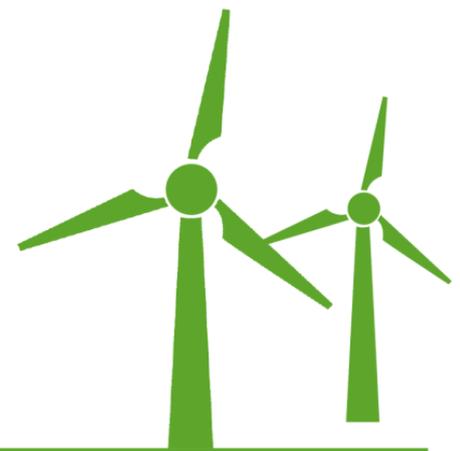




“Innovative Business Models for Market Uptake of **Renewable Electricity** unlocking the potential for flexibility in the Industrial Electricity Use”

# Process of Case Studies Candidates Selection

Deliverable 4.1  
Public Version, 11 July 2016



## Acknowledgements

This report has been produced as part of the IndustRE project “Innovative business models for market uptake of renewable electricity unlocking the potential for flexibility in the industrial electricity use”. The logos of the partners cooperating in this project are shown below and information about them and the project is available under [www.IndustRE.eu](http://www.IndustRE.eu).

This deliverable has been written by Tomas Jezdinsky and Fernando Nuño from the European Copper Institute (ECI), with the valuable support from all other consortium partners to approach through their particular networks industrial associations and individual companies in order to look for potential candidates to conduct case studies.

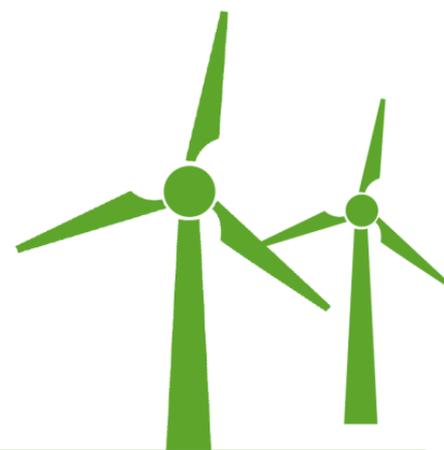


### Disclaimer

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 646191.

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## Executive Summary

This document provides an overview on the selection process of potential candidates, i.e. industrial facilities which are expected to have a certain flexibility in their energy demand to potentially explore, where Vito/EnergyVille then could realize an evaluation of their electricity demand and its possible exploitation.

The case study candidate selection process lasted from the beginning of the IndustRE project in January 2015 until now June 2016 and was based on several activities in parallel:

- constitution of an expert group among the relevant consortium members to evaluate potential industrial candidates
- preparation of an introductory document to be sent to interested industrial facilities
- preparation of a call for expression of interest and application form and dissemination of the announcement through various channels
- bilateral discussions with relevant European industry associations and networks to find potential candidates

By the end of June 2016, the joint efforts of the core consortium team have accomplished to identify and evaluate about a dozen industrial facilities in detail, which we classified into 1<sup>st</sup> priority for potential execution of a case study and 2<sup>nd</sup> priority as back-up option.

**6 potential case study candidates have been finally selected, covering 5 countries and 4 industry sectors.**

In the next phase of the IndustRE project, VITO/EnergyVille, supported by ECI, will go into detailed negotiations and arrangements to prepare the first on-site assessments in order to end up with 3 to 5 real applied case studies, either full or simplified method or both.

The results of these assessments will then be presented by VITO/EnergyVille in 2017 in the deliverable report D4.2 “Case studies”.

## 1. Introduction

This report, as part of work package 4, will provide an overview on the selection process of potential candidates, i.e. industrial facilities which are expected to have a certain flexibility in their energy demand to potentially explore, where Vito/EnergyVille then could realize an evaluation of their electricity demand and its possible exploitation.

Finally, as a status-to-date end of June 2016, we will present the list of selected industrial facilities, plus some back-up options. If any changes will occur in the course of the proper realisation of case studies between Q3-2016 and Q2-2017, this report will be updated through a comprehensive amendment.

For confidentiality reasons, as we are in a transitory communication phase on bilateral basis with the individual companies and do not yet have non-disclosure agreements with all interested companies in place, here in the present **public report**, we will not reveal the names or specific locations of the industrial sites under discussion, but show these information in a confidential version to the European Commission.

The ultimate goal of this task was to identify at least **6 industrial facilities** (plus some back-up options) where

- a) they have shown interest to be engaged in our project and are prepared to cooperate in the framework of the case studies,
- b) the a-priori conditions of energy usage and flexible demand seem promising to get meaningful results from an in-depth assessment and the absolute cooperativeness of the industrial partner was given,
- c) Vito/EnergyVille could potentially apply the demand response methodology in those case studies in order to further validate the simplified methodology for assessing the optimal valorisation of industrial flexible electricity consumption,
- d) where we have a good balance and coverage between different industry sectors in scope as well as between the 6 target countries (Germany, UK, Belgium, France, Spain and Italy).

