

SCITODATE

AI and Experts to Unlock Energy Market Opportunities

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Here is what we do

SCITODATE
Scientifically Up-To-Date

At Scitodate, we **help companies de-risk their business decisions**, validating the critical assumptions underpinning their **market expansion** and **large CAPEX investments**.

We are a professional service for **market-** and **technology research** specialized in **Energy verticals**

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100+ innovators and leaders have expanded
their markets with our expertise



Situation: Energy Transition Projects

Analytical Instrumentation and Photonics Company:

- **What opportunities exist for my product portfolio within the Energy Sector?**
- **What challenges in the industry can my product help resolve?**
- **What is the size of the opportunity, and where can it be found?**

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Common Solutions:

- **Generic Reports:**
 - General market trend not related to my product
- **Consultancy Projects:**
 - Very very Expensive



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Our Objective:

High Quality Research

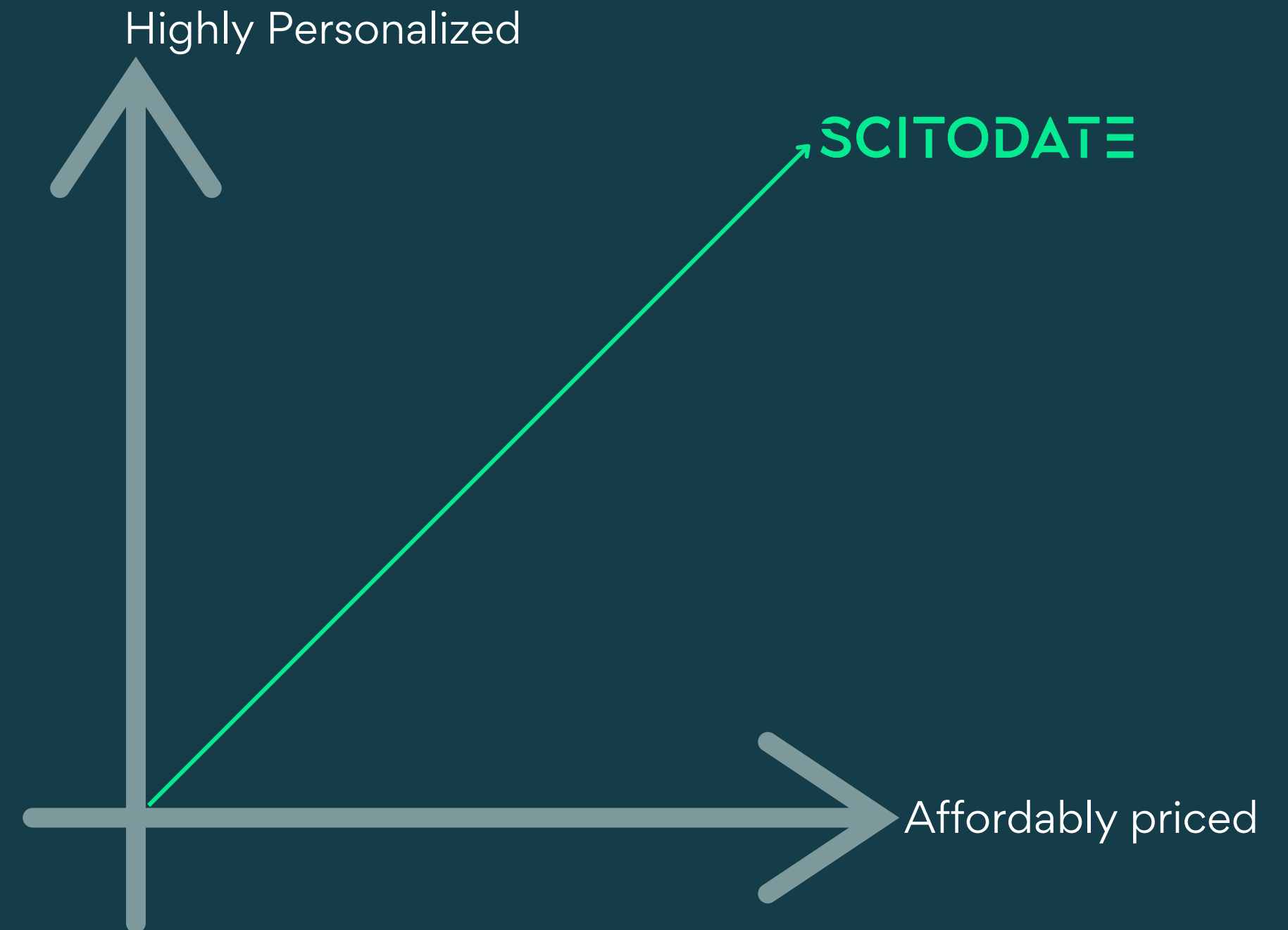
- Factual and Verifiable Information
- Bottom-up Approach
- Background data provided

