

Energy transition with use of **Geo-spatial** and **Big Data**

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Energy transition in Geneva



Energy
planning



Infrastructure

Energy efficiency

Renewable
energy

Energy consumption
CO2 emissions
change

Energy policy
objectives

Le Programme Bâtiments



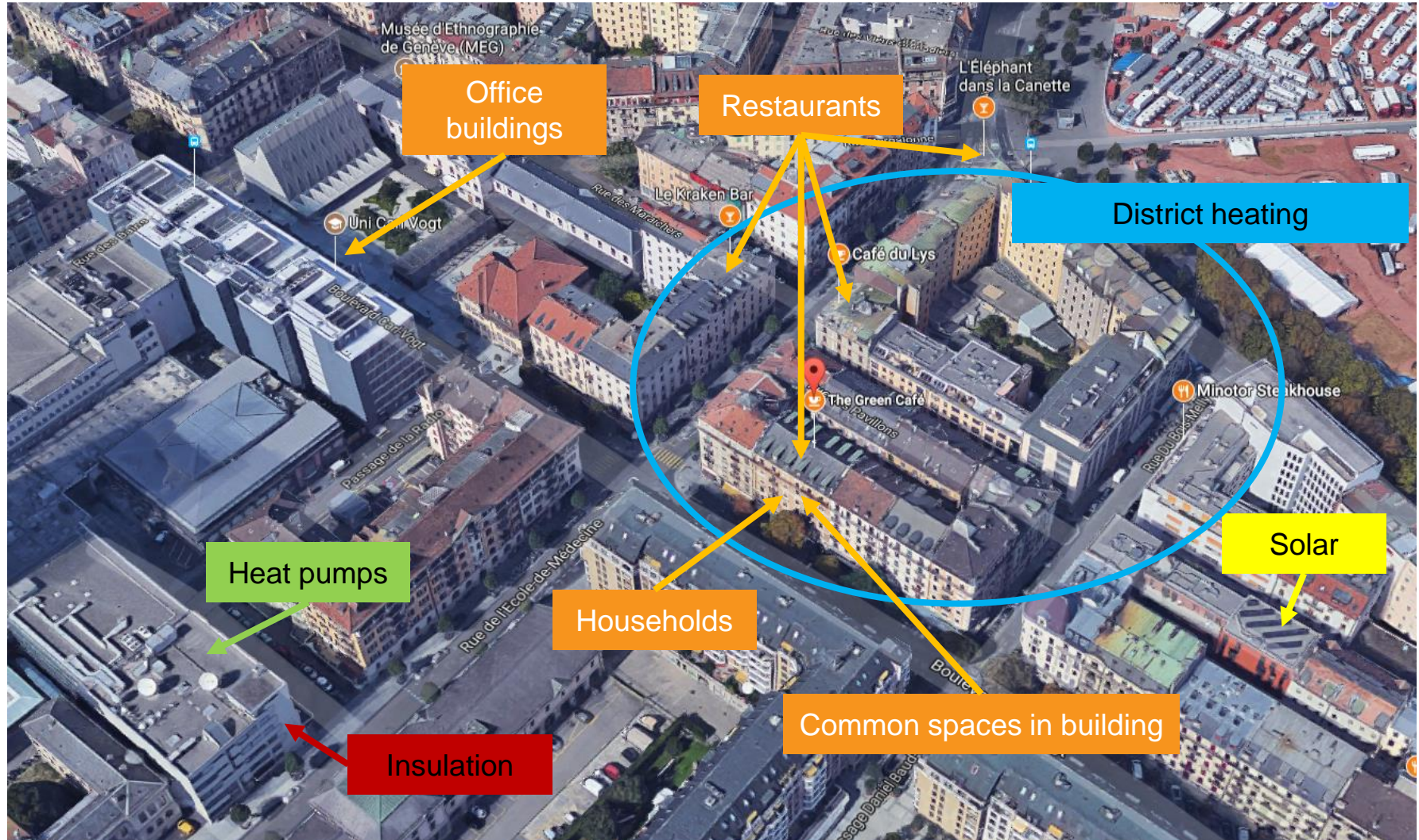
ProKilowatt

Energy
programs

Evaluation



Coordination between solutions and scales



Data collection and use challenges



Geo-spatial and Big Data producers:



Statistics
Maps



Energy consumption
Infrastructure



Energy projects



Field data



Studies

Data characteristics:

- Collected?
- Systematized?
- Accessible?
- Updated?
- (Un)used?

AtlasEco21: planned content

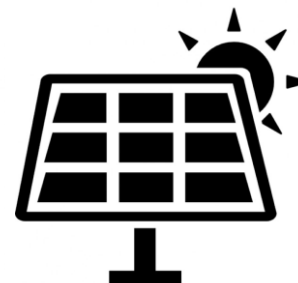
Buildings



Technology & Consumption

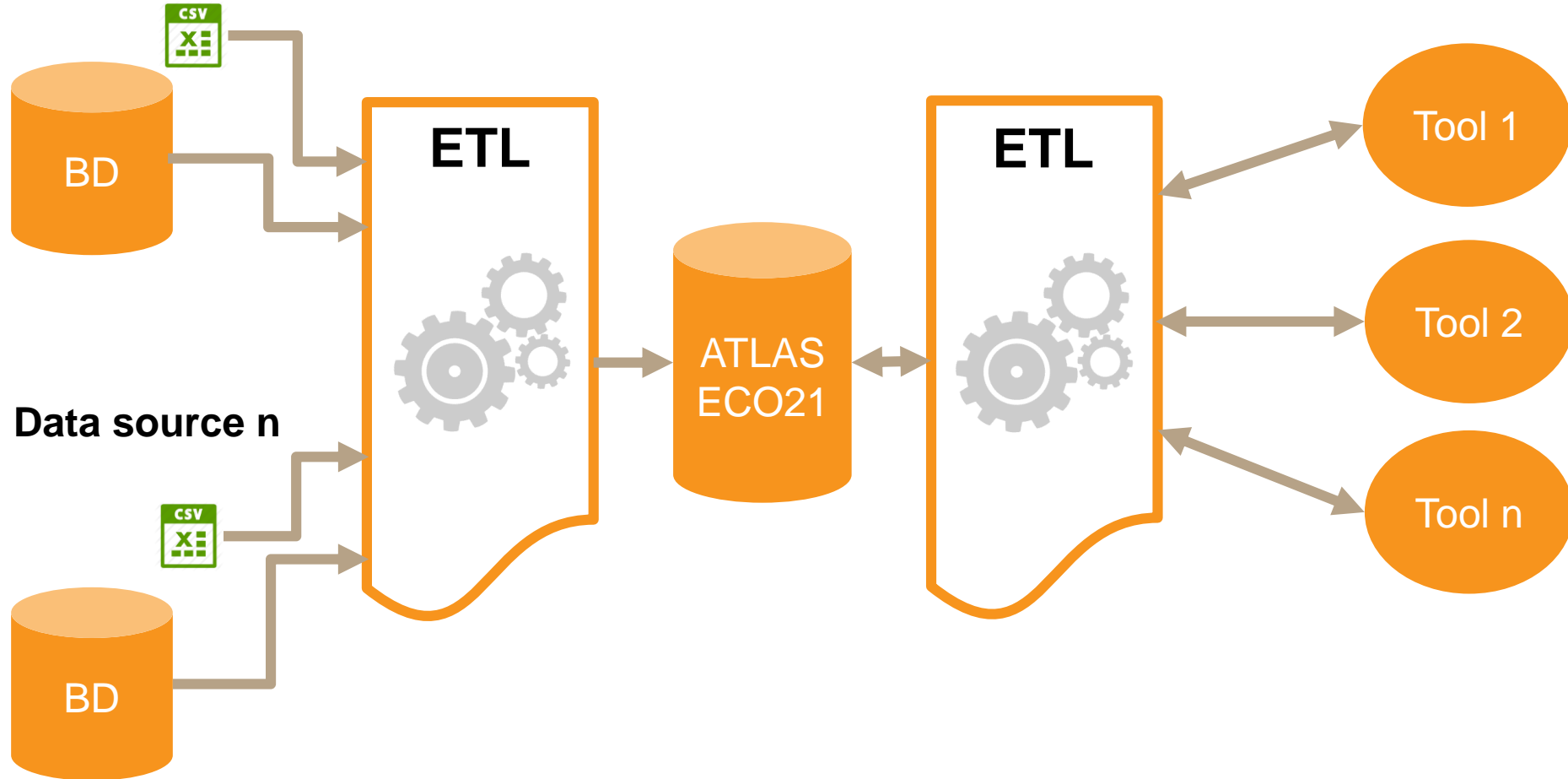


Energy saving & Renewable energy potentials



Functioning principle

Data source 1



Examples of tools

Heating planning tools

-  Urban scale

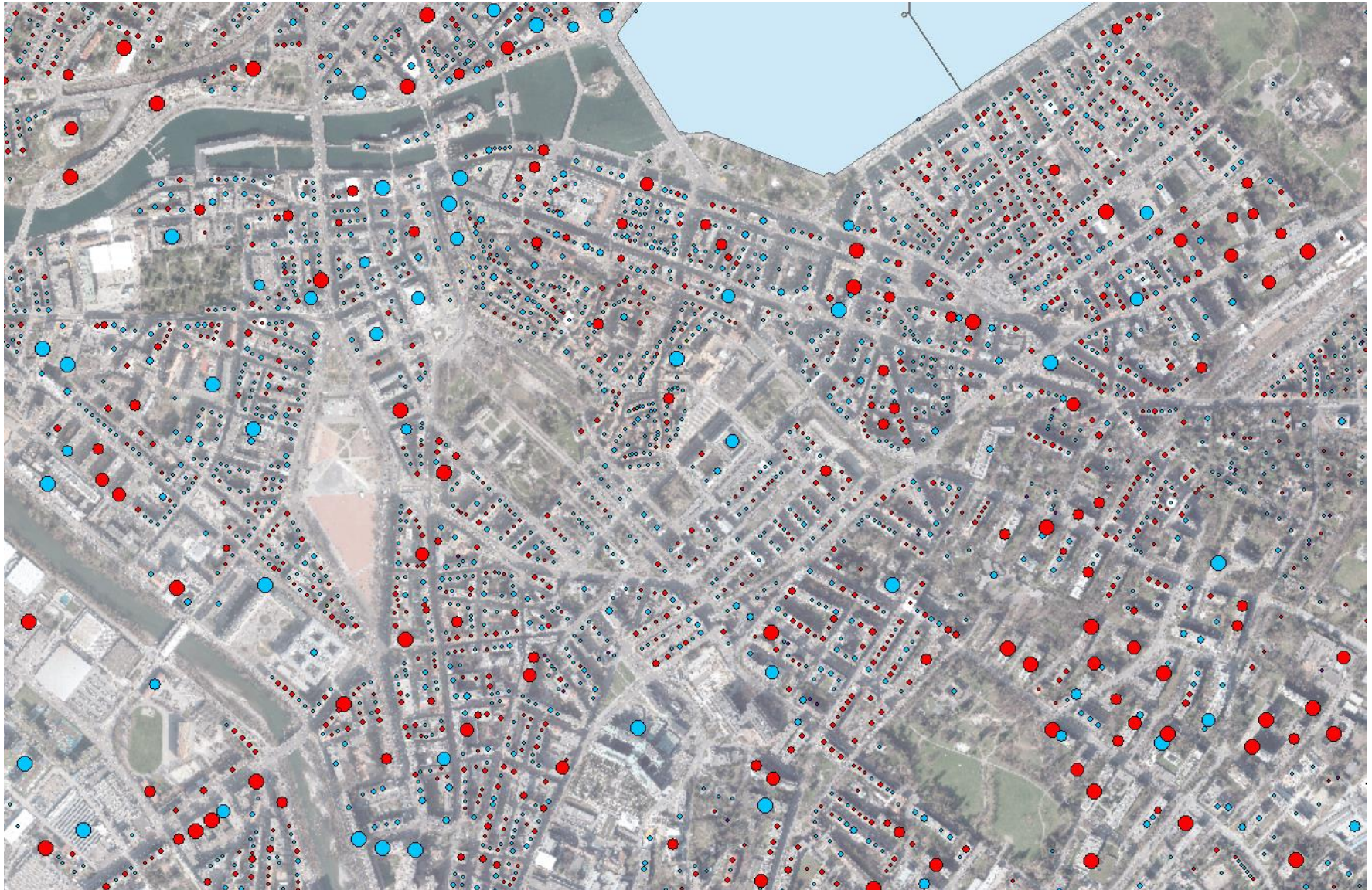
-  Project scale

Electricity saving tools

-  Urban scale

-  Individual consumer scale

