B-WaterSmart

Environment Dashboard
Training sessions: #30 Environmentdashboard.

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nord|kontakt ®

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Today's Agenda

- Briefly about Nordkontakt

- Our task at B-Watersmart

- Method

- Focus

- Application values

- Weaknesses with the current knowledge base

- Demonstration of Environmental Dashboard
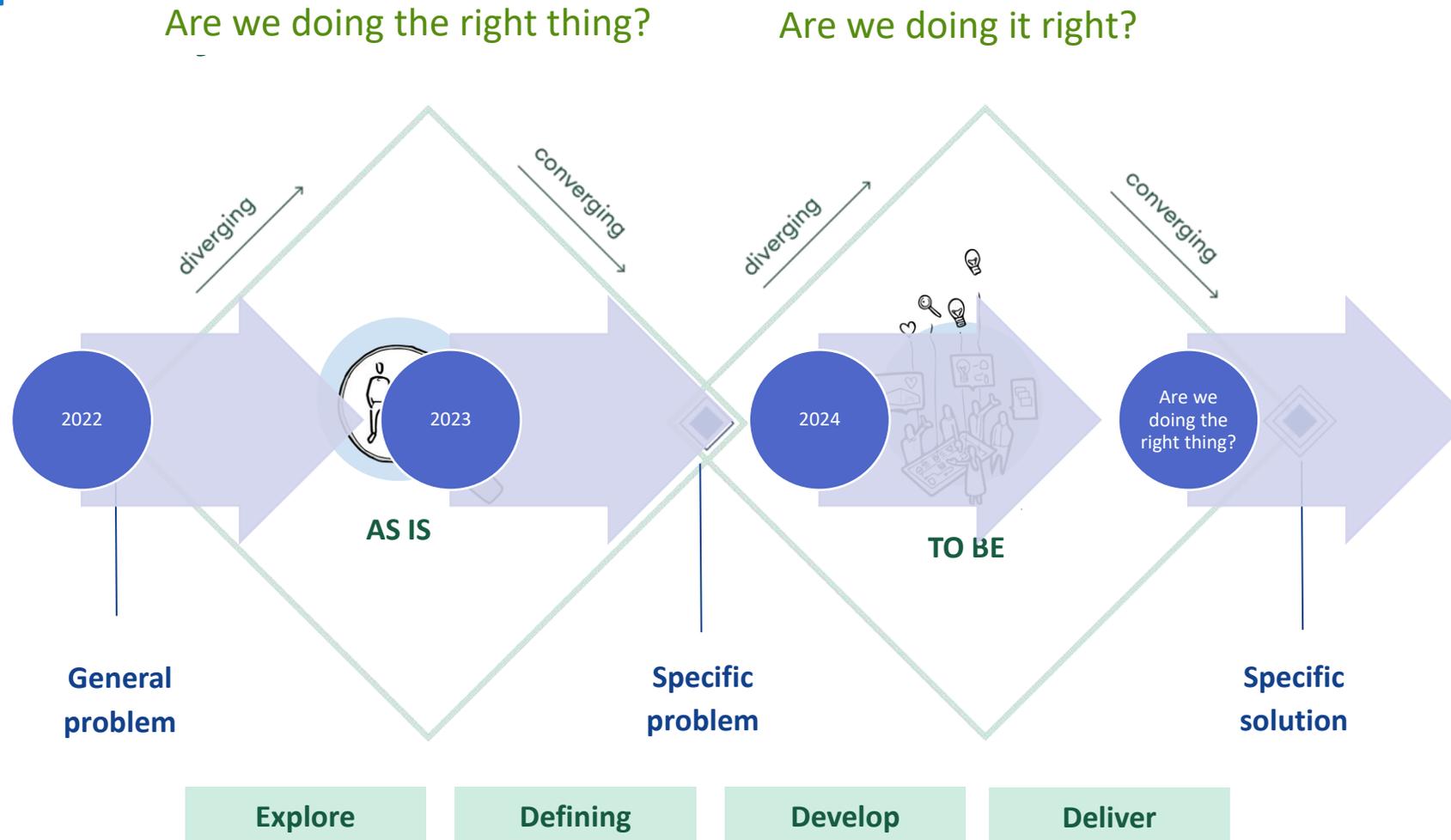
Industri

Bygg

VA

Siømat

About us at Nordkontakt

- We are a leading Norwegian engineering company specializing in automation and information technology, serving all industries and markets.

