

# Action Plan for the Implementation of Procel Gold Seal- reference: Top Runner Program/Japan

## 1 Promotion of the manufacture and sale of high energy-efficient products

The Procel Seal was established in 1993 under the [DECRETO DE 8 DE DEZEMBRO DE 1993](#). It's a recognition seal with the purpose of being a simple and effective tool that allows the consumer to know, among the equipment and appliances available on the market, the most efficient and the ones that consume less energy.

All products awarded with the Procel Seal must meet the specifications contained in the regulation and manual available in <http://www.procel.gov.br/main.asp?View={B70B5A3C-19EF-499D-B7BC-D6FF3BABE5FA}>. It is a voluntary program and the safety and performance tests are the same applied at the Brazilian Labelling Program (PBE) runned by the National Institute of Metrology, Quality and Technology (Inmetro).

Nowadays, there are 16 equipment and appliances recognized with Procel Seal. The air conditioner is one of the appliances among them, and had its specific criteria updated in 2020. The review increased the minimum levels of energy efficiency for the granting of Procel Seal for products in this category, matching the Brazilian certification with the best international practices in the sector. The revision of Procel Seal for air conditioners also created **Procel Gold Seal** as an instrument to highlight the best equipment on the market, in the light of practices like the Top Runner Program in Japan.

The most significant changes are the use of the energy efficiency index called the Seasonal Cooling Performance Index (IDRS) and the entry of a criterion on refrigerant fluid, considering better classification for air conditioners with lower GWP. The implementation of the new indexes will be carried out in three phases. In the first, valid until 05/02/2022, all equipment must be classified in level A of PBE/Inmetro. After 05/03/2022, air conditioners must present an IDRS (Seasonal Cooling Performance Index) of 6.0, which will make the energy efficiency level of the Procel Seal higher than that determined by Inmetro, which will require an IDRS of 5.5 in 2022. After 11/03/2023, the minimum IDRS required for a manufacturer to obtain the Procel Seal will be 7.6.

**Procel Gold Seal** will be like a *premium category* of Procel Seal, to differentiate the most efficient equipment from others awarded with Procel Seal. Therefore, the Procel Gold Seal will be awarded to air conditioners with an IDRS greater than 7.6 until May 2021 and equal to or greater than 8.2 after November 2023<sup>1</sup>. The goal is that Procel Gold Seal is extended to other equipment. Procel Gold Seal if proposed to be only in digital format.

### 1.1 Definition of prioritization criteria for the selection of equipment and appliances

The minimum criteria to be considered in the selection of new equipment to be included in Procel Gold Seal are:

- Broad/significant utilization in the national market/final energy consumption.
- Represent the most commonly used equipment in the evaluated sector (building sector, for example);
- Consume a great amount of energy during its use.

<sup>1</sup> In October 2020, the rules and deadlines for implementing the criteria for the Procel Seal and Procel Gold Seal for air conditioners were set, together with manufacturers and other partners. The deadlines extend until November 2023. Manufacturers are already preparing for the new rules and deadlines defined.

- Requires significant efforts to improve its energy efficiency.

## 1.2 Implementation of an information and data collection system

A **new energy efficiency regulatory framework**<sup>2</sup>, must be established in order to define clear competences and responsibilities to the main stakeholders:

- The Ministry of Economy would be responsible for sharing and maintain an information system which would include the amount of produced equipment and the related energy efficiency classification by model.
- The Ministry of Economy would share the data with Procel and Inmetro under a cooperation agreement.
- Manufacturers, importers and associations (starting with air conditioners) would have to feed the information system.
- Procel would be responsible for requiring, every year, or every two years, the updates for the manufacturers, importers and associations.
- Procel and Inmetro would have to evaluate the provided data regarding the goal of monitoring the market and defining the performance revisions plans.
- Inmetro would evaluate the conformity of the provided data.

The regulatory framework must consider the creation of a system of tax incentives based on the strategy adopted in 2030 Route Program.

The information and data collection system can be a module integrated to the existing IRS system. The first version can start with air conditioners.

## 1.3 Incentives for manufacturers and importers

The new regulatory framework would make the sharing of sales data compulsory. On the other hand, the information system would allow the systematization of a great amount of data that could be individually shared with the manufacturers and importers, allowing them to understand better their own profile regarding energy efficiency issues.

The consolidation of Procel Gold Seal as a vector of consumers choice would incentive manufacturers and importers to invest in energy efficient products.

Having as a reference the 2030 Route Program, a system that provides tax incentives to energy efficient equipment based on their market share can be created.

## 1.4 Incentives for consumers

Considering the digital format of Procel Gold Seal, a mobile application that users can point to a QR code can incorporate very strategic information that can be graphically displayed. With this application the user/consumer can have information about the performance index of the product, the annual electricity consumption in kWh and the estimated annual electricity bills in R\$, according to the local energy company.