Example 1: heating planning tool for city



Example 2: heat supply tool for buildings

Functions:

- Data on **heating systems** by building **address** (regular update)
- **Individual building** and building **group** levels
- **Pre-qualification** of technical and economic **feasibility**
- Evaluation of **environmental impact**
- Contracting **offer development** (with comparison of alternatives)

Allows to:

- **Valorize knowledge** from studies and pilot projects
- **Reduce the costs** related to data collection and reports
- **Communicate more effectively** with decision-makers and implementers

Étape 1 : choix du lieux des travaux

Lieux des travaux

Adresse

1

Ch. Château-Bloch 10, 1219 Le Lignon
Ch. Château-Bloch 12, 1219 Le Lignon
Ch. Château-Bloch 14, 1219 Le Lignon

Type de projet

2

☐ Immeuble individuel
☐ Ilot

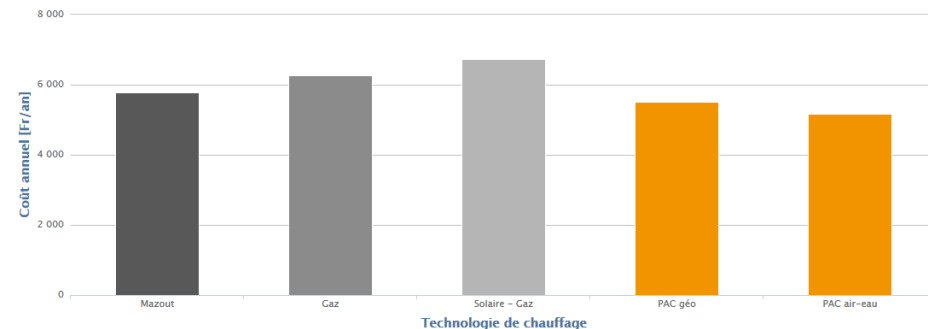
3

Ch. Château-Bloch 10, 1219 Le Lignon

continuer

Comparatif financier des solutions techniques de chauffage

Le graphique vous permet de comparer le coût annuel des différentes solutions de chauffage. Le coût annuel comprend l'amortissement des investissements, l'entretien et l'énergie. Vous voulez recevoir ce comparatif, il vous suffit de cliquer sur "imprimer la simulation".