Following table shows a distribution map to be considered when approaching and identifying potential industrial facilities:

	Chemicals	Non-ferrous Metals	Cold storage	Steel	Water treatment
Belgium					
France					
Germany					
Italy					
Spain					
UK					

The case study candidate selection process started basically since the beginning of the IndustRE project in January 2015 and was based on several activities in parallel, which will be described in detail in the following chapters:

- constitution of an expert group among the relevant consortium members to evaluate potential industrial candidates
- preparation of an introductory document to be sent to interested industrial facilities
- preparation of a call for expression of interest and application form and dissemination of the announcement through various channels
- bilateral discussions with relevant European industry associations and networks to find potential candidates

### 1.1 Consortium Expert Group

While we were using all consortium members' industrial contacts to identify potential case study candidates, a core team, consisting in project representatives from WIP, Vito/EnergyVille and ECI, has been in constant communication and information exchange to review the status, evaluate the candidates and define further activities to recruit industrial facilities for the selection of case studies.

The following basic characteristics have been defined when contacting industrial facilities to better assess and prioritize their potential relevance for realizing a case study:

- energy consumption level and inherent process flexibility
- experience with regard to flexible demand
- on-site renewable generation
- complementarity with the other case studies in terms of geographical coverage and industrial sector diversity

## 1.2 Short Audit Description

VITO/EnergyVille prepared a short memo [see Annex B] describing the way of working, the different steps in preparing and then realizing the audits, the expected level of contribution and the expected outcome for industrial partners willing to participate in a case study. This memo was used to inform interested companies and specific industrial sites about the framework of the case studies to be executed later on.

## 1.3 Call for expression of interest and application form

ECI prepared a brief document [see Annex C] describing the potential target industries and countries, the key elements of the assessment and the main benefits for industrial facilities to participate potentially in a case study.

A link inserted connects to a web based application form [see Annex D], where interested industrial parties could apply to be considered for the case study and leave relevant basic information on the facility proposed (contact details, country, industry sector, average annual energy consumption electrical & thermal, on-site energy generation, etc).

This call for expression of interest has been placed and promoted through several channels and media:

- IndustRE website announcement
- LinkedIn groups: “LinkedEnergy” and “Energy Storage, Demand Response & Grid Technology”



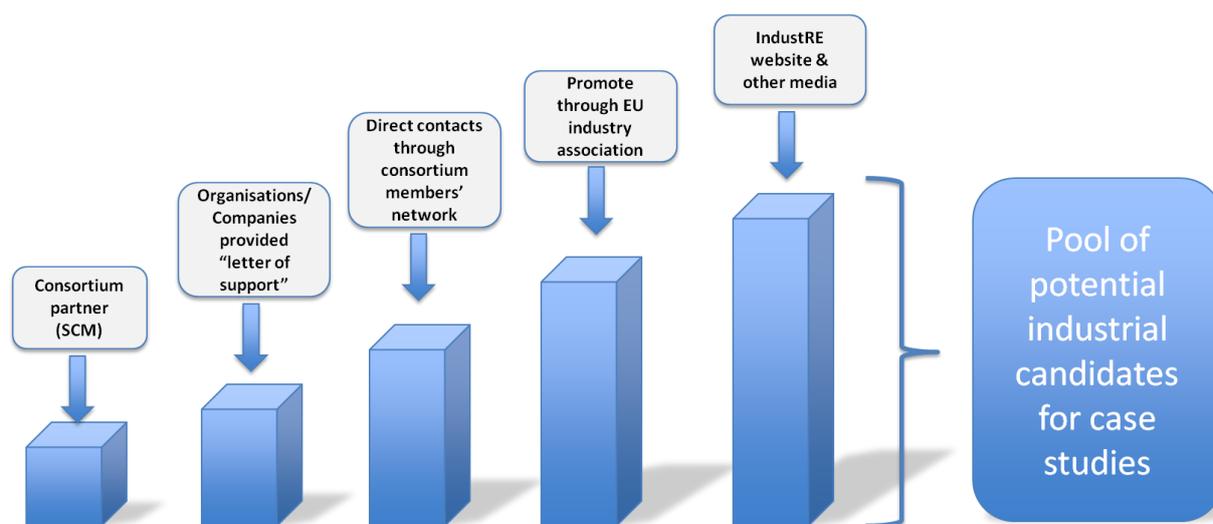
- SPIRE website announcement
- IndustRE newsletter

Screenshots of the respective announcements on these websites and the newsletter are part of the annex [see Annex E].

## 2. Selection approach in parallel

In order to promote our search and approach potential candidates where we potentially could perform an assessment of their flexible demand potential throughout a case study, we used different avenues and channels in parallel.

Then in the final selection we gave priority to internal consortium member SCM, as well as to companies and organisations who signed a “letter of support” in the proposal phase when submitting IndustRE and showing a high interest to cooperate in our project.



### 2.1 Consortium partner SCM

**SCM fonderie** was a given. During the constitution of the IndustRE project consortium, one of the members, SCM a group of industrial companies including cast iron and foundry facilities, was already designated to become a case study candidate as their facility in Rimini fits perfectly into the panorama and the preparation and realization will be very effective. Learning from this process can then be used to better organize the remaining case studies.

### 2.2 Companies signed a “letter of support”

During the proposal phase of IndustRE relevant EU associations as well as some industrial companies and groups were asked to support the idea of this project and specifically informed about the element of realizing case studies. Two companies from the chemical sector signed a “letter of support” and were contacted directly.

VITO/ EnergyVille maintained the contact and bilateral discussions with both companies to explore if and which facilities could be most appropriate candidates for a case study.