The application can also integrate the option for the user to inform if he decided for choosing that product and this information could be shared with the information system (1.2).

<sup>2</sup> Reference: Energy Conservation Act (Japan)

## 2 Potencial funding sources:

Products/activities	Sources
Definition of prioritization criteria for the selection of equipment and appliances <u>Necessary studies to develop methodologies for identifying the following points:</u> <ul style="list-style-type: none"> <li>• Broad/significant utilization in the national market/final energy consumption.</li> <li>• Represent the most commonly used equipment in the evaluated sector (building sector, for example);</li> <li>• Consume a great amount of energy during its use.</li> <li>• Requires significant efforts to improve its energy efficiency.</li> </ul>	Procel's Resources Application Plan
New energy efficiency regulatory framework	MME human resources. Coordination of a Task Force with ME, Procel, Inmetro and representatives of Manufacturers Associations.
Architecture development of the Information and data collection system module First package- air conditioners	Procel's Resources Application Plan
Development of a mobile application First package- air conditioners	Procel's Resources Application Plan

### 2.1 Risks and Assumptions

- Studies to develop methodologies to establish prioritization criteria for the selection of equipment and appliances:
  - The project proposal must be approved in Procel's Resources Application Plan.
  - Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.
- New energy efficiency regulatory framework:
  - Political support from the main stakeholders is necessary.
  - There must be available human resources in MME.
  - The proposed legal instruments must be approved in the specific instances.
- Architecture development of the Information and data collection system module:
  - The project proposal must be approved in Procel's Resources Application Plan.
  - Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.

- Development of a mobile application:
  - The project proposal must be approved in Procel's Resources Application Plan.
  - Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.

## 2.2 Time schedule

	Year 1	Year 2	Year 3	Year 4	Year 5
Studies to develop methodologies to establish prioritization criteria for the selection of equipment and appliances	Under development with support of Clasp (MEPSY webtool)				
New energy efficiency regulatory framework					
Architecture development of the Information and data collection system module First package- Air conditioning					
Development of a mobile application First package	Proposal approved in PAR/Procel- Already under development- procurement stage under development				

## 2.3 Matrix of results

Promotion of the manufacture and sale of high energy-efficient products					
<b>Indicators:</b>					
<ul style="list-style-type: none"> <li>• Consolidation of Procel Gold Seal as a vector of consumers choice</li> <li>• Increase of energy efficient products sales</li> <li>• Decrease in the energy consume</li> </ul>					
<b>Partners: ME, Inmetro, Procel, Eletros, Abrava</b>					

Measure 1	Indicators	Referencial scenarium	Goals	Verification sources	Risks and assumptio ns
Studies to develop methodologies to establish prioritization criteria for the selection of equipment and appliances	Established prioritization criteria for the selection of equipment and appliances	No criteria for selecting new equipment to Procel Seal Program	New equipment engaged to Procel Seal according to the established criteria	Balanço Energético Nacional- EPE  Relatórios anuais ANP	The project proposal must be approved in Procel's Resources Application Plan.  Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.
Measure 2	Indicators	Referencial scenarium	Goals	Verification sources	Risks and assumptio ns
New energy efficiency regulatory framework	Established new energy efficiency regulatory framework	The existent law of energy efficiency is restricted to MEPS policy with no clear definition of competences for the main stakeholders, or a policy of incentives.	A new energy efficiency regulatory framework considering:  Competences of the main stakeholders  Data sharing mandatory  System of tax incentives based on the strategy adopted in 2030 Route Program.	Official public press (D.O.U)	Political support from the main stakeholders is necessary.  There must be available human resources in MME.  The proposed legal instruments must be approved in the specific instances.

<b>Measure 3</b>	<b>Indicators</b>	<b>Referencial scenarium</b>	<b>Goals</b>	<b>Verification sources</b>	<b>Risks and assumptio ns</b>
Information and data collection system module	Module of an information and data collection system designed and tested	No information system for collecting data from manufactuters and importers	Integrate a module for ee air conditioning data collection to the IRS system.	IRS system	<p>The project proposal must be approved in Procel's Resources Application Plan.</p> <p>Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.</p>
<b>Measure 4</b>	<b>Indicators</b>	<b>Referencial scenarium</b>	<b>Goals</b>	<b>Verification sources</b>	<b>Risks and assumptio ns</b>
Development of a mobile application	Mobile application for Procel Gold Seal designed and tested	Procel Gold Seal is only digital	<p>Mobile application available in mobile stores, including the following functionalities:</p> <p>Pointing to a QR code, users can have information about the performance index of the product, the annual electricity consumption in kWh and the estimated annual electricity bills in R\$, according to the local energy company.</p> <p>The application can also integrate the option for the user to inform if he decided for choosing that product and this information could be shared with the information system (1.2).</p>	Mobile stores	<p>The project proposal must be approved in Procel's Resources Application Plan.</p> <p>Procel must be operating properly considering a new structure of governance, after Eletrobras' privatization.</p>