



For every Dollar you spend on an Application,  
you'll spend 5 on **Integration.**

# Greenbird Offerings to the Energy Sector

Transforming utilities since 2010

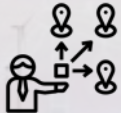
TSO



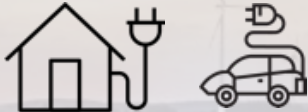
DSO



Suppliers



Lifestyle Services



**Established company  
Proven Client Success**



Utilihive clients serving end users

Total end users:  
**> 60,400,000**



**Leading Big Data iPaaS  
Designed for Utility Sector**



Data Integration



Data Harmonization



Data Provisioning

**Agile Team  
Technology & Industry Experts**



Employee total

	Av. age	Perceived age
	38	28
	Nationalities	Languages
	14	17
Data Scientists, System Engineers, Architects	Skiers	M/F ratio
79%	31	38:9
	Runners	Cyclists
	14	5
Ops, Sales, Marketing, Administration	Cabin owners	Travelers
21%	19	47



# The Greenbird Team

diversity driving the energy revolution

EXPERIENCED TEAM WITH MORE THAN

## 585 YEARS OF COMBINED EXPERIENCE

ON SOFTWARE DEVELOPMENT IN THE ENERGY SECTOR

### EXECUTIVE TEAM

3 FTEs

Strategy, Finance and Operations

### PLATFORM DEVELOPMENT

15 FTEs

Responsible for core development in Utilihive

### PLATFORM OPERATIONS

6 FTEs

Utilihive operations for private cloud and public cloud

### SOLUTION ENGINEERING

14 FTEs

Technical presales, architecture and delivery

### CORPORATE

2 FTEs

Information Security, HR

### SALES AND MARKETING

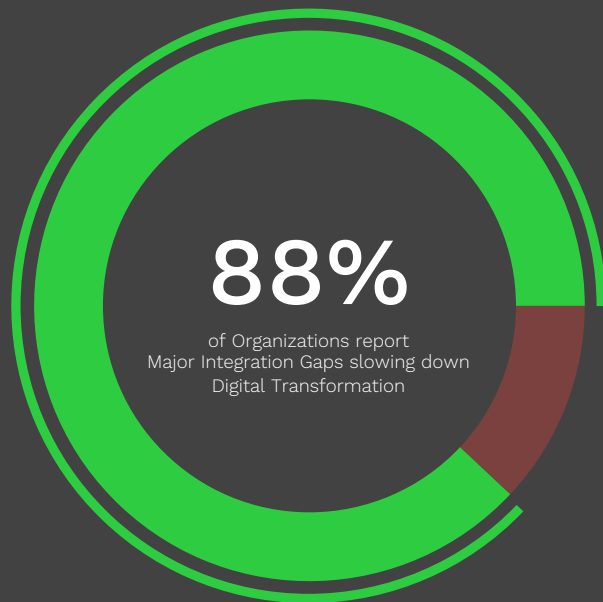
6 FTEs

Marketing, sales and bid management

# The challenge of accessing data

Utilities recognize Integration Gaps slow down Digital Transformation

Key integration gaps slowing down digital transformation

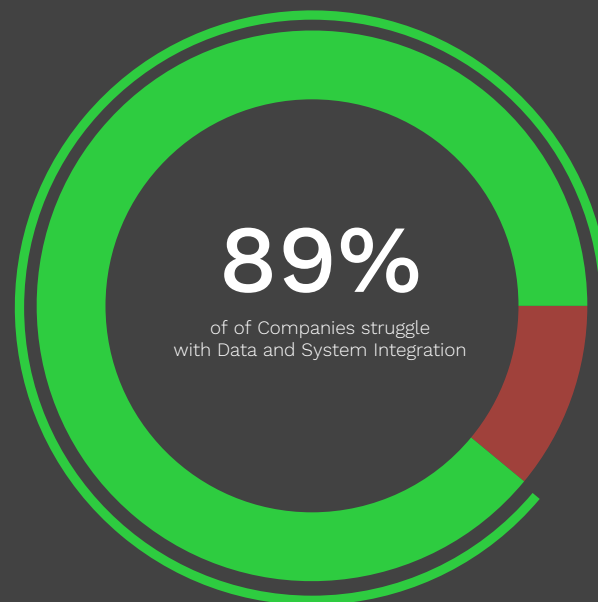


88%

of Organizations report Major Integration Gaps slowing down Digital Transformation