### **2.3 Direct contacts from consortium partners**

Based on existing contacts and network in place, some consortium partners proposed industrial facilities for an initial list to be further explored. Some turned out to be finally not interested or not to have appropriate facilities (e.g. one municipal site for sewage water treatment or a biomass research centre for electrification of biogas), whereas we could here identify two promising candidates:

- One company with aluminium melting facilities in several countries
- One company in the area of cold storage in the UK

### **2.4 Promotion through EU associations**

All relevant EU industry associations were approached by IndustRE consortium members and asked to announce the opportunity of a potential free case study to their respective member companies. The information flow to these EU associations through bilateral discussions, meetings, in-house presentations, ultimately also during the IndustRE workshop in October 2015 in Brussels. There was no need for further communication activities as these meetings turned out to be very effective and fruitful in providing a number of potential candidates:

- Through Eurometaux and other existing contacts we reached out a copper smelting plant.
- ECSLA (cold storage) and specifically their French national society UNEF disseminated our search and put us into contact with a cold storage and food distribution center in France. The screenshot of UNEF website announcement is part of the annex [see Annex F].
- IFIEC presented our project and the potential case studies in their working groups and identified a steel making company in Spain as interested candidate.
- CEPI actively searched for interested companies through their national associations through dedicated mailings or newsletters and identified several potential candidates: Two pulp and paper mills in Belgium, one in Spain and one in France.

As an example for the meetings and presentations to introduce and explain our case study search to EU associations, in the annex there are some pages from an ECI in-person presentation at IFIEC premises in September 2015, similar presentation was held with ECSLA [see Annex G].

### 3. Intermediate reviews and final selection

A starting point with a first list of some tentative candidates and potential targets for first contacts has been defined during the kick-off meeting in January 2015 in Munich.

Then during the subsequent project meetings in June 2015 in Madrid and October 2015 in Brussels, as well through several teleconferences, the changes regarding the selection status have been reviewed by the core expert team and respective actions taken. For the follow-up on each potential candidate to get relevant information on their facilities, an IndustRE consortium partner has been assigned (in brackets in the below table).

	Chemicals	Non-ferrous	Cold storage	Steel	Water treatment	Paper?
Belgium	Company 1 (VITO)					Small company through CEPI? (VITO)
France			Member of ECSLA? (ECI)	Company 6 (ECI)		
Germany	Company 2 (VITO)	Company 3 (ECI)		Company 6 (ECI)		
Italy				SCM (VITO)		
Spain		Company 5 (ECI)		Company 7 (Comillas)	Some desalination company ?	
UK			Company 4 (Imperial)		Water treatment company? (WIP)	

We extended the proper IndustRE sector scope also to the paper industry and were looking for potential candidates through their association CEPI:

- Their industrial association CEPI has stepped up and pro-actively engaged with us.
- There is relatively coherent similarity across paper mills in the production processes, from a simpler top-down perspective there are only 2 different ways of paper making, plus the paper mills across Europe are mainly of a similar size, which allows a high level of potential replicability of the results.

- Their production sites have available flexibility because of on-site CHPs. This kind of flexibility is interesting to study as the results are transferrable to any other industrial sector as long as they have CHPs. Specifically the simplified methodology could be useful to make this transfer of assessment results.

Also the complexity and efforts to realize the full assessment on location of each industrial facility have to be taken into consideration for the final selection of candidates. During the proposal phase, VITO/EnergyVille has estimated to be able to perform 3-5 on-site case study audits, depending on complexity, within the given budget and timing.

Hence we were also looking to integrate 1-2 “less complex” candidates for case studies to guarantee ease of replication and verification of the simplified methodology.

Ultimately, the level of awareness and expertise at the companies has to be considered: it is a valid question, what our case study will really bring them as new learning. Very well experienced companies might not see much benefit in participating in our case studies whereas for less experienced/ less organized structures the analysis of their processes by VITO/EnergyVille and the outcome are a relevant incentive to collaborate.

In the final phase of putting together a pool of potential case study candidates, we therefore decided to go rather targeted than broad, in order to avoid a widespread raise of expectations due to the limitations in number of executed assessments. The public announcement of our case study offering stressed the issue that there is no guarantee for everyone to get a free audit, as we have to balance across sectors and countries, but of course all applicants will be considered. The knowledge transfer route later could be a potential avenue for those case studies not carried out in the practice.

## 4. Last status-to-date 30<sup>th</sup> June 2016

Based on the information collected from the different industrial facilities and first bilateral discussions with either corporate or local energy managers of the respective companies, the consortium expert group prioritized and selected 6 candidates as most appropriate.

The following table summarizes the status-to-date showing selected case study candidates as well as some back-up options:

	Chemicals	Non-ferrous	Cold storage	Steel	Water treatment	Paper
Belgium	Company 1					Company 9 ✓ Company 12
France			Company 5 ✓			Company 10 ✓
Germany	Company 2	Company 3 ✓		Company 7		
Italy				SCM ✓		
Spain		Company 4		Company 8	Association ?	Company 11
UK			Company 6 ✓			

TIER 1 (in blue) = Selected as first options to start

- SCM in Italy and a non-Ferrous metal plant in Germany are confirmed to apply the full methodology of VITO/EnergyVille during the assessment.
- In case of cold storage in France and in the UK, final evaluation of the methodology for an assessment is in place, same for the paper mills in Belgium and France.

