STATUS OF SINERGIA PROJECT

70th SEMI-ANNUAL ETSAP MEETING

17 November 2016
MADRID (SPAIN)

DIRECTION GENERAL FOR ENERGY POLICY AND MINES
Ministry of Energy, Tourism and Digital Agenda
SINERGIA (INTEGRATED SYSTEM FOR ENERGY STUDY)

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Among other responsibilities, the Direction General for Energy Policy and Mines (DGEPM) holds the responsibility for developing energy planning proposals to facilitate energy policy setting on the basis of:

- Energy demand and market assessments
- Energy demand and supply projections

To fulfil this mission the DGEPM requires:

- Qualified human resources
- Reliable, rigorous and assured information sources
- Validated analytical means to:
  - Manage energy sector data and information from other areas with an influence on energy demand and market response
  - Test candidate energy policies and measures and build least cost future energy pathways
Until recently the DGEPM has been using a house-made analytical tool:

- Technical limitations
- Uses externally-provided static pre-established paths for energy sources

This analytical tool needed extensive upgrading to perform simulations and optimizations required to undertake reliable medium and long term energy assessments.

The lack of state-of-the-art validated analytical means poses substantial limitations to evaluate and quantify impact of proposed energy policy and measures.
SINERGIA – MOTIVATION

EU GOVERNANCE SYSTEM

#EnergyUnion

Integrated Energy and Climate Plan
Energy Union 2030 Strategic Framework:

- National Energy and Climate plans for 2021-30
- Energy prospective until 2050

End of 2017: deadline to provide the Commission with the first draft of the national plan

Member States will have to demonstrate with analytical means that policies and measures of the plan will lead to reaching national contributions to EU-wide targets.

The DGEPFM requires to have available a reliable and multipurpose analytical model to carry out impact assessments until 2030 and projections until 2050.

The national energy and climate plan will have to be revised and updated every second year.
## Integrated National Energy and Climate Plans

### PART A
**NATIONAL PLANS**

1. Overview and Process for Establishing the Plan

### PART B
**ANALYTICAL BASIS**

2. National Objectives and Targets
3. Policies and Measures
4. Current Situation and Reference Projections

### ENERGY UNION Dimensions

<table>
<thead>
<tr>
<th>Decarbonisation</th>
<th>Energy efficiency</th>
<th>Energy security</th>
<th>Internal energy market</th>
<th>R&amp;I and competitiveness</th>
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5. Impact Assessment of Policies and Measures
1. To have available an analytical system **operative and validated** that meets the needs of the DGEPM

2. To build a knowledge base and preserve it by implementing a **knowledge management system**

3. To implement a **quality management system** to provide assurances that system’s products meet requirements and expectations of internal and external customers

4. To **build synergies with key stakeholders** to achieve the level of reliability, integration and sustainability required by a rigorous analytical framework
ISDEFE shall provide technical and project management support to:

1. Build, install and commission a prospective energy model
2. Formulate and implement a cooperation strategy with key stakeholders of the energy sector
3. Establish quality and knowledge management systems
SINERGIA – HOW?

- Corporate level: DGEPM
- Executive level:
  - Project board:
    - Executive
    - Senior user function
    - Senior supplier function
  - Assurance function
SINERGIA - HOW?  PROJECT ORGANIZATION

- Management level:
  - Project Manager:
    - Responsible for controlling project implementation
    - Coordinates and supervises the work of team leaders
  - Support function
  - Team leaders
  - Project quality function:
    - Independent of project management
    - Supervises that project and products quality criteria are met
    - Cooperates with senior user and assurance functions
SINERGIA – HOW?