Benchmark Report (2021) from Mulesoft

Companies struggle with data & system integration

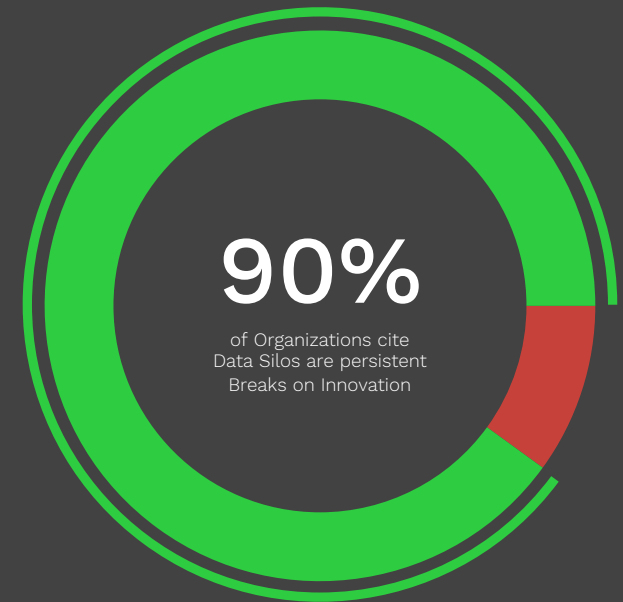


89%

of of Companies struggle with Data and System Integration

Market Study (2021) from IDG & TeamDynamic

Data silos persistently breaking innovation



90%

of Organizations cite Data Silos as persistent Breaks on Innovation

Benchmark Report (2021) from Mulesoft



**Gartner**  
Enterprise  
iPaaS  
2021

THE GLOBAL  
POWER & ENERGY  
ELITES  
2020

GLOBAL  
SMART ENERGY  
ELITES  
2019

**Gartner**  
Cool  
Vendor  
2018

# Utilihive<sup>®</sup> energy ready iPaaS

Enterprise data integration platform **built for utilities**  
delivering **electricity, gas, distributed heating and water**