TIER 2 (in red) = On hold, keep as back-up options

- In the paper sector we have in addition two facilities where necessary information is available, evaluated as back-ups.
- Chemical sites on hold for the moment.
- Steel manufacturing plants have been kept on hold for the moment, as SCM does cover this sector, but as back-ups, a non-Fe metal plant in Spain could also be a back-up if necessary.
- Some less advanced contacts of WIP in the area of water treatment could be again activated if necessary.

Following thorough evaluations and discussions of the consortium expert team, we will finally focus the case study execution on three proper IndustRE sectors - non-Ferrous metals, Cold Storage and Steel - plus the paper industry as a fourth sector, and potentially cover five of the six countries in scope, in order to guarantee best outcomes and transferable results from the assessment.

The two candidates from the chemical industry are on hold for the moment as we anticipate here that preparation and analysis of these cases would be more complex and replicability of results rather questionable compared to other industries.

Based on the analysis work presented in the report “Business models and market barriers”<sup>[1]</sup> (deliverable D2.4 in work package 2 of the project), developed by the team from Institute for Research in Technology (IIT), of Universidad Pontificia Comillas, which defines and describes the most suitable business models for the exploitation of demand flexibility by industrial consumers and provides a clear picture of the regulatory and market frameworks in our target countries, we see that **in Spain**, at present, the opportunities to exploit these business models are much more limited and facing serious barriers for industrial demand participation. These limitations were also confirmed by companies approached during our case study selection process, that we hence do not pursue for the moment an execution of case studies in Spain as the assessment of the flexibility potential would be narrowed down compared to expected more promising results in other countries and market frameworks.

## 5. Conclusions & Outlook for next steps

By the end of June 2016, the joint efforts of the core consortium team have successfully identified and evaluated about a dozen industrial facilities in detail and could classify them into:

- TIER 1 = continue and finalize bilateral discussions about the case study process
- TIER 2 = on hold, keep as back-up options in case some of the first priority fails during the proper starting or execution of the case study

**6 potential case study candidates have been finally selected, covering 5 countries and 4 industry sectors.**

In the next phase of the IndustRE project, VITO/EnergyVille, supported by ECI, will go into detailed negotiations and arrangements to prepare the first on-site assessments in order to end up with 3 to 5 real applied case studies, either full or simplified method or both.

In addition, for some industrial facilities, information exchange on how to adapt the simplified methodology will be prepared.

Some of the business models identified in the work package 2 of IndustRE, and presented in detail in the report “Business models and market barriers”[\[1\]](#), involve the procurement of renewable energies and/or the on-site generation and potential self-consumption of renewable energies, which is reflected in Vito/Energyville’s methodology and will be taken into account during assessments and possible alternatives in the case studies.

The results of these assessments will then be presented by VITO/EnergyVille in 2017 in the deliverable report D4.2 “Case studies”.

After the realization of case studies and providing recommendations to the industrial facilities, ECI will then take care to do a follow-up monitoring and survey on the possible adoption<sup>1</sup> activities and outcomes, due in month 33 (September 2017) of the IndustRE project in deliverable D4.3 “Recommendations adoptions”.

---

<sup>1</sup> Although it is important to note that actual implementation of measures for valorisation of flexibility is out of scope of the industRE project and fully left over to the involved companies.

## 6. References

- [1] M. Vallés, T. Gómez and P. Frías, Business models and market barriers, European Union's Horizon 2020 Grant agreement no. 646191, Work Package 2: Innovative Business Models, 2015.

## **Annexes**

### **B) Vito/ EnergyVille Short Audit Description**

**“Innovative Business Models for Market Uptake of Renewable Electricity  
unlocking the potential for flexibility in the Industrial Electricity Use”**

# **Flexible Industrial Demand Assessment**

*Way of working for industrial partners*

**July 2015 and updated May 2016**

## Acknowledgements

This memo has been produced as part of the IndustRE project “*Innovative business models for market uptake of renewable electricity unlocking the potential for flexibility in the industrial electricity use*”. The logos of the partners cooperating in this project are shown below and all information about them and the project is available under [www.IndustRE.eu](http://www.IndustRE.eu)

This memo has been written by VITO - EnergyVille



## IndustRE: the project in short

IndustRE has identified the flexibility potential of the industrial electricity demand as an opportunity that can facilitate further growth and integration of variable renewable energy. The project investigates innovative business models that should result in win-win situations for the industry as well as for the renewable energy sector. Further, a methodology for the assessment of flexibility in industrial processes and an efficient methodology to calculate its economic value for 6 target countries (Belgium, France, Germany, Italy, Spain and UK) will be worked out. As part of the project, a number of case studies will be used to validate the results and developed methodologies. This memo describes the way of working, the expected level of contribution and the expected outcome for industrial partners willing to participate in a case study.

## Flexible Industrial Demand assessment: Way of working

A Flexible Industrial Demand assessment consists of the following steps:

Step 1: Electricity consumption pattern analysis: An assessment starts with an analysis of the electricity consumption pattern of the industrial partner. The industrial partner provides the IndustRE expert(s) with detailed site electricity consumption data (e.g. quarter hour based) which will be represented in a comprehensible format that visualizes day, week, seasonal and year patterns. This analysis will be sent to the industrial partner before the site visit.