- PRINCE2 (tailored)
- Quality management provided by ISDEFE

Project management principles
- Stage by stage management with pre-defined tolerances
- Capture experience and preserve knowledge
- Roles and responsibilities defined up front
- Focus on products
- Continuous justification of project
- Adapted management depending on specific needs

Project management products:
- Project daily log
- Risk, quality and change registers
- Configuration and documentation control
- Progress indicators
- Progress reports by stages
SINERGIA - HOW?  ADVISORY PANEL

- SINERGIA has attached an independent Advisory Panel which is not part of the project organization

- Role:
  - The panel advises the project Executive
  - Mechanism to channel *initiatives and suggestions* received from internal and external stakeholders
  - Dialog forum set to keep stakeholders informed about work in progress and achievements, as well as to receive advice from them aimed to facilitate continual improvement
Membership:

- Core members:
  - Project board, Assurance function, Quality function and Project manager
  - Focal points appointed by DGEPM organizational units

- Institutional representatives
  - National institute and research centers in energy and climate matters
  - Transmission system operators and other institutional bodies of the energy sector

- Collaborators
  - Energy sectorial and consumers associations
  - Other institutional or sectorial players which provide added value to the project
SINERGIA – HOW?

SIMPLIFIED LOGICAL FRAMEWORK

SCOPE

COOPERATION STRATEGY
- TASK 3: PROMOTE HORIZONTAL COOPERATION

ANALYTICAL MODEL
- TASK 1: SELECT CORE ANALYTICAL MODEL
- TASK 2: CREATE INFORMATION INVENTORY AND DATABASE
- TASK 4: DEVELOP A BETA VERSION OF THE ANALYTICAL MODEL
- TASK 5: VALIDATE THE ANALYTICAL MODEL

MANAGEMENT MANUAL
- TASK 6: DEVELOP QUALITY AND KNOWLEDGE MANAGEMENT SYSTEMS

CAPACITY BUILDING
- TASK 7: PREPARE TRAINING MANUAL AND DELIVER IT
**SINERGIA – HOW?**

**PROYECTO SINERGIA**
- Project start: 1 April 2016
- Project End: 31 March 2018
- Duration: 24 months

**SCHEDULE**

- **End 2017**: April 2018
- **2016**: Today
- **2017**: Today
- **2018**: Today

**Energy Prospective Framework – SINERGIA**

**ENERGY & CLIMATE PLAN 2021-30**
In the matter of energy planning, the key of success is: **to involve all relevant players**

A correct formulation of **medium and long term planning** proposals is the main driver of a correct **energy policy**
SINERGIA – WITH WHOM?

National energy mix

Our goal and core values:

Create synergies among the different energy sector players and establish cooperation channels to ensure a self-sustained analytical framework

1. Spirit of Service: we identify opportunities and benefits for all the players involved in SINERGIA

2. Knowledge value: we believe knowledge guides our practice, strengthens our and facilitates reaching SINERGIA goals

3. Forward looking: we strive for forging collaboration schemes that will facilitate continual improvement of SINERGIA
SINERGIA – WITH WHOM?

- The Director General for Energy Policy and Mines took the leadership in promoting the project and encouraging collaboration and active participation of all organizational units
- CIEMAT, IDAE, the gas and electricity TSOs (ENAGAS and REE) and the corporation of strategic reserves of oil products (CORES) are fully engaged in the project
- Alliances have been established with the ministries of environment, economy and industry, and transport and housing for sharing information
- Collaboration with the European Commission and the JRC already started to enhance and validate the model
SINERGIA – WITH WHOM?

COLLABORATIVE SPACE

SINERGIA
Sistema Integrado para el Estudio de la Energía

Calendario

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<tr>
<th>LUNES</th>
<th>MARTES</th>
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Enlaces de interés

Comité de Dirección
Biblioteca del Comité de Dirección
Documentos de reuniones del Comité
Planificación de tareas
Informes de seguimiento
Notas informativas
Informes técnicos de SINERGIA

كسوة: colaborative space
SINERGIA – PROJECT STATUS

- Last October month the project board agreed on the use of TIMES as the core analytical model for SINERGIA and approved the purchase of the software licenses for VEDA-FE and BE and GAMS.

- SINERGIA model is currently under development by ISDEFE drawing on CIEMAT’s TIMES-SPAIN database and with the support of CIEMAT, IDAE and other stakeholders.

- Current schedule is to update and upgrade TIMES-SPAIN database by March 2017 and have a validated model by mid-2017 in order to use the model for the preparation of the 2021-30 national energy and climate plan.
THANK YOU FOR YOUR ATTENTION!