From Your Company's Perspective

- Aligned with your value proposition

Accessible for Medium-Sized Businesses

- At least 1/10 of the cost compared to large consulting firms for similar projects



Our Approach: Hybrid Intelligence



Define the business question and Understand the partner's offering



Extract the insights from the data bank and report back.

3 Iterations



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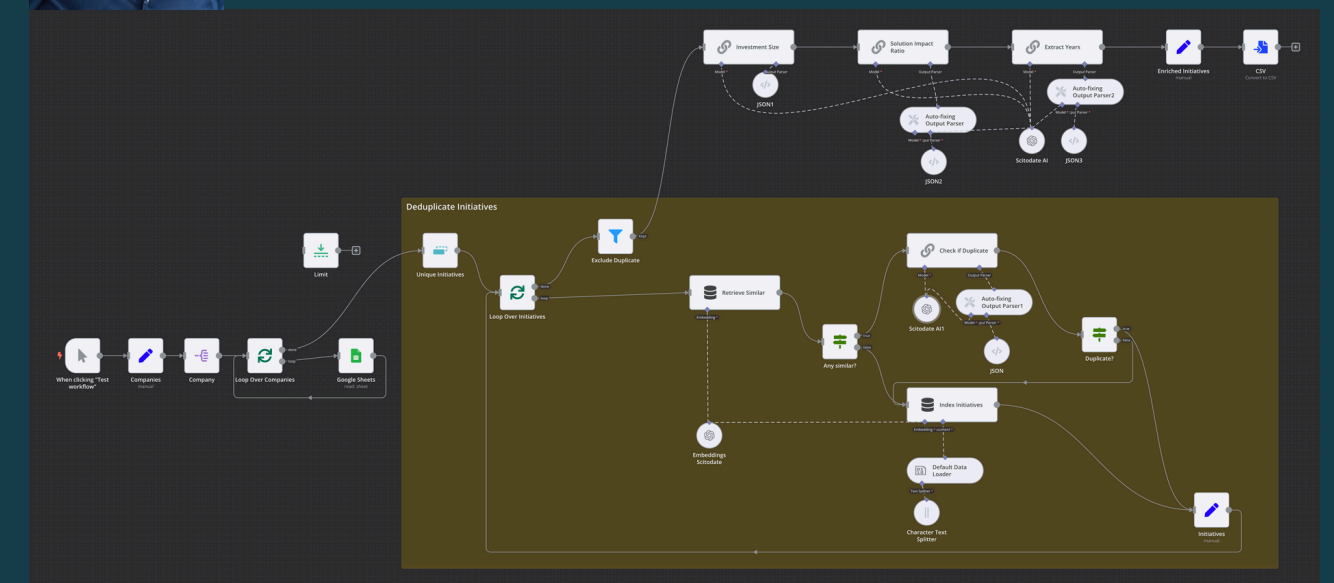
Develop technology understanding, Identify data points needed to answer the research question

Generate a databank that contains the bottom-up information to answer the question.