**Connects enterprise data and machine data**

**Accelerates** integration projects and time to value



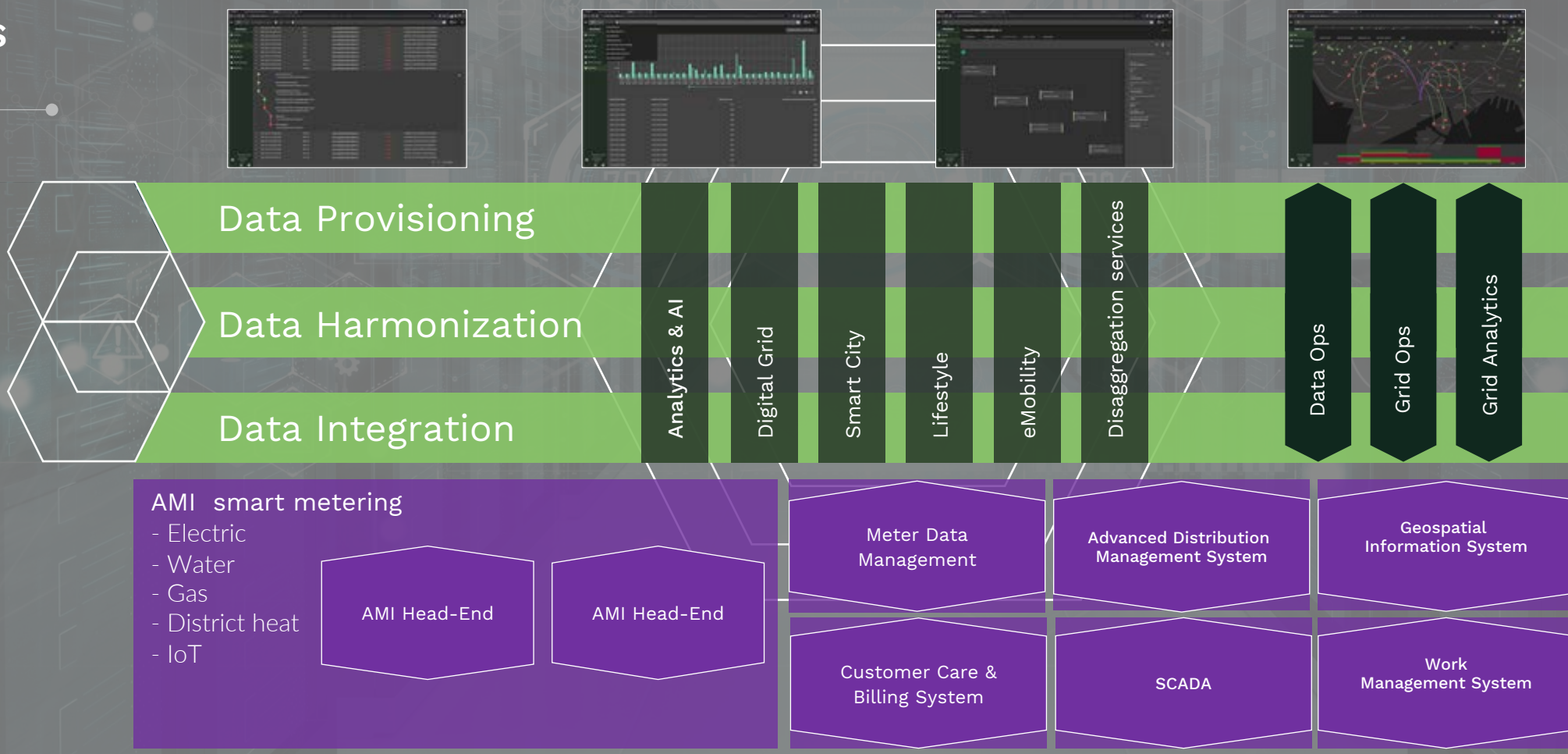
# Utilihive<sup>®</sup>

utility ready iPaaS

Leading domain specific **eiPaaS**

Hybrid in the cloud, on-premise, at the edge

Accelerating **time to value**





# Utilihive eiPaaS

## Platform core

Utilihive **energy integration Platform as a Service** provides both technical big data integration infrastructure and pre-configured integration content

Built-in monitoring and management console provides end-to-end control of integrations and data lifecycle

## Platform accelerators



Utilihive  
**Adapters**



Utilihive  
**Dataflows**



Utilihive  
**SMOC**



Utilihive  
**MonAMI**



Utilihive  
**Ghostwriter**



Utilihive  
**Beatbox**



Utilihive  
**Datalake**



Utilihive  
**ADR**

# Utilihive Adapters

Select from a library of **pre-configured adapters** for commonly used utility applications

Customize default **data mappings**

Develop custom adapters using **the Utilihive SDK**

The screenshot displays the Utilihive Flow Traces interface. The top section shows a table of messages with columns for Start time, Processing time, Origin, Flow ID, State, Message ID, and Payload. The messages are all in a 'FAILURE' state. Below the table is a flow diagram showing the sequence of events, including SOAP requests to AMM for findDevice and distributionControlService, and a SOAP API call for ControlService. The interface also includes a sidebar with navigation options like Overview, Flows, Flow traces, Resources, Service accounts, Alerts, and Reporting.

Start time	Processing time	Origin	Flow ID	State	Message ID	Payload
2021-09-27T15:54:53.882	1867 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.GetPngByEndpointResult	ControlService	FAILURE	843b15a-9c-11-412-611-6436d528473	
2021-09-27T15:51:15.341	38 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	0x748a4f-5947-412b-863e-92ba3178a47	
2021-09-27T15:51:04.482	51 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	25c9f53-c177-4802-b646-5517dc0340b	
2021-09-27T15:51:01.577	30 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	4217b487-8489-4c1e-d887-5a737d4487c	
2021-09-27T15:18:27.841	2940 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	124c940-6598-4a64-e3af-5355683280ce	
2021-09-27T14:35:36.966	2289 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	468354b-5c58-4a78-887c-28af6c709771	
2021-09-23T15:29:58.466	773 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	7b689f25-d6f3-460e-863b-536ba28e457	
2021-09-22T12:11:18.069	7078 ms	SOAP https://api.test.utilihive.io/iron/wu/ControlService - ControlService.PngByEndpoints	ControlService	FAILURE	2b50ac4f-4841-4caa-916e-c72b0ca4ff1	

