

# Data, information and innovation for safe and sustainable use of the subsurface

Safeguarding data from departing operators

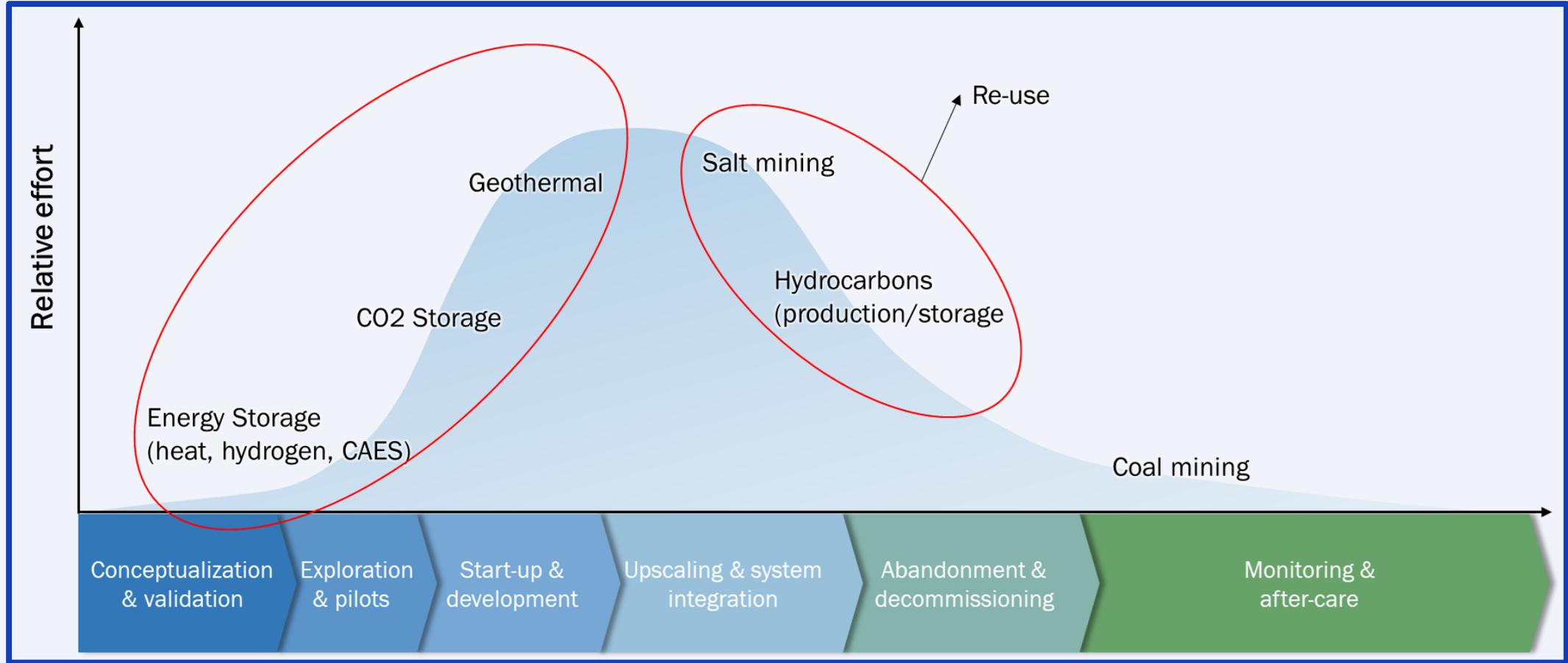


## **Take away message**

**Significant amount of valuable, but inaccessible data present at operator repositories.**

**Opportunity for operators to share this data to accelerate gas production and contribute to the energy transition.**

# Context



# Current data situation at GDN

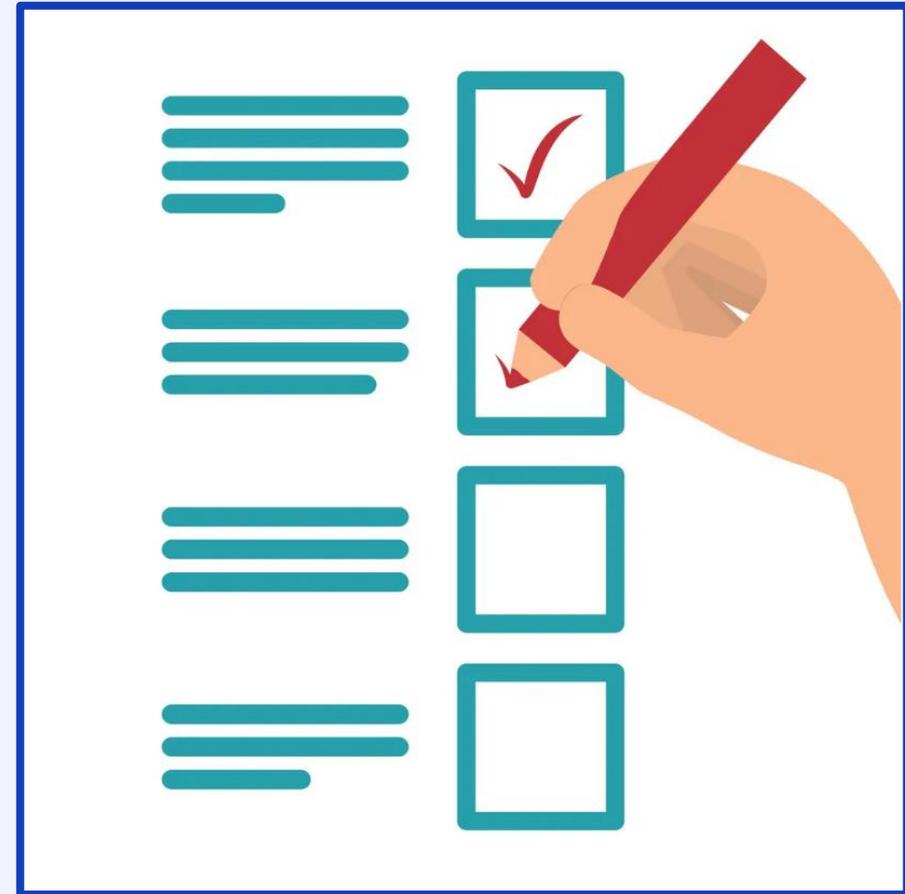
- Operators share data with government, TNO
  - After confidentiality period released (nlog.nl)
  - Accessible for everyone
  - Important source of information for upcoming subsurface industries
- More data still resides with operators
  - Valuable for upcoming subsurface industries
  - Valuable to accelerate gas production
  - At risk of getting lost

The screenshot shows the NLOG website interface. At the top, there is a navigation bar with links for Home, Data, Activiteiten, Wet- en regelgeving, Vergunningen, Mijnbouweffecten, and Publicaties. Below the navigation bar, the main content area is divided into several sections:

- Welkom bij NLOG**: A welcome message stating that the website provides information about energy and minerals in the deep underground of the Netherlands and the Dutch continental shelf. It also mentions that TNO – Geologische Dienst Nederland manages NLOG on behalf of the Ministry of Economic Affairs and Climate.
- NLOG op kaart**: A section featuring a map of the Netherlands and a link to "Naar de kaart".
- Datacenter**: A section featuring an image of a wellhead labeled "WELL-12" and a link to "Naar het Datacenter".
- Nieuws**: A section listing recent news items with dates and titles, such as "07.11.2023 Wijzigingen in vergunningen per 1 november 2023".
- Lopende boringen**: A section listing ongoing drilling operations with identifiers like "DEL-GT-02-S1 L11-16".
- Direct naar**: A section with direct links to various resources, including "Results public SHRA Groningen", "Geothermie", "Interactieve kaart bodemdalingmetingen", "Maximale productievolumes per gasveld", "DINOloket", "Stratigrafische Nomenclator", "Data aanleveren op het Innameportaal", and "Website geologische dienst Nederland".

