

Customer data provision from a national grid operator perspective



GRDF key data (31/12/2015)

The longest natural gas network in Europe

197,928 km

natural gas network, i. e. a network that could circles the Farth almost five times!

277 TW h

of natural gas delivered

€745 million

invested in order to develop, maintain and operate the network

every day, dedicated to the security of the network

And energy conduits serving the French-regions

10.9 million customers in France

9,528 districts

supplied by the natural gas distribution

77% of the population

lives in a district covered by the GRDF netword

17 biomethane injection facilities (all

network operators)

A dynamic company

11,431 employees

€3,409 billion in revenues



What is GRDF's role in data provision?

Key issues for GRDF

In the context of its <u>public service missions</u> and in full conformity with current regulations

Facilitating access to the data



- Data provision to end-consumers, suppliers and third parties
- Support to all actors involved in energy management to use these data

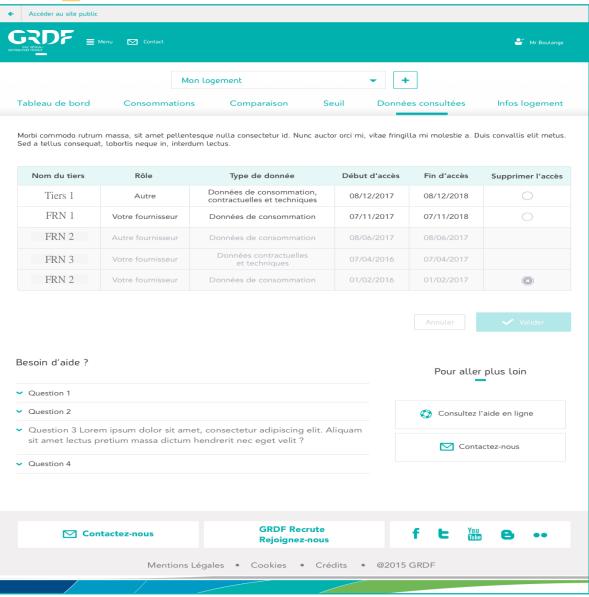
Guaranteeing data security and confidentiality



- By developing secure data provision interfaces...
- But also consumers consent management previous to any data provision to third parties



Facilitating access: Classic solution for the client through personal space



- First of all : Access to his own data
- Specific focus on transparency:

Who?

When?

What?

And access and consent management:

Clear view on subscriptions



GRDF How to deal with the other actors and use cases regarding gas energy consumption data

IMPROVING EXISTING SERVICES

Estimated energy consumptions (operation of heating systems)

Energy diagnostics (ex: property management companies)

Data provision during call for tenders for gas energy supply

More detailed analysis of consumption and energy management to provide better recommendations or to control better (facility managers and heating systems operators)

Supporting building renovation (renovation platforms designed and used by energy agencies)

DEVELOPING EMERGING SERVICES

Offering multi-fluid (gas, electricity, water...) consumption monitoring tools (digital platforms)

Providing energy management platforms to citizens (cities)

Letting individuals control what happens to their data (digital services & personal information managers - PIMs)

Providing data to digital household handbooks developed by housing authorities (digital platforms)

Facilitating new services development by crossing data from different sources (cities, digital platforms)



GRDF ADICT*: an API service to give access to consumption data



- A securised access to raw data
 - formatted data but with no interface to visualize them
- With <u>automated processes</u> and API requests
- Access to consumption, contractual & technical data



- Any companies, starts-ups, cities, public organizations interested in gas energy management
- Access to data as a third party <u>with consent</u> of the end-consumer or as a multi-site holder of the supply contract

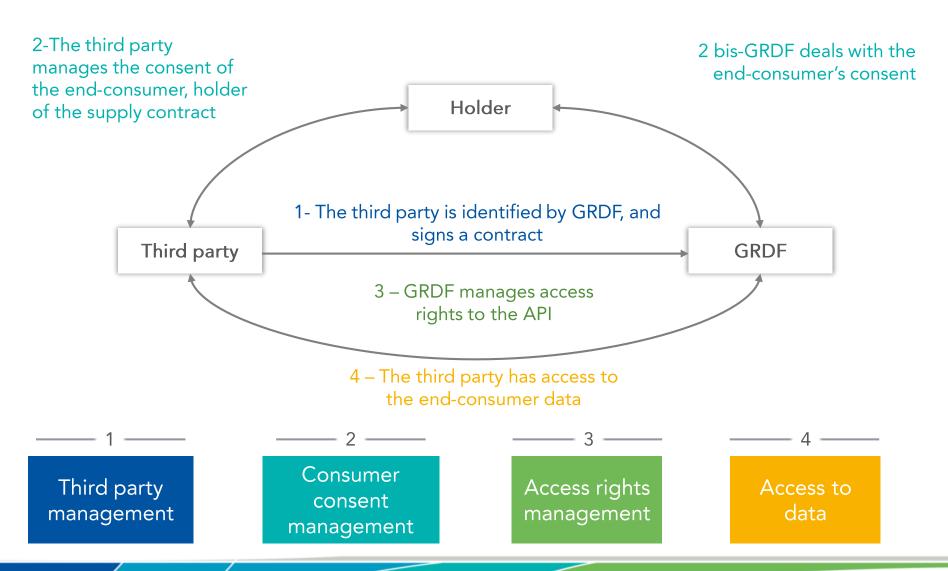


Many different use cases depending on the specificities and services
of third parties (public, private companies, start-ups...)

^{*(«} Accès aux Données Individuelles Client par des Tiers »)



GRDF ADICT: how to get consent?





GRDF ADICT: a strong variety of third parties interested and involved in the project





Some third parties' reactions and identified challenges to new services to clients

ECOCO2

« data enable better understanding of domestic comsuption.
Without clear references, there will be no understanding of the energy management issues;
Reliable data increase the energy comsumption issue awareness; Daily data give weight to given advices »

HOMEYS

« Daily access through API eases analysis capabilities; To be able to reach daily data enable better reactivity related to downward slides of installed devices. »

In a nutshell

Without support, data access do not bring full awareness related to energy issue => A client with the control oh his data wil be able to choose the better service for him

Without trust, the client will not take advantage of his data => My data is a clear way to give confidence to the client in a service and the use of his data