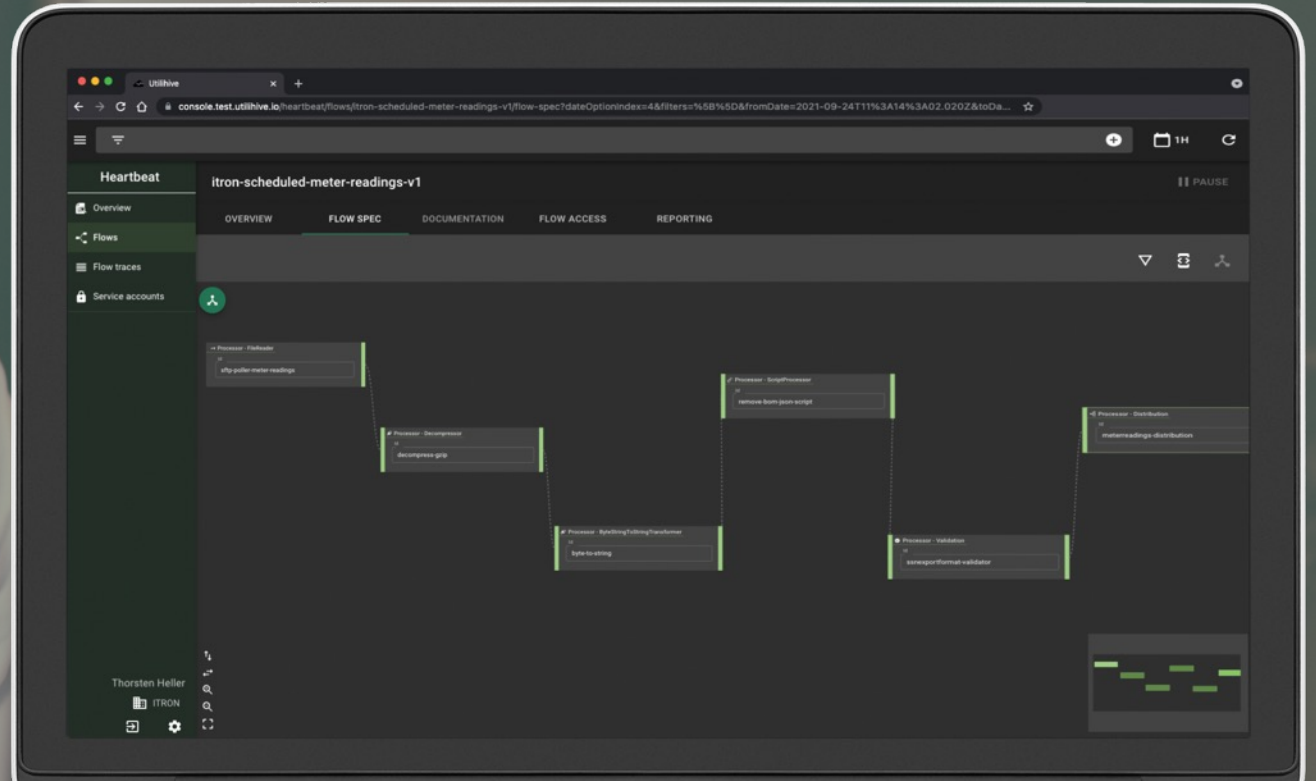


# Utilihive Dataflows

Select from a library of **pre-configured integration applications** or **energy data flows**

