy data as paying online. Free data-driven services of data sourcing costs. Generate reliable scientific insight into energy data infrastructure, economics and regulatory matters. Establish an organisation that takes care of making energy data available that is fit and set to keep on driving things for the future. Complement the European Energy Data Space with retail / final customer data. 	<p>Key Relationships</p> <ul style="list-style-type: none"> Data-Sharing Infrastructures Data-Driven Services DSOs and TSOs Smart Energy Actors Energy Communities European Commission EU Policy Makers Standards Defining Organisations Smart Metering Industry Building Automation <p>Channels</p> <ul style="list-style-type: none"> Web: https://eddie.energy Social Media European Expert Groups Targeted Communications Plan: <ul style="list-style-type: none"> Data-driven services Regulators and Policy Makers Data-sharing infrastructures Final Customers Academic, Interoperability, Distributed Flexibility, Data Spaces - Communities Conferences Eurovision Song-contest of Data-Driven Services 	<p>Target Groups</p> <ul style="list-style-type: none"> Energy-related data-driven services (e.g. Energy Service Companies (ESCos), Carbon Footprint Est., 24/7 Matching, Green Hydrogen Schemas Non energy-related data-driven services Wholesale Actors (e.g. PPAs) Energy Communities (e.g. real-time access for community-wide self-consumption optimization, assigned collective generation...) Grid operators, suppliers and Flexibility Service Providers 
<p>Budget</p> <ul style="list-style-type: none"> Around 10 Mio. EUR Almost 8 Mio. funded via Horizon Europe Additional supporting partners 	<p>Supporting Organisations / Organisations to co-operate with</p> 		<p>Sustainability</p> <ul style="list-style-type: none"> Public Funding Spin outs Open Source co-operation further options tba 	

PROJECT EDDIE INPUTS

Running ahead
of the game

IMPLEMENTING REGULATION (COM/2021/803)

SUPPLIER SWITCHING REGULATION (IN PROGRESS)

DEMAND RESPONSE REGULATIONS (IN PROGRESS)

