





















Linking & Integrating **Environmental Data** in Europe





Christopher Baldock CLEAR Info, Action 3.6 Project Manager









Introduction

Linking and integrating company-level and geo-spatial environmental data at a parent company, subsidiary and site-level so that it can be aggregated and is useful in policy and decision-making for regulators, investors and companies.

Linking

Taking the same type of *company-level* environmental data from around the EU

Integrating

Using <u>geo-spatial</u> datasets of different formats so that they provide an extra layer of information





Data Integration Tool

England

Environment Agency

Stores information on:

i. 170,000 sites, 35,000 parent companies and 1,300 listed companies

Data contained in the CUBE includes company and regulatory data, such as:

- i. Waste production
- ii. Emissions
- iii. Permit breaches
- iv. Water abstraction

Challenges

- Data regional variations in data collection methods, systems used, permitting conditions, joint permitting
- ii. Company identity may have changed since the permit was issued, identifying primary keys, formatting of permits



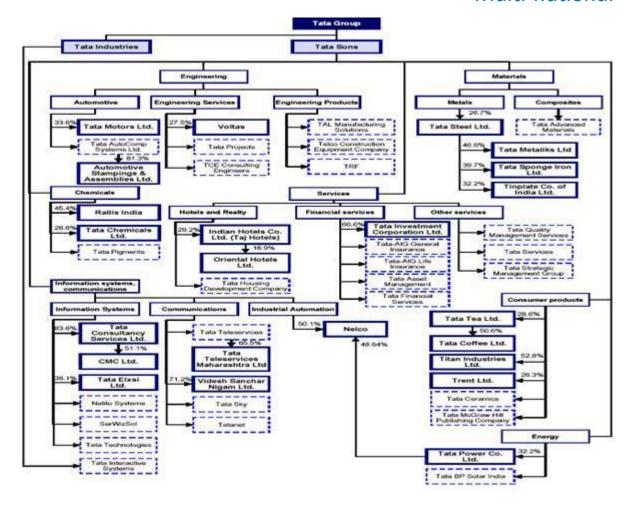


Example Company – Tata Group

Multi-national

7 industries

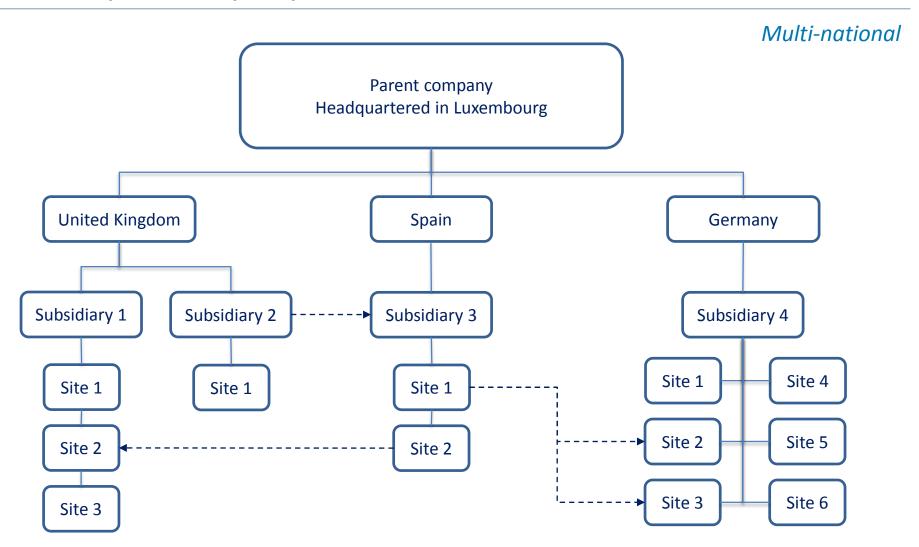
- i. Engineering
- ii. Materials
- iii. Consumer Products
- iv. Services
- v. Chemicals
- vi. Information Systems
- vii. Energy