- We deliver products and services at all levels in the process, from simple components to fully commissioned plants.

The task for Nordkontakt in B-WaterSmart

- **Collect data, analyze and present**

  - Establish data flow

  - Establish database for massive amounts of data

  - Establish analysis

  - Establish a front end that contributes to new insights

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Method

Are we doing the right thing?   Are we doing it right?

diverging   converging   diverging   converging

2022   2023   2024   Are we doing the right thing?

AS IS   TO BE

General problem   Specific problem   Specific solution

Explore   Defining   Develop   Deliver

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Focus

For technical personnel and municipal administration

➢ Provide new insight through a comprehensive real-time picture of the municipality's water supply network

Develop a real-time picture, with historical data for research

➢ Provide an interface with real-time and historical water data for the municipality, districts and basic districts.

Water-smart citizens

➢ Provide new insights that give the citizen a simple interface with real-time water data for the municipality. New insights should contribute to increased water awareness.

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Useful value for Bodø municipality

Ambiton:

- **Improved decision support tools with real-time data and analysis**

Whitch gives:

- **Correct and faster prioritization of work initiatives**

- **Fact-based decision support**

- **Simplify reporting**

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Utility value for Nordkontakt

- **With participation in B-Water Smart together with Bodø municipality and others. we achieve :**

  - ➢ Presents us as a knowledge company that attracts people to the municipality and the region.

  - ➢ Presents us as a knowledge company in a international context.

  - ➢ And thus contribute to new and lasting knowledge workplaces in the region.

2 Konklusjoner

📋 **Konklusjon**

- Drikkevannet til de fleste innbyggerne er trygt, ut fra de myndighetsbestemte kontrollene. Det er imidlertid begrensninger i statlige myndigheters kunnskapsgrunnlag.
- Nasjonale mål fra 2014 om å redusere lekkasjer og fornye ledningsnettet for drikkevann er ikke nådd.
- Samlet sett har ikke virkemidlene på drikkevannsområdet ført til en bedring i måloppnåelsen.
- Det har vært for lite samordning mellom involverte departementer i oppfølgingen av de nasjonale målene om å redusere lekkasjer og å fornye ledningsnettet for drikkevann.
- Styringsinformasjonen på drikkevannsområdet er ikke tilstrekkelig og innhentes ikke på en effektiv måte.

The management information in the drinking water area is not sufficient and is not obtained in an efficient manner.

Riksrevisjonen

Myndighetenes arbeid med trygt drikkevann

Dokument 3:8 (2022–2023)

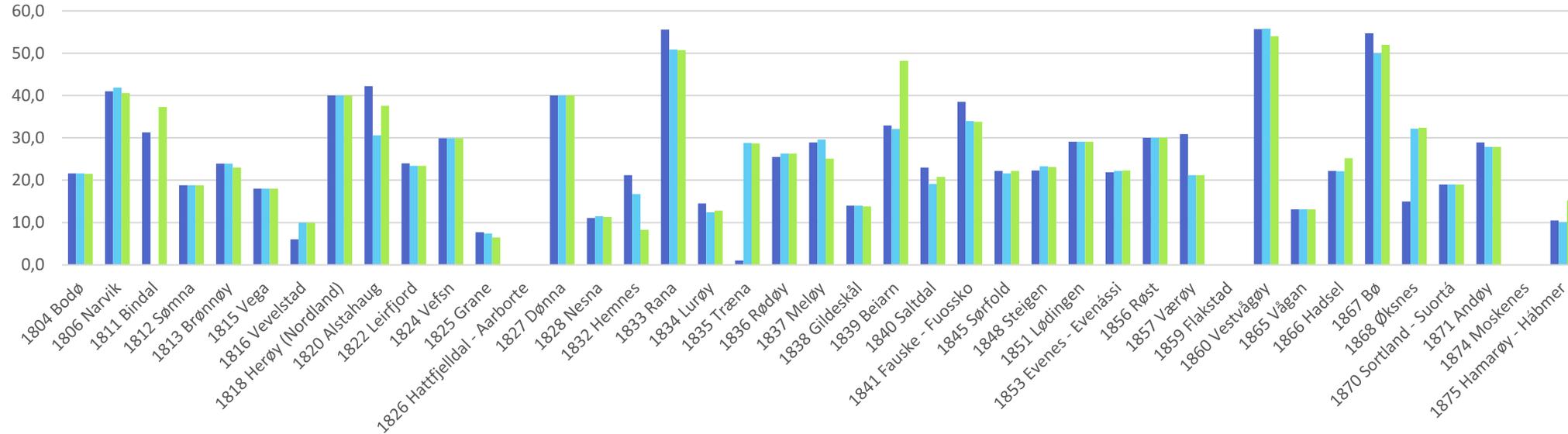The National Audit Office
The authorities' work with safedrinking water