Customize data flows with **(F)Low Code configuration**

Develop custom data flows using **Utilihive SDK**



# Utilihive SMOC

Manage smart infrastructure  
**end-to-end**

Monitor smart meter rollout &  
installation progress

Analyse meter-to-cash value chain



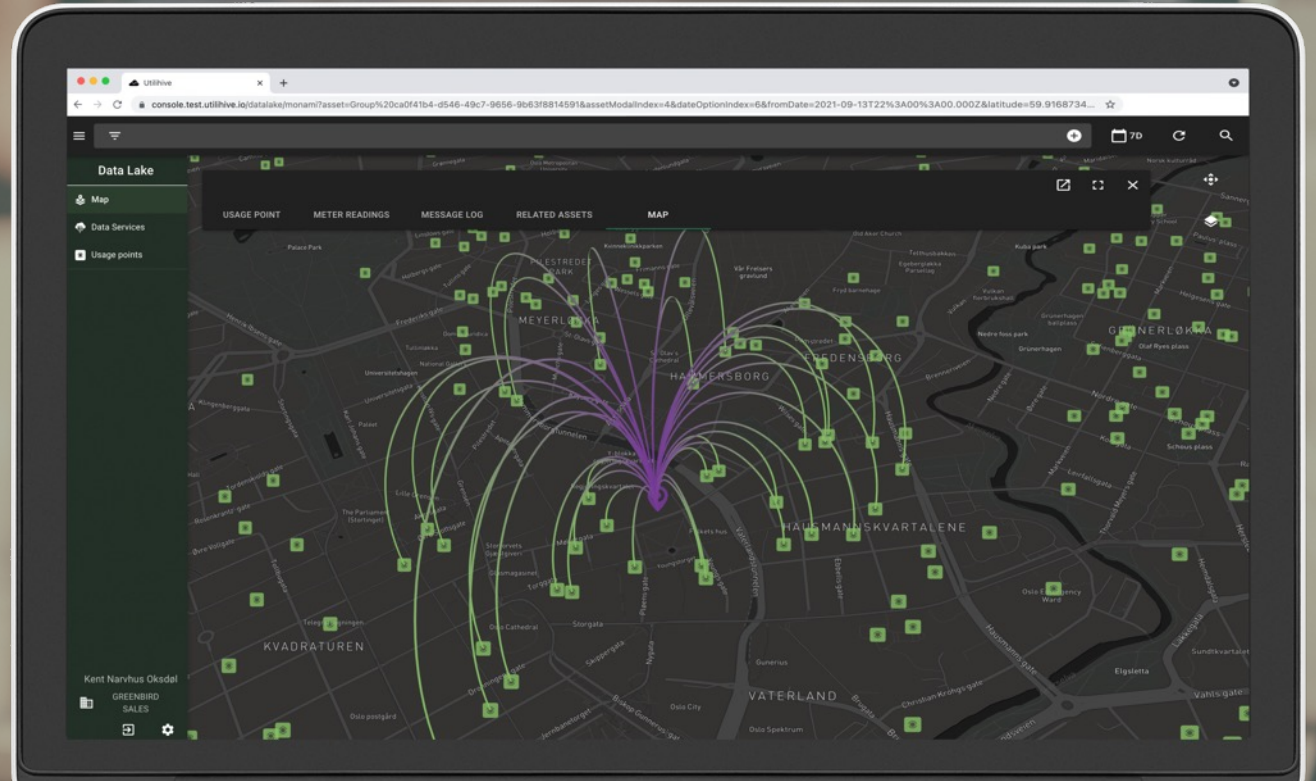


# Utilihive MonAMI

Get **full visibility** into low and mid-voltage network

Analyze near real-time events and alarms from AMI