Step 2: 1 day site visit by IndustRE expert(s): the detailed agenda of a site visit will be discussed beforehand during a conference call. As a guideline the following agenda can be expected:

- Discussion of the electricity pattern analysis
- Discussion of the current electricity contract(s)
- Discussion/overview of the different site activities and processes
- Discussion/overview of local electricity production facilities (e.g. CHP, Photovoltaic, wind)
- Fill out energy flexibility questionnaire
- Visit the utilities, processes and production facilities which are relevant for the assessment

### Step 3: Flexibility potential analysis

Based on the input during the visit and the current market and regulatory conditions, the most promising/relevant business cases will be selected in agreement with the industrial site responsible. A simplified model of the site flexibility will be made and used for business case estimations. The industrial partner receives a report with the summary of the results.

Although the focus of the IndustRE project is on innovative business models improving the integration of renewable energy, other business cases in the context of flexible industrial demand might be investigated as well if they are relevant for the industrial partner.

## **Commitments of the IndustRE project and the industrial partner**

- The Flexible Industrial Demand assessment is part of a subsidized European project and will be performed free of charge for the contributing industrial partners.
- Although the assessment is free of charge, the industrial partner commits itself to the assessment procedure.
- The industrial partner commits to providing the necessary information. Electricity consumption profiles, electricity contract information, electricity production capabilities and some level of detail in way of working of the industrial processes will be required in order to assure the quality of the assessment.
- Depending on the size of the company, the overall effort for the industrial partner (collecting data, preparation of the site visit, the site visit itself, review and feedback on the report) is expected to be between 2 and 5 man days.
- All information provided by the industrial partner will be treated as confidential. On request of the industrial partner, a non-disclosure agreement (NDA) can be signed.
- In order to have an efficient site visit, energy manager and relevant process engineer(s) should be present. The agenda of the site visit will be discussed beforehand.
- The industrial partner receives a summary report with concluding “facts and figures” which is confidential and is not part of a public report of the IndustRE project. Models and calculation methods are not part of the disclosed report. Depending on the level of confidentiality, certain aspects of the analysis can be agreed not to be included in the public and non-public project deliverables.
- The IndustRE project is a European project with public deliverables and dissemination targets. This means that a top level conclusion of the assessment, including the name of the industrial partner will be used in public documents. The industrial partner will have the possibility to review every public document where the top level conclusions of its company are mentioned.
- In case the Flexible Industrial Demand assessment results in an actual implementation by the industrial partner, the industrial partner will refer to the supporting role of the IndustRE project in its public communications.

### **More information needed?**

The Flexible Industrial Demand assessments will be executed by consortium partner VITO – EnergyVille. In case you have questions on the assessment procedure or the terms and conditions, you can contact Jef Verbeeck, +32 14 33 59 17, [jef.verbeeck@vito.be](mailto:jef.verbeeck@vito.be).

## C) Call for expressions of interest – case study announcement on IndustRE website and other media

### Looking for large industrial electricity consumers to conduct case study on flexible demand opportunities

#### Flexible Industrial Demand assessment

In the first phase of our project, we have identified several **a-priori business models** for large industrial users with flexibility in their demand, many of them showing win-win situations with variable renewable generation. Now, we will conduct some **case studies** to assess the real potential of industrial flexible demand.

We are looking for large industrial plants from following sectors:



located either in Germany, Belgium, France, UK, Italy or Spain.

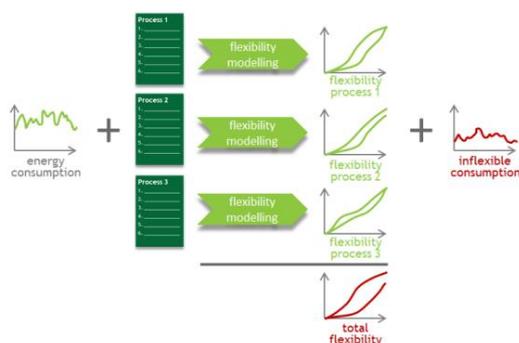
For the participating companies, the **assessment is free of charge**, and will allow to

- identify their available flexibility for this site
- identify best scenarios to make a business case
- calculate the value of this flexibility, **quantify the achievable energy bill savings and possible new revenue streams**

The Flexible Industrial Demand assessment consists of the following steps

- Electricity consumption pattern analysis
- One day on-site visit by IndustRE expert(s)
- Flexibility potential analysis

Based on the input and the current market and regulatory conditions, the most promising/relevant business cases will be selected in agreement with the industrial site responsible. All **information provided will be treated as confidential**. On request, a non-disclosure agreement (NDA) can be signed. The participating site **receives a report with the summary of the results**.



Timing for doing these on-site visits is between **Q3-2016 to Q2-2017**, but we need to make in the following weeks a selection of the companies and sites finally chosen for investigation, as we **have to balance our analysis covering different industry sectors and different countries**.

**Deadline for our selection process and to submit a first non-binding interest is 30th June 2016.**

If your organization is a-priori interested to apply as potential candidate for this Flexible Industrial Demand assessment, please contact us as soon as possible for further information by using this link,

[application form](#)

or directly:

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phone: +49- 172 –35 65 251

Email: tomas.jezdinsky@copperalliance.eu

## D) Application Form (web based in surveymonkey)



**Call for expressions of interest - Flexible Industrial Demand assessment**

Intro

**Acknowledgements**

This Online Form has been produced by ECI-European Copper Institute as part of the IndustRE project "Innovative business models for market uptake of renewable electricity unlocking the potential for flexibility in the industrial electricity use".