Riksrevisjonen, 21. februar 2023

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Example from Statistics Norway SSB

Reported leakage rate for all municipalities in Nordland for the past 3 years.

When data on leaks in Norwegian distribution systems for drinking water are as uncertain as what we have shown here, it is not only very difficult for the authorities to know what the actual proportion of leaks is.

It will also be very demanding to have management information about how much the actual leakage percentage changes over time.

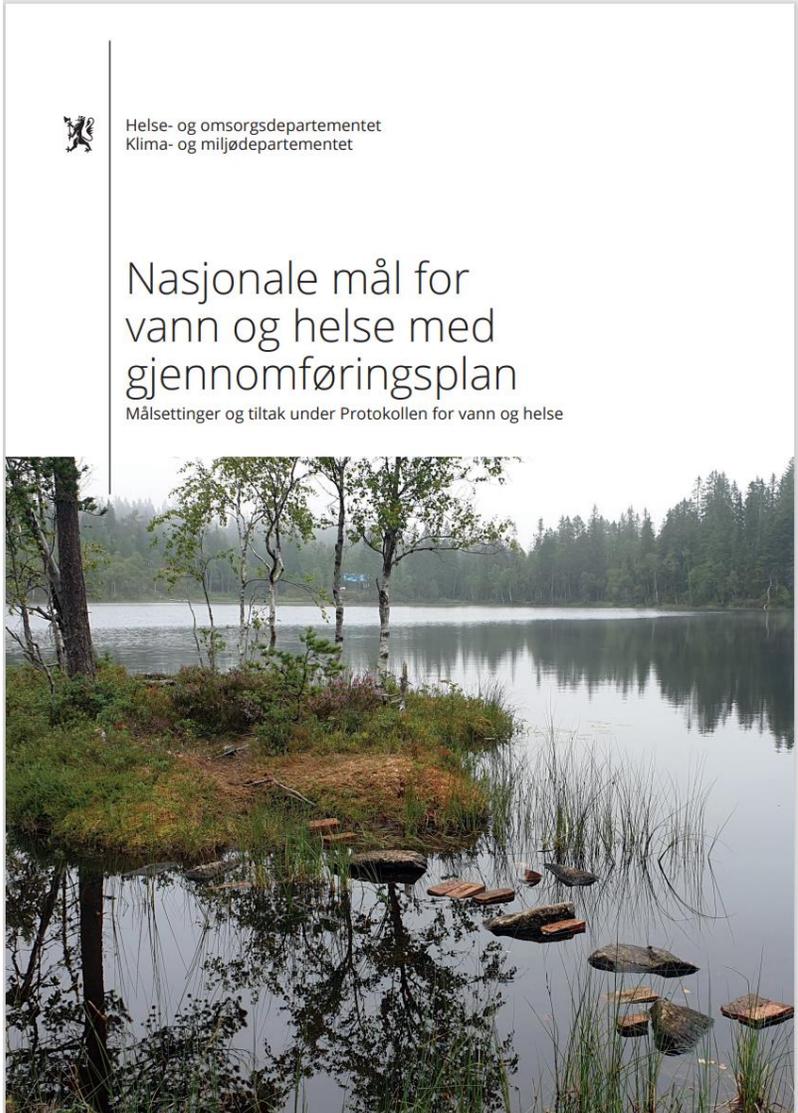B-WaterSmart

Useful value for the country and society

Norway has set national targets for water and health which will help to solve important challenges for the drinking water supply and in the wastewater area.

The targets were updated in 2024, together with an implementation plan for the sector authorities.

Quote from this document.

"There are certain fundamental prerequisites for achieving national goals. Developing better reporting solutions for drinking water data and statistics with reliable data to analyze the condition and then implement the appropriate measures to achieve the goals is one example"

We feel that we are at the right time with the right solution now.