Create a digital twin of network and monitor asset status



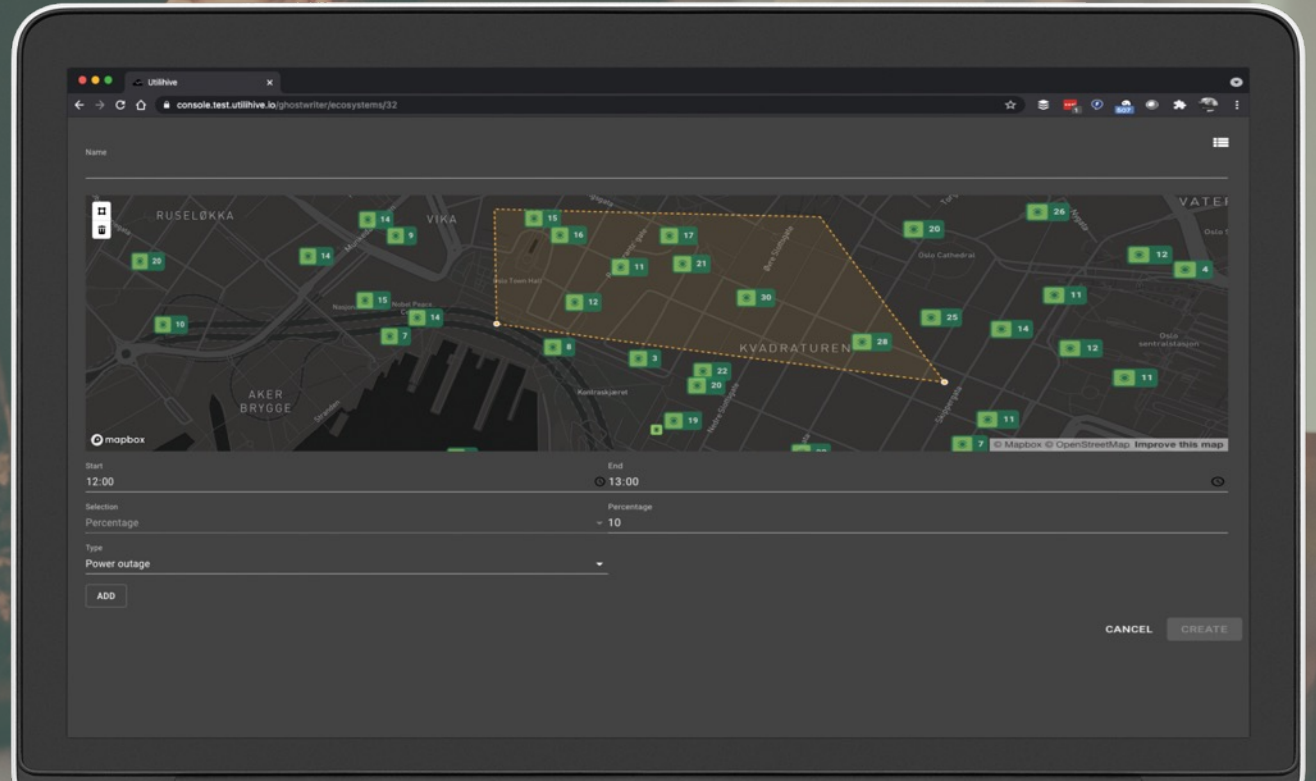


# Utilihive Ghostwriter

Create test data sets for **full scale**  
deployment scenarios

Simulate meter readings, alarms and  
events

Test and verify all data integrations and  
business logic



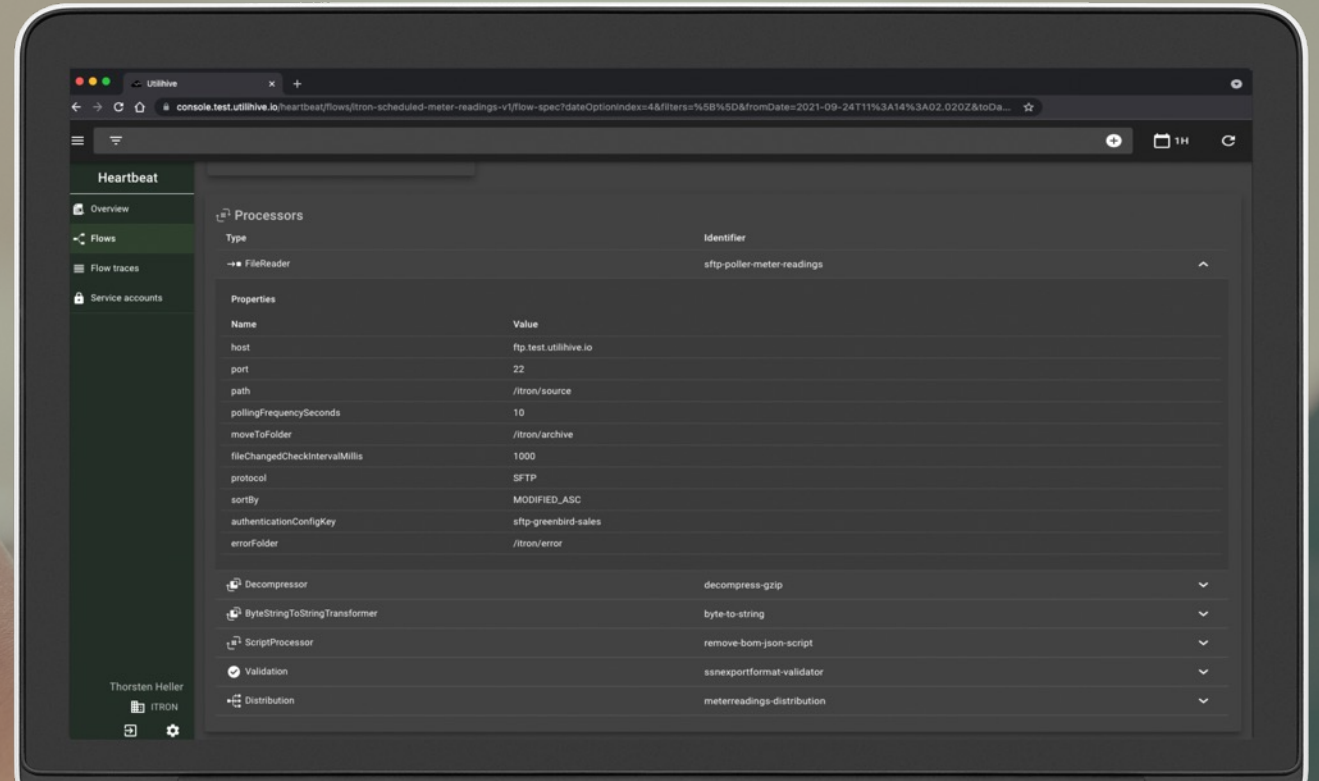


# Utilihive Beatbox

Manage **secure communication**  
across network boundaries  
(e.g. cloud and on-prem)