Convert it a data gathering workflow for AI Agents

Parties Involved	Technical Details and Challenges	Emission Reduction Type	Investment Type	Opportunity	Bo	
- N - G - Ni - Gi	- National Grid: Lead organization - GLND: Developing and evaluation	- Recompression technology to increase depth - Development of ANG storage to manage demand - Assessing potential for full-scale deployment	Other Emission Reduction	R&D Investment	\$1,200,000.00	
- V - D - W - Di	- Wacker Chemie AG: Responsibility - Dubai Central Laboratories: Hot	- Integrating EIFS involves selecting optimal materials - Requires a balance between energy efficiency and cost - Deployment must fit with local construction	Other Emission Reduction	Compliance, CSR or ESG	\$624,000.00	
- A - Ai	- Air BP spearheads the initiative	- Digital system integration for existing fuel systems - Ensuring compatibility with varied avionics	Electrification	Upgrade Existing Infrastructure	\$4,822,000.00	
- S - C - St - Ct	- SSAB leveraging its extensive expertise - Collaboration with industries like steel	- Requires expertise in steel recycling and process optimization - Employs high-pressure atomization gas for production - Dependency on 100% fossil-free energy sources	Other Emission Reduction	New Clean Energy Infrastructure	\$2,150,000.00	



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It takes data and understanding

1168

Individual **projects analysed** in detail

+100k

Publicly available **sources**

\$570B

Total investment in projects analysed

\$4.2B


Total client opportunity



*"SCITODATE technical understanding of our portfolio and the **bottom-up analysis of the market** provided **factual validation** for our **assumptions** and allowed us to **secure the budget to take action**"*