Helse- og omsorgsdepartementet
Klima- og miljødepartementet

Nasjonale mål for vann og helse med gjennomføringsplan
Målsettinger og tiltak under Protokollen for vann og helse

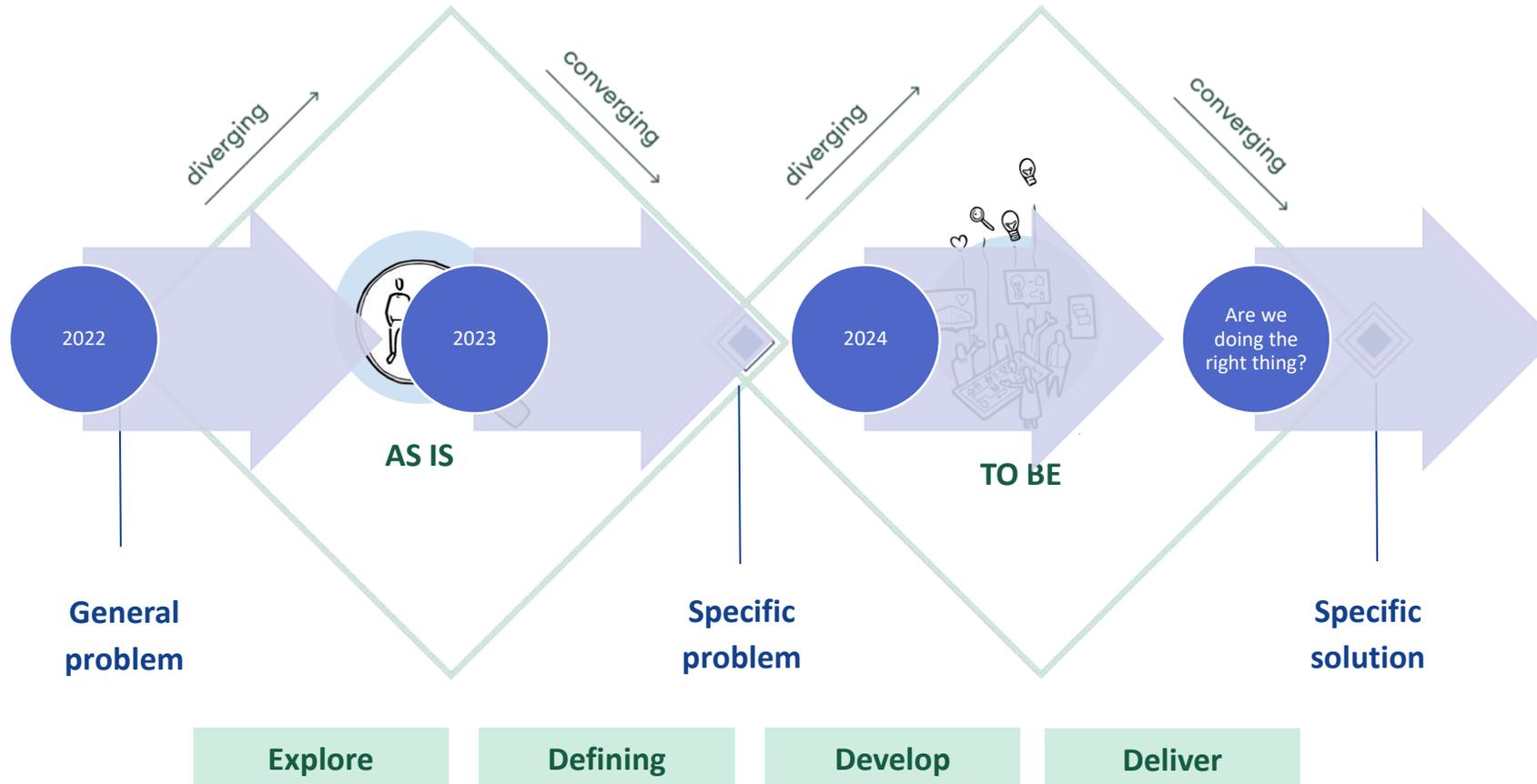Ministry of Health and Welfare
Ministry of Climate and Environment