Enable near real-time  
**OT/IT integration**

Exchange data **securely** between  
cloud and on-prem

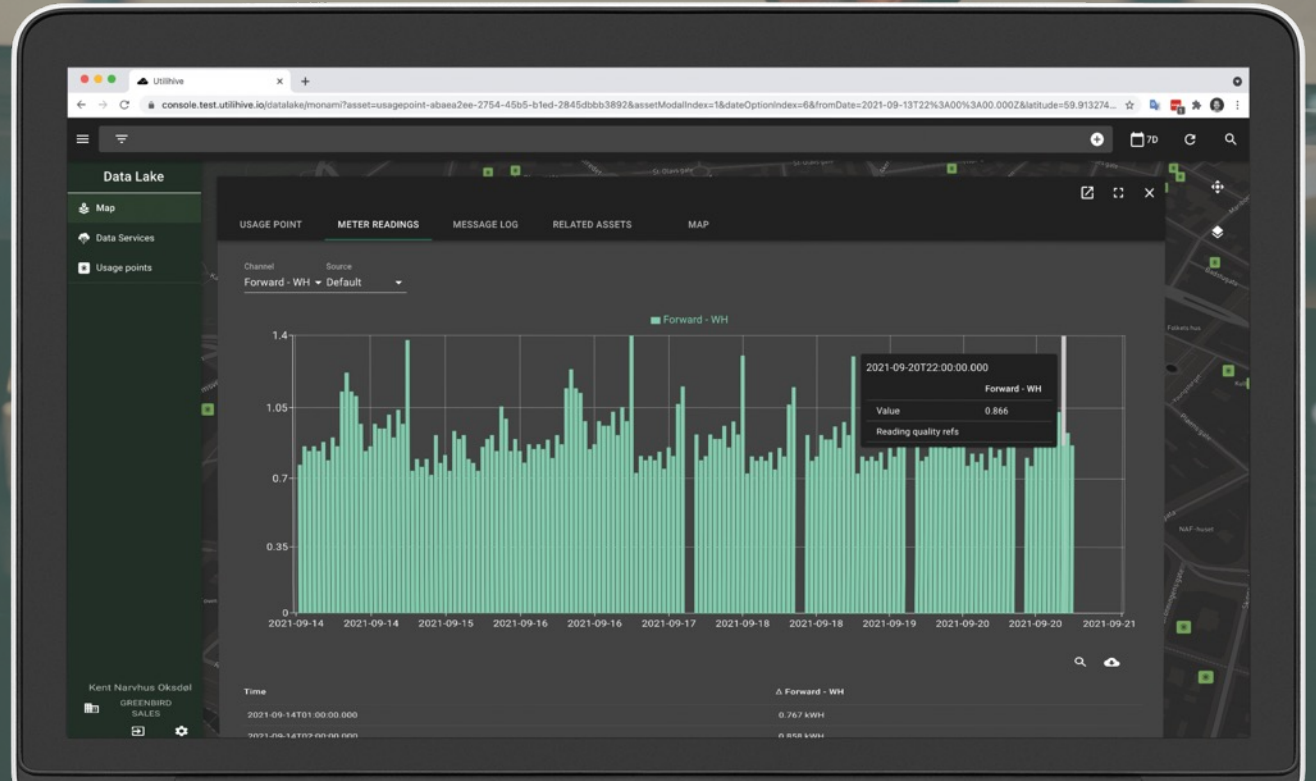


# Utilihive DataLake

Structure and harmonize energy data for **high performance** data services

Pre-process energy data for **complex grid analytics** use cases

Expose managed data services to 3rd party applications and data science tools





# Utilihive ADR

Provide harmonized view for all assets

Create unified master data sets for asset information

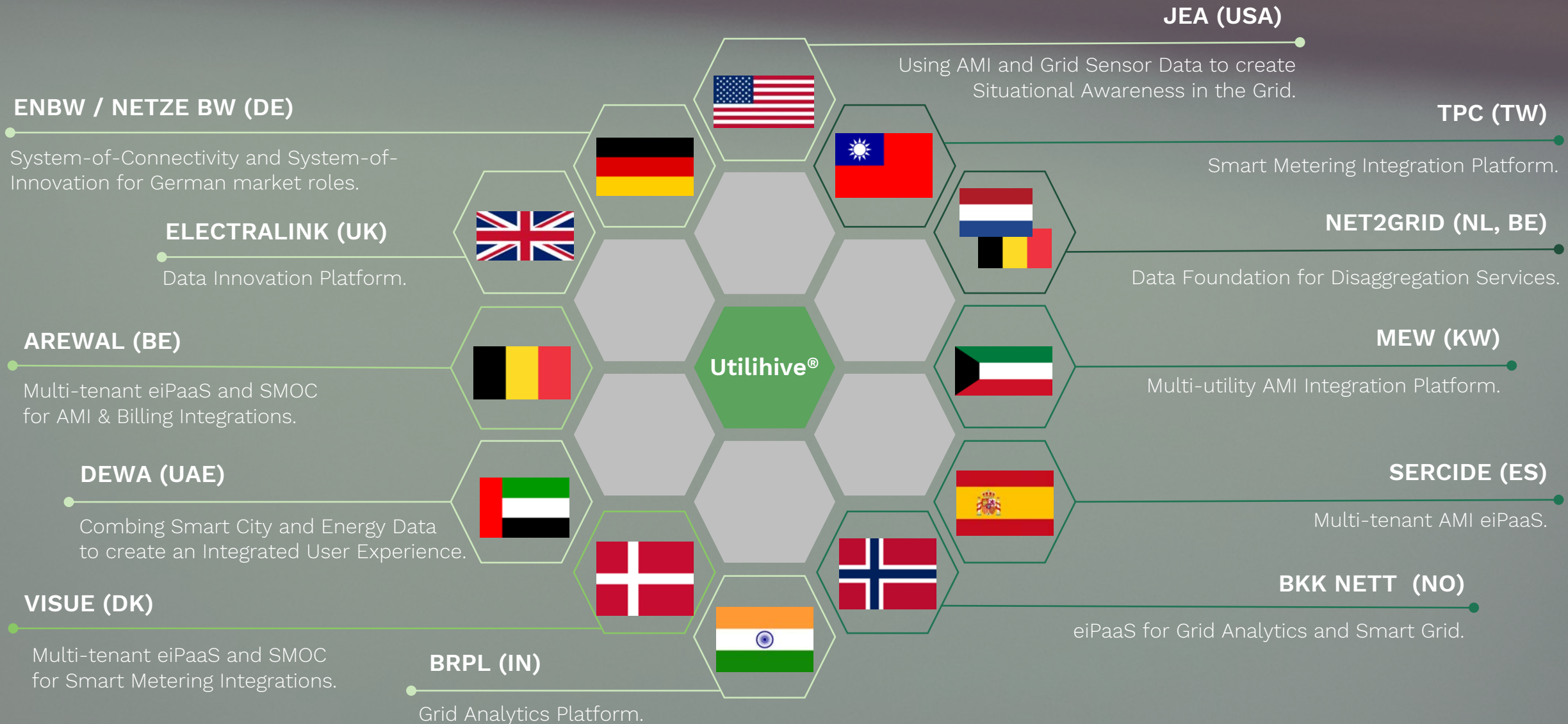
Establish centralized repository/catalogue for asset data

The screenshot displays the Utilihive ADR web application interface. The main content area is titled 'Data Lake' and shows details for a 'Metering point' asset. The interface is divided into several sections:

- Metering point details:** Includes fields for 'id', 'usagepoint-id', 'service category', 'type', 'type-1', and 'is virtual point'. It also lists 'MID string ready', 'Phase code', 'Meter current', 'Rated voltage', and 'N/A'.
- Location details:** Includes 'Address', 'City name', 'Coordinate system', 'Coordinates', 'Latitude', 'Longitude', and 'Geolocation information reference'.
- Channels table:** A table with columns 'id', 'Name', 'Reading type ref', 'Data interval', and 'Is virtual'. It lists several channels with their respective IDs, names, and reading type references.
- Meter details:** Includes 'id', 'enddevice-id', 'type-1', 'Name', 'Rated voltage', and 'Manufacturer'.