The logos of the partners cooperating in this project are shown below and information about them and the project is available under [www.IndustRE.eu](http://www.IndustRE.eu)



This project has received funding from the European Union's Horizon2020 research and innovation programme under grant agreement No 845741. The sole responsibility for the content of this presentation lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither INEG nor the European Commission are responsible for any use that may be made of the information contained therein.

**Data Privacy**

Filling in the specific fields of information on the next page is voluntary  
Your data will not be revealed to any third party and only used by IndustRE Project Partners in the selection process of potential case study candidates, all data privacy issues are fully respected

see: [Full Data Privacy Statement](#)

If you continue, you agree to these above mentioned data privacy statements. Otherwise please close here.

Next

## Looking for large industrial electricity consumers to conduct case study on flexible demand opportunities

### Flexible Industrial Demand assessment

In the first phase of our project, we have identified several a-priori business models for large industrial users with flexibility in their demand, many of them showing win-win situations with variable renewable generation. Now, we will conduct some case studies to assess the real potential of industrial flexible demand.

We will contact you shortly to discuss all details, but would like to get some upfront information on your industrial site(s).

*Please provide following information:*

Company Name

Country

*Which industry sector does your company belong to ?*

*If you have SEVERAL sites to be considered as potential candidates for our Flexibility Demand Assessment, then please provide following information for each site, otherwise please provide data for the most appropriate and leave other tables following in blank - PLEASE ALWAYS CLICK "SUBMIT" to enter your information and terminate*

Site Name/ Location

average annual energy consumption - ELECTRICAL

average annual energy consumption - THERMAL

max peak load

on-site power generation ? (if so please specify: wind, PV, biomass CHP, etc)

contact Person (ideally on the site) : Name

contact Person : Title/ Function

contact Person : Phone

contact Person : Email

## E) Screenshots

from IndustRE website: [www.industre.eu](http://www.industre.eu)

IndustRE

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WHO CAN GET INVOLVED

- Large industrial electricity users and variable renewable energy
- Consultancies, professional and service providers

PROJECT NEWS

Large industrial electricity consumers needed to conduct case study on flexible demand

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Scoping of flexible response CEER discussion paper

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Screenshot from LinkedIn groups announcement:

<https://www.linkedin.com/groups/4202957/4202957-6151400236276342786>

in

Nach Personen, Stellen, Unternehmen suchen ...

Energy Storage & Grid Technologies

2.358 Mitglieder

Michael Papapetrou  
Renewable Energy Consultant

17 Std

**Case studies for reducing industrial energy costs through demand flexibility**

Take a look at the opportunity to have your industrial plant included as a case study in our project.

Large industrial electricity consumers needed to conduct case study on flexible demand

If your business is an industry that consumes large amounts of electricity and you want to take advantage of flexible-demand

Gefällt mir nicht mehr Kommentieren | Sie + 1

Screenshot from SPIRE website:

<http://www.spire2030.eu/mediaroom/148/21/IndustRE-project-Large-industrial-electricity-consumers-needed-to-conduct-case-study-on-flexible-demand>

The screenshot shows the SPIRE website interface. At the top left is the SPIRE logo with the tagline 'Sustainable Process Industry through Resource and Energy Efficiency'. Next to it is the 'GENERATION AWAKE' logo. On the right, there are social media icons for RSS and Twitter, and a search bar. A navigation menu includes: HOME > ABOUT US > SPIRE VISION > LIBRARY > CONTACT > MEMBERS' PORTAL >. The main content area features the article title 'IndustRE project - Large industrial electricity consumers needed to conduct case study on flexible demand' in blue. Below the title, it states 'Published on 21 June 2016' and 'Call for expressions of interest - Deadline for selection process and to submit a first non-binding interest is 30th June 2016.' The article text describes the first phase of the IndustRE project, mentioning 'a-priori business models' and 'case studies'. It lists sectors of interest: chemicals, non-ferrous metals, steel, cold storage, water treatment, located in Germany, Belgium, France, UK, Italy or Spain. It also states that the assessment is free of charge and lists four key objectives for participating companies: identify flexibility, identify best scenarios, calculate flexibility value, and quantify energy bill savings and new energy streams. At the bottom, a diagram illustrates the process: 'total energy consumption' (a jagged line graph) is added to 'inflexible consumption' (a smoother line graph). This is processed through three parallel 'flexibility modelling' steps (Process 1: cooling, Process 2: industrial process, Process 3: storage/generator), each producing a 'flexgraph' (a graph showing a reduction in consumption). These three flexgraphs are then summed to produce a 'flexgraph total', which shows a significantly reduced and more stable consumption profile.

## E) Newsletter

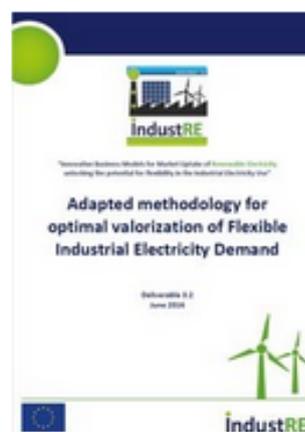


### Adapted Methodology for Optimal Valorization of Flexible Industrial Electricity Demand

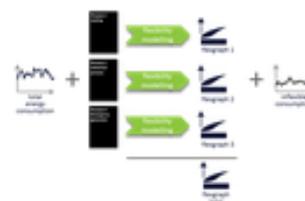
[This report](#) focusses on how to calculate a concrete business case for Flexible Industrial Demand. This requires 3 core elements: a flexibility model, a calculation method, and price information.