National targets for water and health with implementation plan

19.02.2024

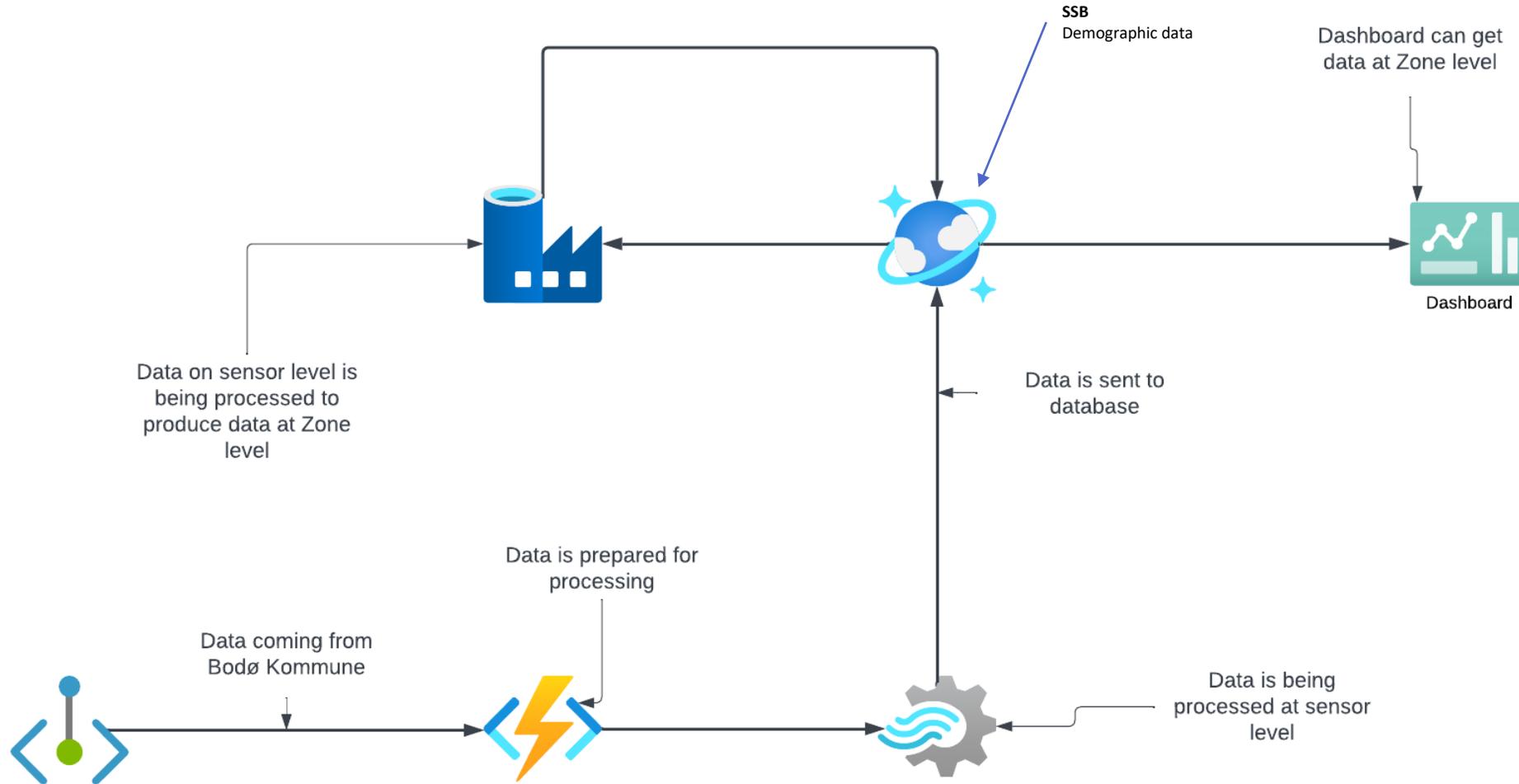Objectives and measures under the Protocol for water and health

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Existing data sources.