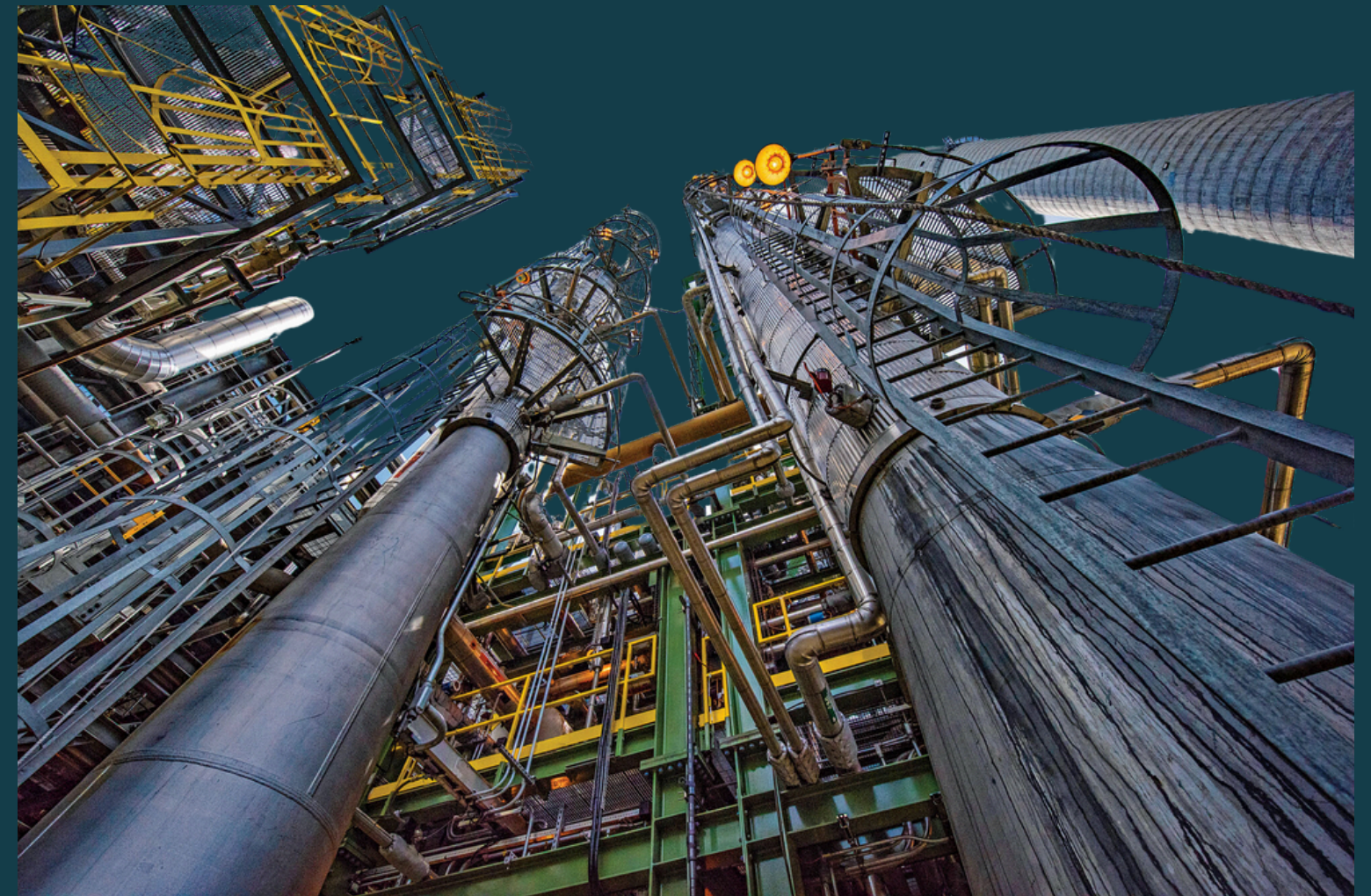
Carbon Capture, Storage and Utilization

630 
Carbon capture and
storage facilities

266 
Projects in EMEA

535 
Projects under
development

~7000+ 
Additional projects
are needed to reach
2050 goals



District Energy: Central Heating and Cooling Systems in Cities

\$220B

CCUS investment we have mapped out in only EMEA

- Investment size per project
- CCUS technology utilised
- Parties involved
- Start and delivery date of the project
- Technical bottlenecks

Name	Source	Company	Summary	Industry
Carbon Dioxide Recovery Plant in Austria	https://www.basf.com/global/en/media/news/en/	BASF	<ul style="list-style-type: none"> - Implementation of a carbon dioxide recovery plant using BASF's OASES blue technology in Austria. - Project aims to extract CO2 from industrial flue gas and refine it to food-grade quality. - The refined CO2 will cater to regions such as Western Austria, South Tyrol, Eastern Switzerland, and Bavaria. - Technical benefits: increased reliability in CO2 supply for industries and reduction in carbon emissions. 	Chemicals
Intrusion Drone Power Line Upgrades	https://www.equinor.com/energy/ret/retires	Equinor	<ul style="list-style-type: none"> - This initiative focuses on upgrading power lines using drone technology. - Enhances existing power networks to improve efficiency. - Utilizes drones for an innovative approach to reduce manual labor and increase safety. - Potentially reduces carbon emissions by modernizing grid infrastructure. 	Oil and Gas Extraction and Refining
Engie Lelystad Battery Energy Storage Project	https://ir.fluenceenergy.com/news-releases/cheers	Engie	<ul style="list-style-type: none"> - ENGIE has assigned Fluence Energy to deploy an advanced battery energy storage system at the Maxima power plant in Lelystad. - The system will consist of a 33 MW / 100 MWh capacity battery installation. - This project is designed to enhance the flexibility and reliability of the Dutch electricity grid by storing excess energy generated by - It is set to become operational in 2025. 	Electricity and Heat
Solvay Greenhouse Gas Reduction Initiative at Dc	https://www.solvay.com/en/	Solvay	<ul style="list-style-type: none"> - This project involves the implementation of a cutting-edge carbon capture technology at Solvay's Dombasle plant in France. The in/ 	Chemicals

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Challenges across CCUS projects addressable by optics and analytical instruments

Capture:

- **Energy intensity:** amine-based absorption, require significant energy input
- **Efficiency and Scalability:** Scale-up from laboratory or pilot-scale systems to large industrial
- **Material Degradation:** capture materials degrades over time

Storage:

- **Site Selection:** Identifying suitable geological formations
- **Monitoring and Verification:** Long-term verification to assess the stability of CO₂
- **Chemical Reactions:** Interaction of injected CO₂ may also reduce reservoir's permeability or porosity.