The interface also features a navigation menu on the left with options like 'Map', 'Data Services', and 'Usage points'. The top navigation bar includes 'USAGE POINT', 'METER READINGS', 'MESSAGE LOG', 'RELATED ASSETS', and 'MAP'.

# SELECTED CLIENT SUCCESS STORIES





# Utilihive Partner Ecosystem

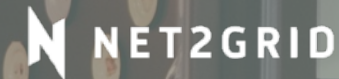
Utilizing the **new breed of technology companies** that is accelerating the energy revolution will be **vital for digital utilities**.

**Seamless data exchange** delivered by Utilihive will empower utilities to **move fast and drive innovation**.

Technology and services from partners in the **Utilihive Partner Ecosystem** can be **configured in days at lower risk**



KONGSBERG



GreenPocket







# KEY MILESTONES

- 2010** Founded to develop Utilihive.
- 2013** Achieved 80 % market penetration in Norway.
- 2015** Signed Utilihive contract with Smarthub.
- 2016** Closed €5M Series A.
- 2017** First contract in the Middle East: MEW (KW).
- 2018** Named Gartner cool vendor.  
Signed TPC (TW) (scaling up to  $\geq 12M$  SDPs).
- 2019** Signed first client in Germany: ENBW (DE).
- 2020** Closed €5M Series B.  
Signed Arewal (BE).  
Delivered to first client in India: BRPL.
- 2021** Signed contract with KMD delivering Utilihive to Danish utilities with more than 1.3M SDPs.
- 2022** Signed contract with BKK Nett (NO).  
Signed contract with 4 new DSOs (DK) with KMD.  
Signed contract with DEWA (UAE).  
Signed 1<sup>st</sup> contracts in Switzerland & Spain.  
Awarded lighthouse contract in the U.S: JEA (FL).





84% of companies fail at  
digital transformation

**Be among the 16%**

[www.greenbird.com](http://www.greenbird.com)