Example 3: electricity saving tool for buildings

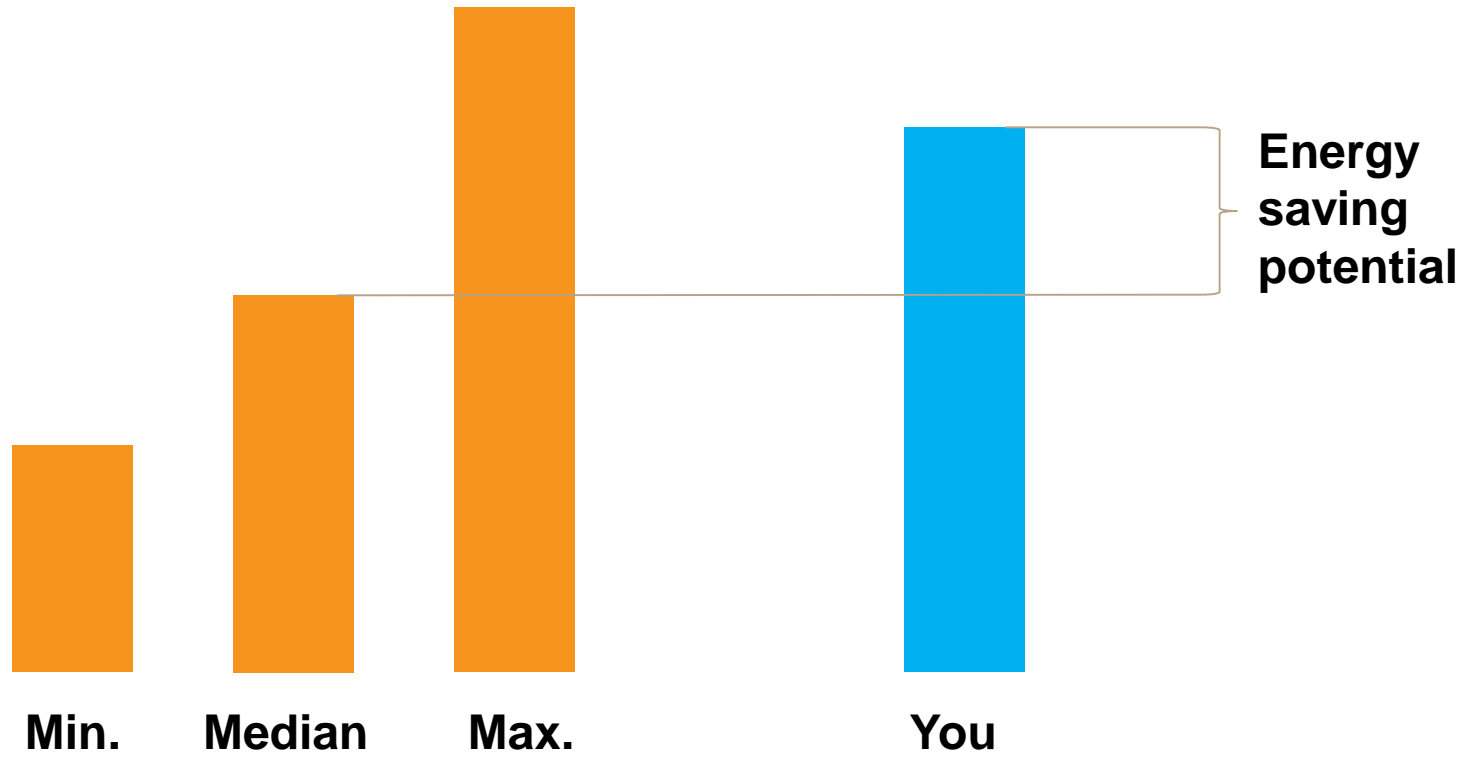


Example 4: electricity saving tool for business



Sector performance

Company performance



Project value

- 📊 Data valorized
- 🗣️ Dialogue facilitated
- ⚡ Energy efficiency & Renewable energy potentials identified
- 🔧 Technical efforts coordinated
- 🚀 Project implementation facilitated