The study is based on the previous [analysis of the regulatory context](#) in Belgium, France, Germany, Italy, Spain and the UK, and goes a step further by giving answers to the following relevant questions: “How much and what kind of flexibility is available?”, and “Is the local (country) price information available to calculate the real value of the flexibility?”

**NEW:** Register for the [webinar on flexibility valorisation](#) that will take place on *6 September 2016 at 14:00h*. The webinar will introduce you to the methodology of valorising the flexibility of industrial electricity demand. **Deadline: 30 June 2016.**



Download the report [here](#)



Register for the [webinar on flexibility valorisation](#) [here](#)



**NEW:** Call for expressions of interest for large industrial users with flexibility in their demand to become case studies and have their potential of industrial flexible demand assessed. **Express you interest** [here](#) by **30 June 2016.**

## Model Contracts for the supply of Variable Renewable Electricity to Industrial Users with Flexible Demand

Two of the business models identified by the IndustRE project in the report “[Business Models and Market Barriers](#)” for reaping the benefits of flexible industrial demand, directly involve industrial electricity users and variable energy producers.

[This report](#), as an “implementation tool” to facilitate the adoption of those business models, sets the foundations for developing bilateral contracts, which can be used by the involved parties in order to sort out their mutual relations both in case there is on-site and off-site variable renewable energy generation.

Download the report [here](#).



Download the report [here](#)



View the IndustRE video [here](#)



Imperial College  
London



You are receiving this newsletter because you opted in at the IndustRE newsletter.

F) Screenshot from UNEF website:

[http://www.usnef.fr/Flexibilite-des-besoins-en-electricite-Sondage-europeen\\_a715.html](http://www.usnef.fr/Flexibilite-des-besoins-en-electricite-Sondage-europeen_a715.html)

**USNEF**

## Flexibilité des besoins en électricité - Sondage européen

**RÉPONDRE AU SONDAGE :**

Les entrepôts frigorifiques ont été identifiés comme l'un des 5 secteurs d'activité qui, collectivement, consomment 10 % de l'électricité en Europe.

Nous sommes donc invités à participer à une réflexion sur les modèles économiques qui accorderaient une certaine flexibilité à nos besoins en électricité dans le cadre réglementaire actuel en vue de pouvoir faire évoluer ce cadre si nécessaire.

Les entreprises de l'USNEF sont encouragées à participer au sondage (environ 20 mn) en cliquant sur ce lien.

**BÉNÉFICIER D'UN AUDIT GRATUIT :**

Dans un deuxième temps, un audit gratuit sera proposé aux entreprises ayant participé pour évaluer leur capacité à être flexible dans leur demande en énergie.

Voir ci-dessous le ppt qui détaille le projet européen.

IndustRE ECSLA 2015 09 09.pptx (2.49 Mo)

**DANS LA MÊME RUBRIQUE :**

- Parution au JO : AM du 8 02 2016 opérations standardisées d'économie d'énergie
- Note USNEF du 28 décembre 2015 audit énergétique
- Parution au JO : AM 2 10 2015 sous produits animaux
- Fusion fiche d'intervention/RSD - lettre de position USNEF