# TNO study: Safeguarding data from departing operators

- Commissioned by MEAC
- Research questions:
  - What is the re-use potential of the data?
  - Do we need to safeguard them?
  - What will be the effort to safeguard them?
- Method:
  - Comparison with policy other countries
  - GDN internal survey
- Results translated into 'Perspective for action' for MEAC



# Situation other countries – differences with NL



## Australia

Relinquishment Reports  
Interpreted data release



## Norway

Relinquishment Reports  
Reduction confidentiality period  
Interpreted data release  
'New data domains'

## Germany

Introduction confidentiality period  
Intake interpreted data

## UK

Relinquishment Reports  
Interpreted data release  
Short confidentiality period well data

# Survey

## Datatypes

- **Biological:** microfossils or DNA for stratigraphy, facies and palaeo-climate;
- **Chemical:** Data about subsurface materials (rocks, sediments, liquids, gasses);
- **Physical:** Static and dynamic properties of rocks, liquids and gasses (seismic, core, field, lab etc.)
- **Operational:** Data about construction, production, maintenance and abandonment of mining objects and facilities
- **Interpretations:** Mining activity life cycle studies (horizons, faults, properties, dynamical models etc.);
- **Effects of mining activities:** meetplannen, monitoring, data about seals, geodesy, well integrity, earthquakes etc.;
- **Damage:** Data about damage to buildings or infrastructure for validation.

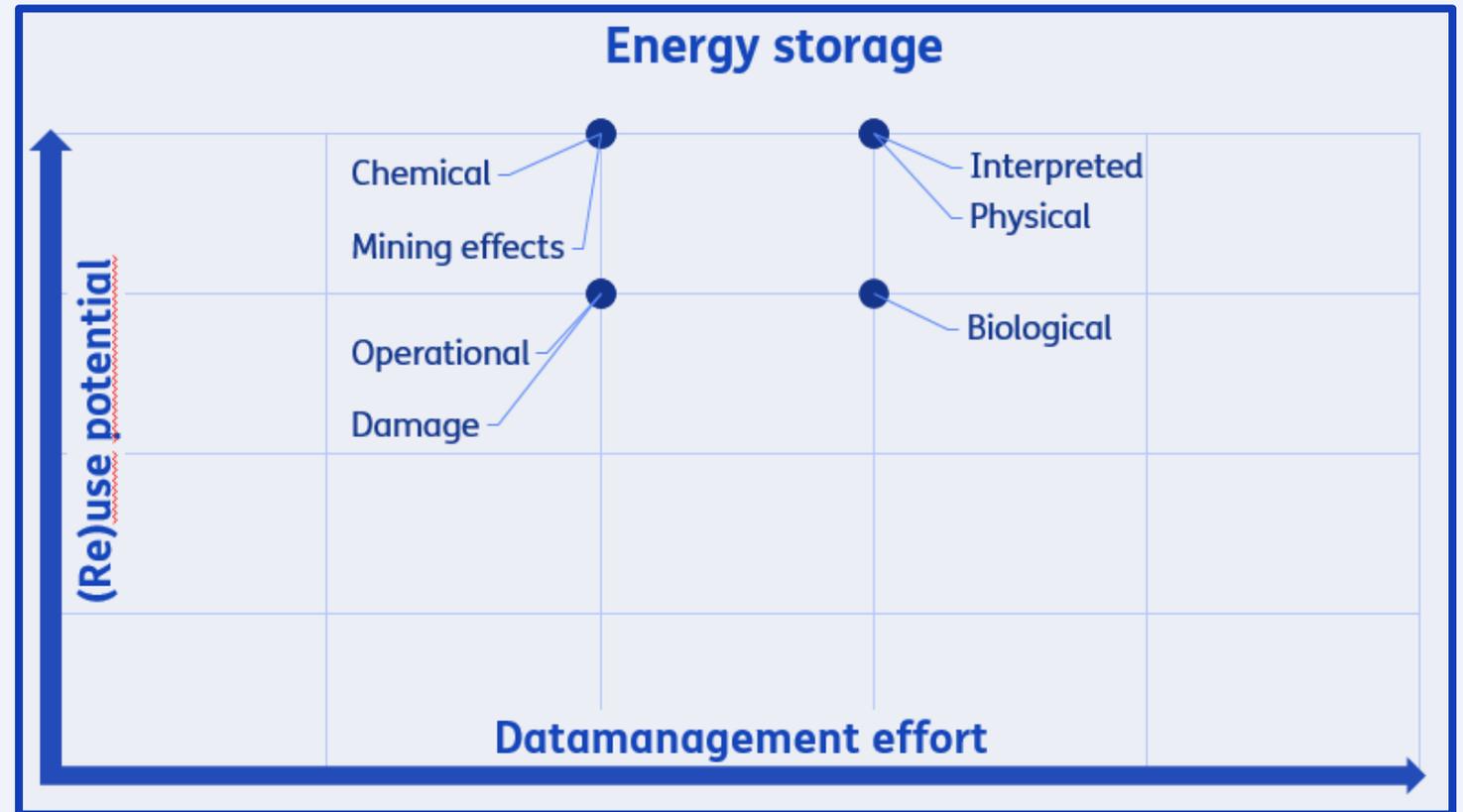
## Assessed on:

- Amnesia risk
- Reproducibility
- Cost of renewed acquisition
- Distribution
- Data management effort
- Re-use potential

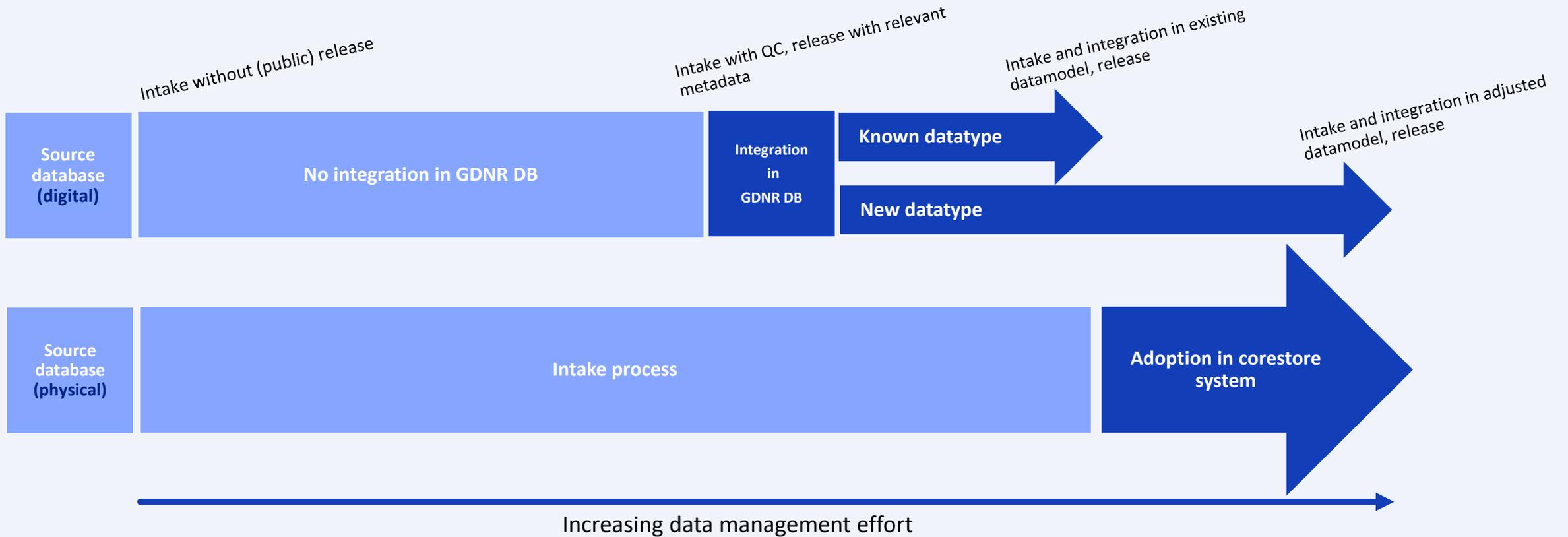
# Survey results

## For all datatypes:

- Reasonable amnesia risk
- Low reproducibility
- Too expensive for renewed acquisition
- **30% – 60% unique data at operator!**
- High re-use potential, but also large data management effort



# Data management effort



# Benefits for operators

- Benefits for operators
  - Low effort data transferral
  - 'Lean and mean' business operations
  - Accelerate gas production
  - Improve knowledge about new subsurface industries



**Geologische Dienst  
Nederland**  
Onderdeel van TNO

## Take away message

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**Thank you for your attention**