New analysis methods

New insights

SSB
Demographic data

Dashboard can get data at Zone level

Data on sensor level is being processed to produce data at Zone level

Data is sent to database

Dashboard

Data is prepared for processing

Data coming from Bodø Kommune

Data is being processed at sensor level

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Overall layout

Global Navigation
The sidebar is the global navigation on the page and allows users to navigate between the various categories

The top bar
The top bar is page-specific. What is selected in the top bar will apply to all widgets and to the map on the page the user is on.
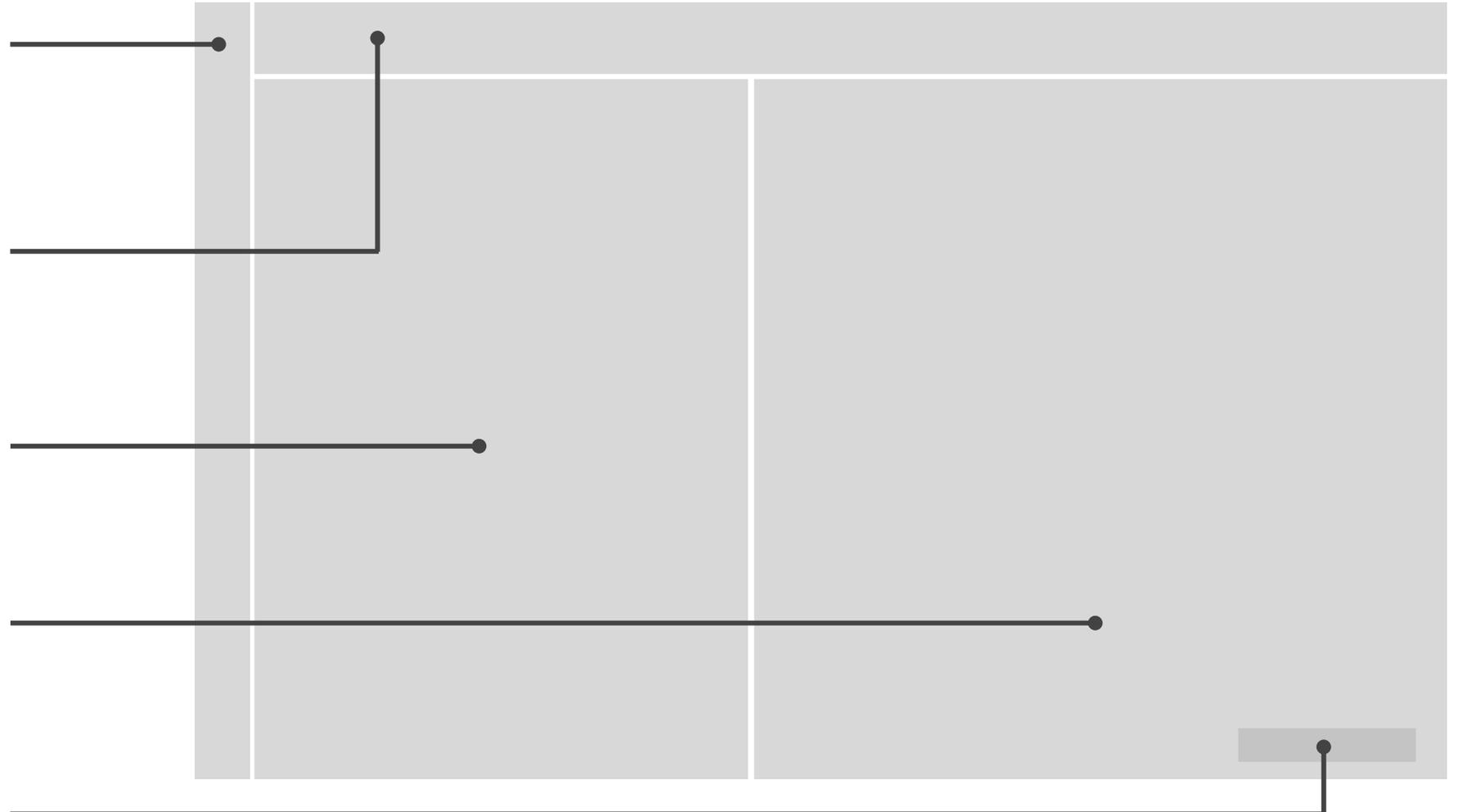
Widgets

Widgets show representations of data sets in various ways that provide value for the user and are linked to the defined user tasks.

Map display
The map view gives the user an overview of various measurement points in a geographical context.Clicking on the icon displays more detailed information about the measuring point.

Filtering

Filtering options in the map allow users to decide how much information the map should show. Filtering options are specific to each page.

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Over to demonstration with Ole-Marius Johansen

https://forms.gle/G6MMbJexdt7iYsJh7