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**Indices et chiffres**

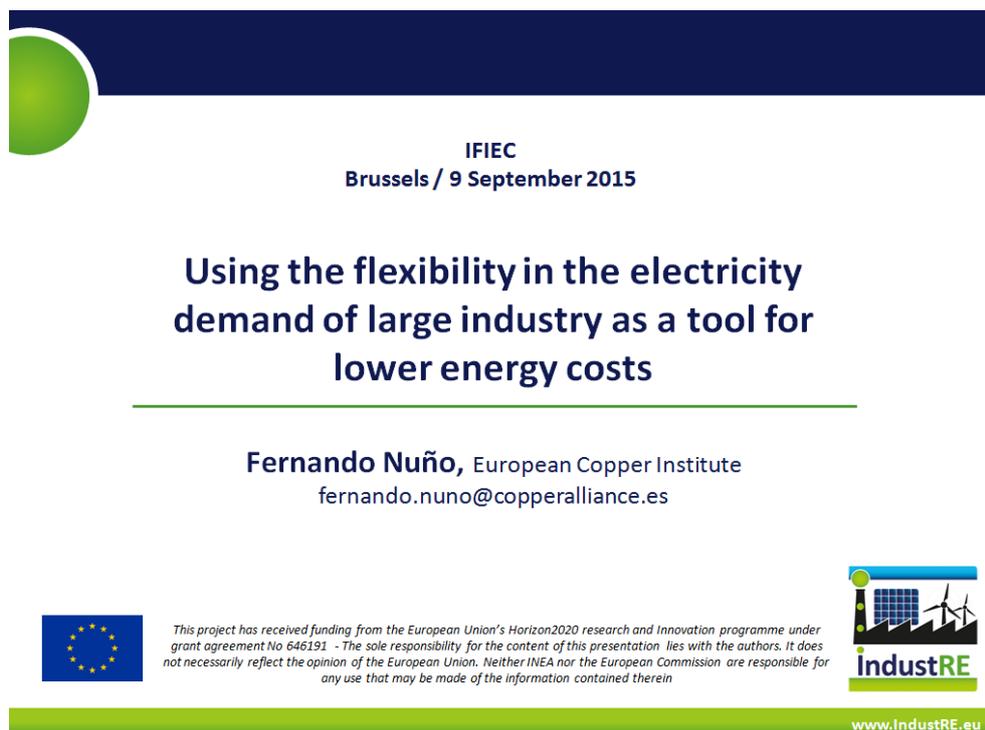
**Bibliothèque USNEF**

**ECSLA**

**Agenda**

- Mardi 19 Juillet
  - Réunion paritaire USNEF
- Mardi 13 Septembre
  - Conseil Exécutif
- Jeudi 15 Septembre
  - Réunion paritaire USNEF
- Mardi 18 Octobre
  - Réunion paritaire USNEF

**G) Excerpt from ECI presentations hold at IFIEC (and ECSLA) premises in Brussels:**



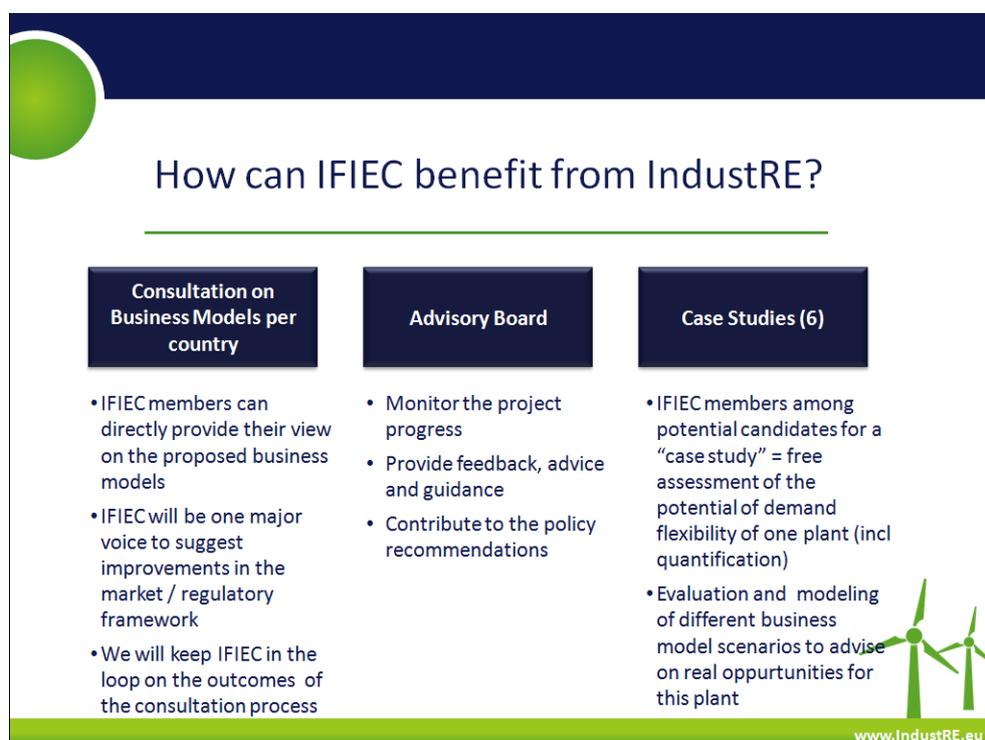
IFIEC  
Brussels / 9 September 2015

## Using the flexibility in the electricity demand of large industry as a tool for lower energy costs

**Fernando Nuño**, European Copper Institute  
fernando.nuno@copperalliance.es

 This project has received funding from the European Union's Horizon2020 research and Innovation programme under grant agreement No 646191 - The sole responsibility for the content of this presentation lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither INEA nor the European Commission are responsible for any use that may be made of the information contained therein

  
www.IndustRE.eu



## How can IFIEC benefit from IndustRE?

Consultation on Business Models per country	Advisory Board	Case Studies (6)
<ul style="list-style-type: none"><li>• IFIEC members can directly provide their view on the proposed business models</li><li>• IFIEC will be one major voice to suggest improvements in the market / regulatory framework</li><li>• We will keep IFIEC in the loop on the outcomes of the consultation process</li></ul>	<ul style="list-style-type: none"><li>• Monitor the project progress</li><li>• Provide feedback, advice and guidance</li><li>• Contribute to the policy recommendations</li></ul>	<ul style="list-style-type: none"><li>• IFIEC members among potential candidates for a "case study" = free assessment of the potential of demand flexibility of one plant (incl quantification)</li><li>• Evaluation and modeling of different business model scenarios to advise on real opportunities for this plant</li></ul>

  
www.IndustRE.eu



## What is needed to participate?

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Consultation on Business Models per country	Advisory Board	Case Studies (6)
<ul style="list-style-type: none"><li>• National Associations/ Members to fill-in the online questionnaire (~ 20 minutes)</li><li>• IFIEC invited to join a Workshop on the conclusions of the consultation process – 27th October, Brussels</li></ul>	<p>1 half-day meeting per year (27th October 2015, Brussels)</p>	<ul style="list-style-type: none"><li>• Help to recruit one Industrial site according to selection criteria (e.g. Country, sector, consumption profile)</li><li>• Some time spent of local plant experts (energy mng, ect) for on-site audit and further communication with our advisors</li></ul>



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