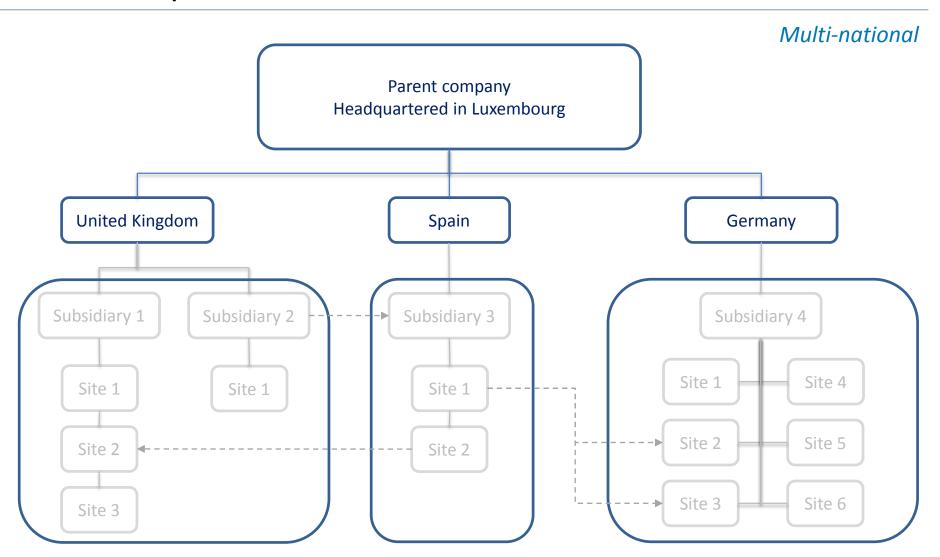
Example Company







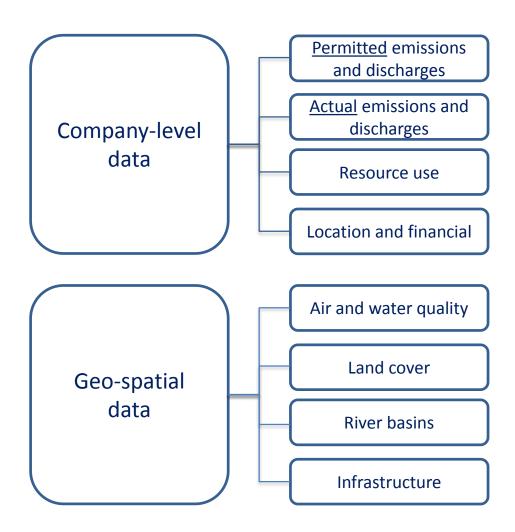
Next Steps







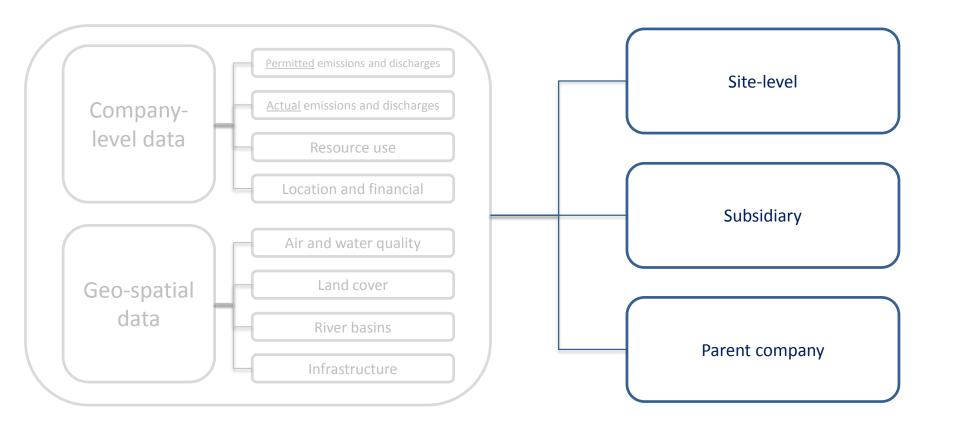
Multi-national





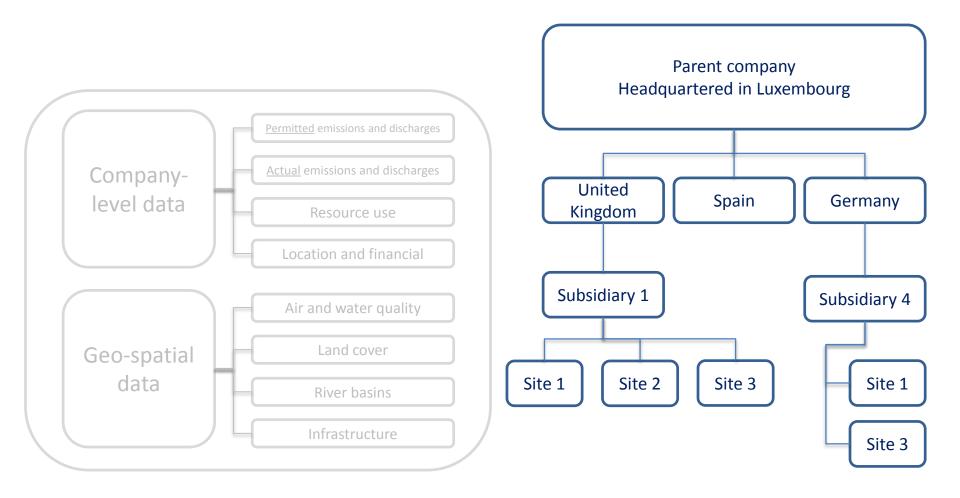


Multi-national













Example Output

Inter- and intra-company comparisons at:

Site-Level

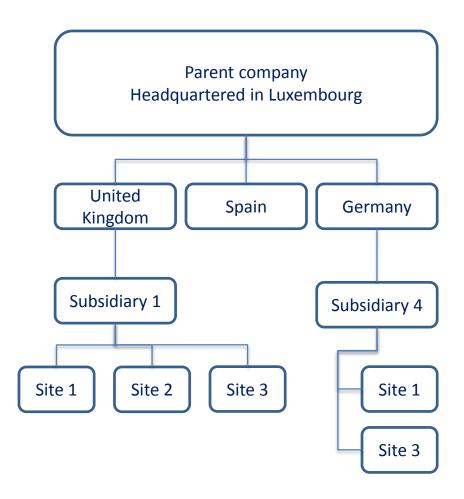
- i. Compare the number, severity and cost of environmental breaches
- ii. Assess local impacts and dependencies on aspects such as water quality

Subsidiary

 i. Compare company environmental performance across various regulatory regimes

Parent Company

 Gain visibility of total environmental performance







Challenges

- Matching companies and sites across datasets
 - i. Company name issues
 - i. Name changes
 - ii. Name spellings
 - ii. Use of unique identifiers D&B number, permit number...
- ii. Permit data
 - Free text mass download difficult
 - ii. Issued in the 1960s
 - iii. Issued and managed at different levels
 - iv. Different information contained in permits
- iii. Filling in the gaps
 - i. Attaining revenue or production data for each site (and type of site)
- iv. Data sources
 - Regulatory and company data, data sharing, confidentiality





CLEAR Info partners