Situation: Energy Transition Projects

Analytical Instrumentation and Photonics Company:

- **What is the state of district energy?**
- **What challenges in the industry can my product help resolve?**
- **What is the size of the opportunity, and where can it be found?**

District Energy: Central Heating and Cooling Systems in Cities

90%

Fossil Fuel the main source of energy

38%

Natural Gas

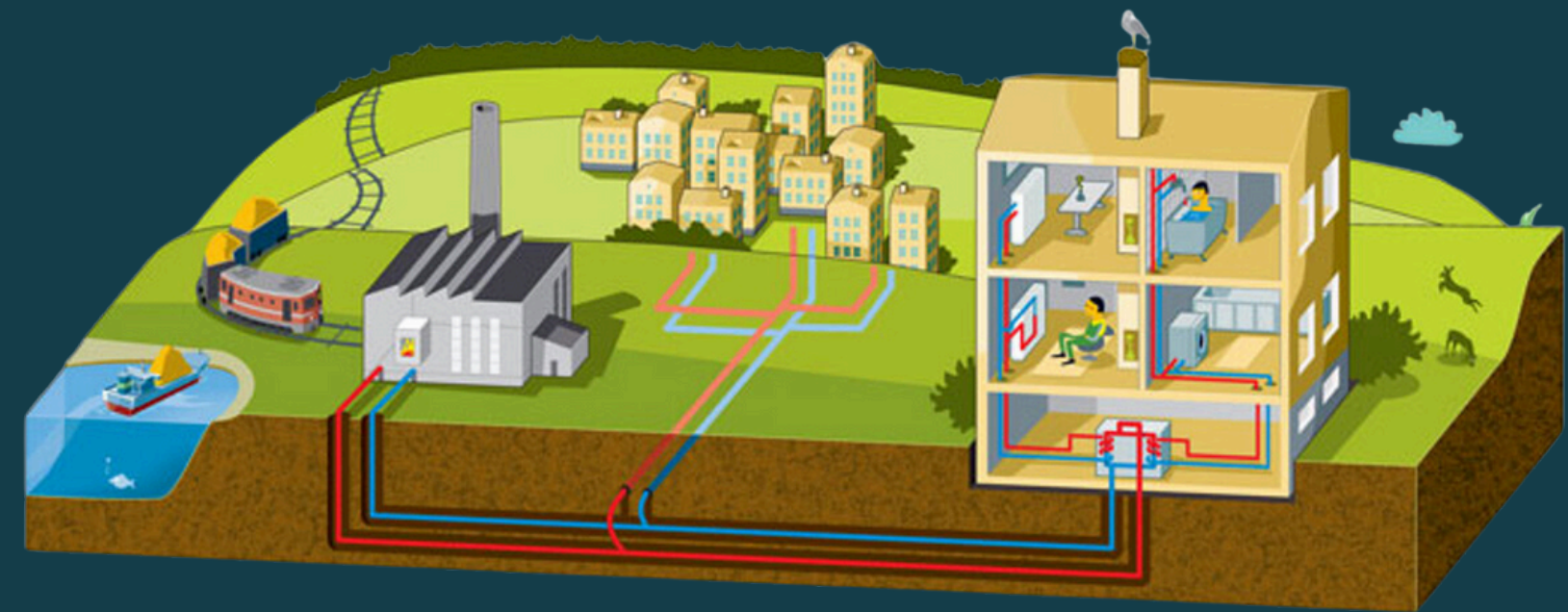


17K

District energy systems in Europe

~30%

European Systems need to be upgraded



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Huge opportunity for real time process control and environmental monitoring systems

- Data for carbon accounting and emissions reporting.
- Detects trace amounts of pollutants with high accuracy
- Identifies leaks or blockages

Questions to answer:

- How many district energy systems need upgrading?
- What are the announced upgrade projects?
- What are the technical challenges for them to reach the goal?

=> How big is the opportunity for my product here (TAM/SAM)?



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Let's start a pilot project and explore new possibilities together...



If you are looking to **expand in a new market** or pursue a **large CAPEX investment** in **Energy verticals** you are likely asking:

- Who **needs my solution**?
- What are **my competitors doing**?
- What's the **market size**?
- What is the **best technology to invest** in?

Let's discuss how we can create your custom data bank to validate your most critical assumptions and make you decide with confidence