REGIONAL CONNECTOR RESTRICTIONS

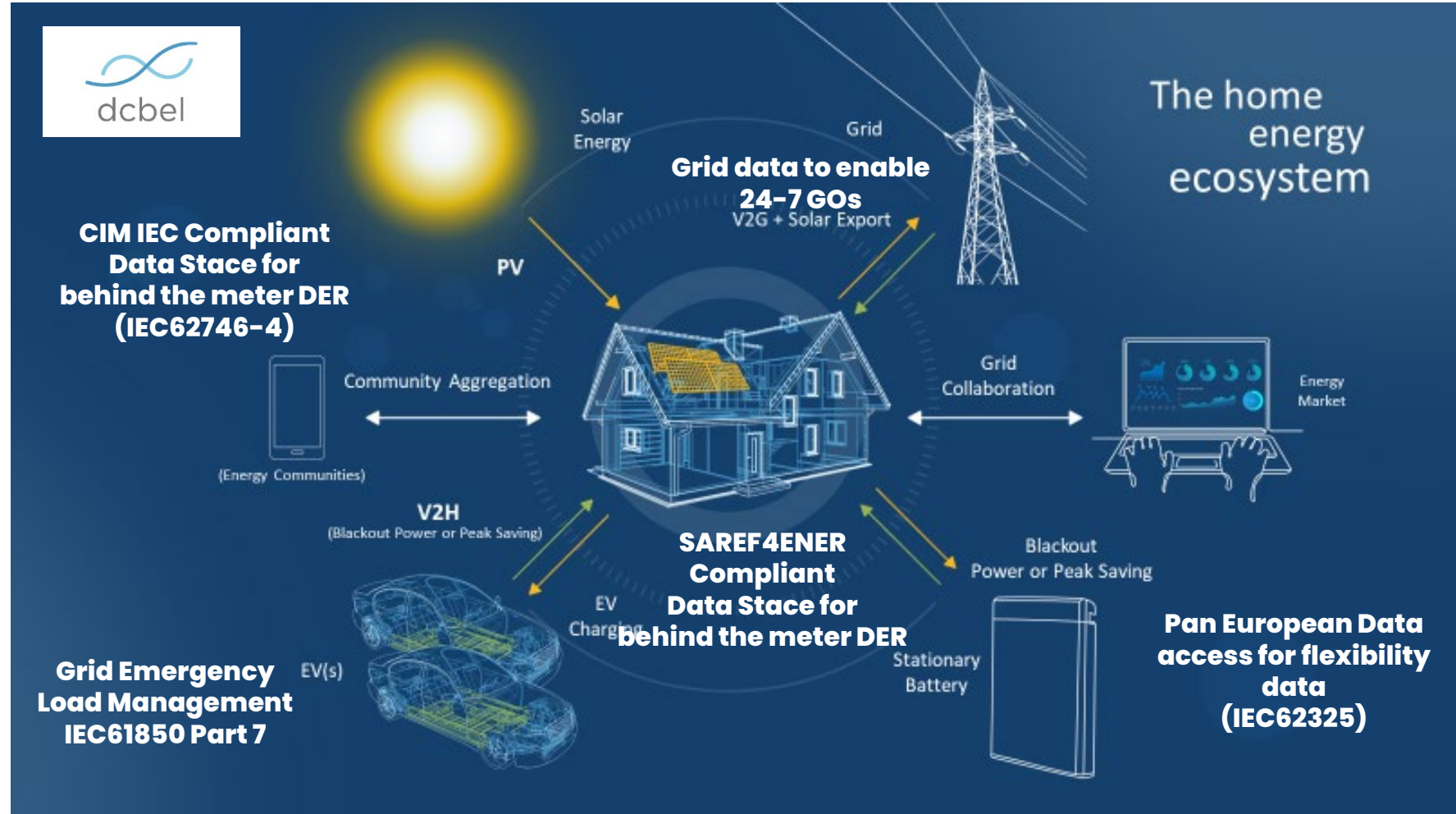
SYSTEM USE CASE DEMANDS

DEMONSTRATORS DEMANDS

USE CASE 1

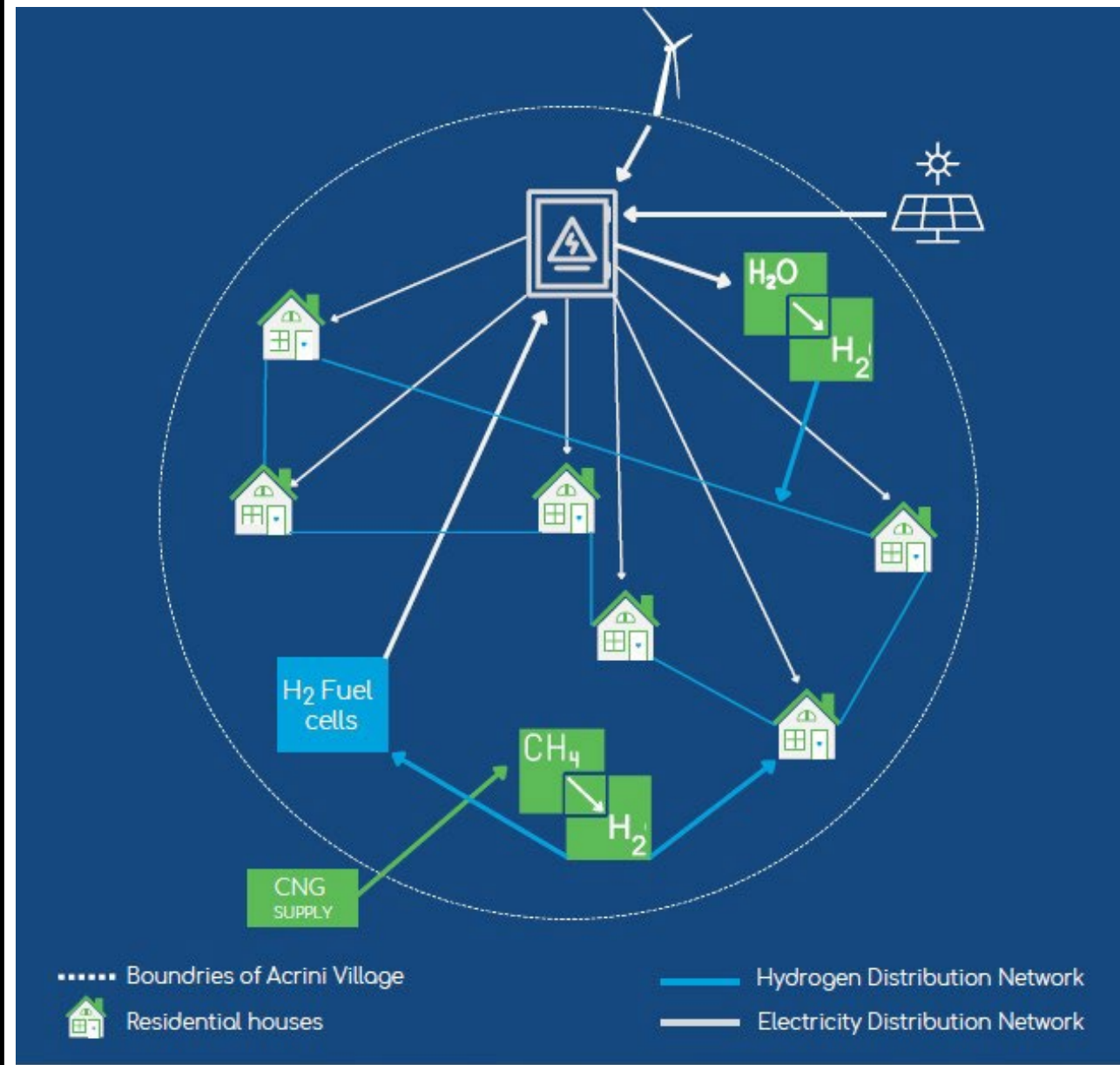
Residential Energy Optimisation in future Netzero homes integrating PV self consumption, storage and V2X

Dataspace for implicit Prosumer Participation



HYDROGEN VILLAGE

The gas demonstrator



Small energy community in North Greece

Green Hydrogen Electrolysers

Electricity: renewable – daytime
fuel cells – nighttime

Hydrogen hot water boilers

Hydrogen pipelines & smart gasmeters

surplus electricity
surplus hydrogen
(fed back into

KEY TAKE AWAYS

Things to
consider

BE AWARE OF THE INTERSECTORIAL DYNAMICS ...

... ANTICIPATE THEM

... LOOK FOR OPPORTUNITIES

INCORPORATE LONG-TERM CONCEPTS
INTO SHORT-TERM PROJECT REALIZATIONS

THINK BIG, START SMALL



EDDIE

EUROPEAN DISTRIBUTED
DATA INFRASTRUCTURE
FOR ENERGY

THANK YOU

USEFUL LINKS

[Electricity directive 2019/944](#)

[Gas Directive 2009/73](#)

Implementing Regulation for access to metering and
consumption data [\(EU\) 2023/1162](#)

Proposed Regulation CNG and hydrogen [COM/2021/803](#)

New implementing regulations [Joint Working Group](#)

Project EDDIE [EDDIE](#)

Check it out