



# Annual Report Energy Efficiency

2024

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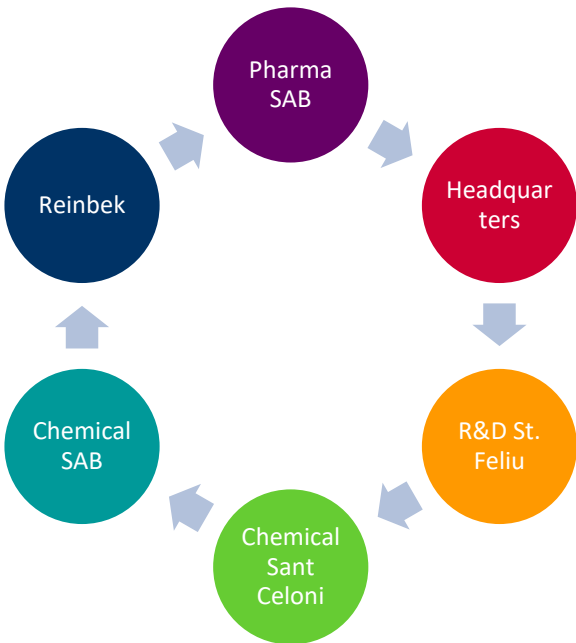
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## 1. Purpose

The purpose of this report is to set out the 2024 Energy Review of Almirall’s centers, as well as to establish and review energy objectives and energy goals for the improvement of energy performance. The report also sets out the energy plans for 2025.

## 2. Scope

The scope of this procedure encompasses all the energy efficiency actions carried out in 2024, along with those scheduled for 2025, in the following centers:



Centre
Headquarters (SC)
St Andreu de la Barca Pharmaceutical Plant (PS)
St.Feliu de Llobregat Research Centre (IF)
Sant Celoni Chemical Plant (QP)
Sant Andreu de la Barca Chemical Plant (QR)
Reinbek center (MCAR)

### 3. Responsibilities

- **Energy Management Manager**

In the centers in which an Energy Management System is implemented, the Energy Management Manager is responsible for updating the energy review. He/she is also responsible for carrying out energy monitoring.

The Energy management Manager is also responsible for ensuring an initial Energy Review is carried out in new centers where an Energy Management System is implemented.

- **Facility Management Director**

The Facility Management Director of each center where an Energy Management System is implemented is responsible for:

- facilitating all necessary information required by the Energy Management Manager in order to update the energy review and carry out energy monitoring.
- the Energy Management of his/her centers.
- Approve objectives and energy efficiency achievements. Additionally, promote energy efficiency director plan.

## 4. Reference documentation

### a) Regulatory references

- UNE-EN ISO 50001:2018

### b) Internal references

- Energy review procedure:
  - PRC-0003588, "Procedimiento de Revisión Energética"
  - PRC-0005511, "Energy Review"
  - PRC-0005342, "Verfahrensbeschreibung zur Energierevision"
- Energy Management procedure:
  - PRC-0003602, "Procedimiento de Gestión de Energías en el área de Facility Management"
  - PRC-0004816, "Energy Management in the Facility Management Area"
  - PRC-0005343, "Energiemanagement in der Abteilung Facility Management"
- Initial Energy review report (Level I)
- Report on Baselines, EnPIs, Objectives, monitoring and checking (Level II)
- Report on proposals for improvement (Level III)
- PRC-0004479, Industrial Security in Equipment and Facilities (Almirall España)
- PRC-0002301, Buenas prácticas uso energías – Trabajadores
- PRC-0002302, Good Practices in energy use – Employees
- PRC-0003589 Gestión de proyectos de ingeniería
- PRC-0006743 Engineering projects Management
- PRC-0005744 Communicating Opportunities for improvement (External Personnel Reinbek)
- PRC-0002289 Internal audits
- PRC-0006011 Risks and opportunities
  - PRC-0005607, Guía de Usuarios Software Energético para perfil cliente
- PRC-0002227, Control de cambios en prevención y medio ambiente.
- PRC-0004811, Diccionario de Roles y Actividades en el Área de Facility Management
- PRC-0002124, Incidentes, no-conformidades, oportunidades de mejora y acciones correctivas.
  - PRC-0004780 Rango de temperaturas en los edificios y/o instalaciones no sometidos a IT 3.8 RITE

## 5. Definitions

Definitions used in this document or relevant to the energy management system are described below.

**ENERGY REVIEW:** Analysis of energy efficiency, energy use and energy consumption based on data and other information, leading to identification of SEU's and opportunities for energy performance improvement.

**ENERGY PERFORMANCE INDICATOR (EnPI):** Measure or unit of energy performance as defined by the organization.

**SIGNIFICANT ENERGY USE (SEU):** Accounting for substantial energy consumption and / or offering considerable potential for energy performance improvement.

**ENERGY BASELINE:** Qualitative reference providing a basis for comparison of energy performance.

**ENERGY:** Electricity, fuels, steam, heat, compressed air and other similar media.

**ENERGY EFFICIENCY:** Ratio or other quantitative relationship between an output of performance, service, goods, commodities, or energy, and an input of energy.

**EnMS: Energy Management System.** Management system to establish an energy policy, objectives, energy targets, action plans and process(es) to achieve the objectives and energy targets.

**PERFORMANCE:** Measurable result.

**ENERGY PERFORMANCE:** Measurable result(s) related to energy efficiency, energy use, and energy consumption.

**ENERGY PERFORMANCE VALUE INDICATOR:** Qualification of the EnPI at a point in or over a specified period of time.

**ENERGY PERFORMANCE IMPROVEMENT:** Improvement in measurable results of energy efficiency, or energy consumption related to energy use, compared to the energy baseline.

**ENERGY TARGET:** Quantifiable objective of energy performance improvement.

**EFFECTIVENESS:** Extent to which planned activities are realized and planned results achieved.

**STAKEHOLDER:** Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.

**STATIC FACTOR:** Identified factor that significantly impacts energy performance and does not routinely change.

**RELEVANT VARIABLE:** Quantifiable factor that significantly impacts energy performance and routinely changes.

**BOUNDARY:** Physical or organizational limits.

**RISK:** Effect of uncertainty.

## 6. EnMS

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6.1. Organizational structure

6.2. Energy management system

6.3. 2024 energy review

6.4. 2025 energy programme



## 6.1. Organizational structure

The organizational structure is Split into the roles listed below.

Name and surname(s)	Role	Area of action
Isabel Balsach	R&D Facility Management Manager	IF- Sant Feliu R&D Centre
		PS- St. Andreu Pharmaceutical Plant
		SC- Headquarters
		QR – Ranke St. Andreu Chemical Plant
		QP- St. Celoni Chemical Plant
		MCAR- Reinbek site
Pol Salvado	Director, Pharma Unit - Process	PS- St. Andreu Pharmaceutical Plant
Enric Codinach	Director, Global Corporate Facility MGMT	SC- Headquarters IF- R&D Centre St. Feliu de Llobregat
Jordi Tugas	Director, Chemical Plants Facility MGMT.	QP- St. Celoni Chemical Plant QR – St. Andreu Chemical Plant
Haonan Yang Olcay Baris	Facility Manager Director, Industrial Engineering	MCAR- Almirall Hermal GmbH (Reinbek)

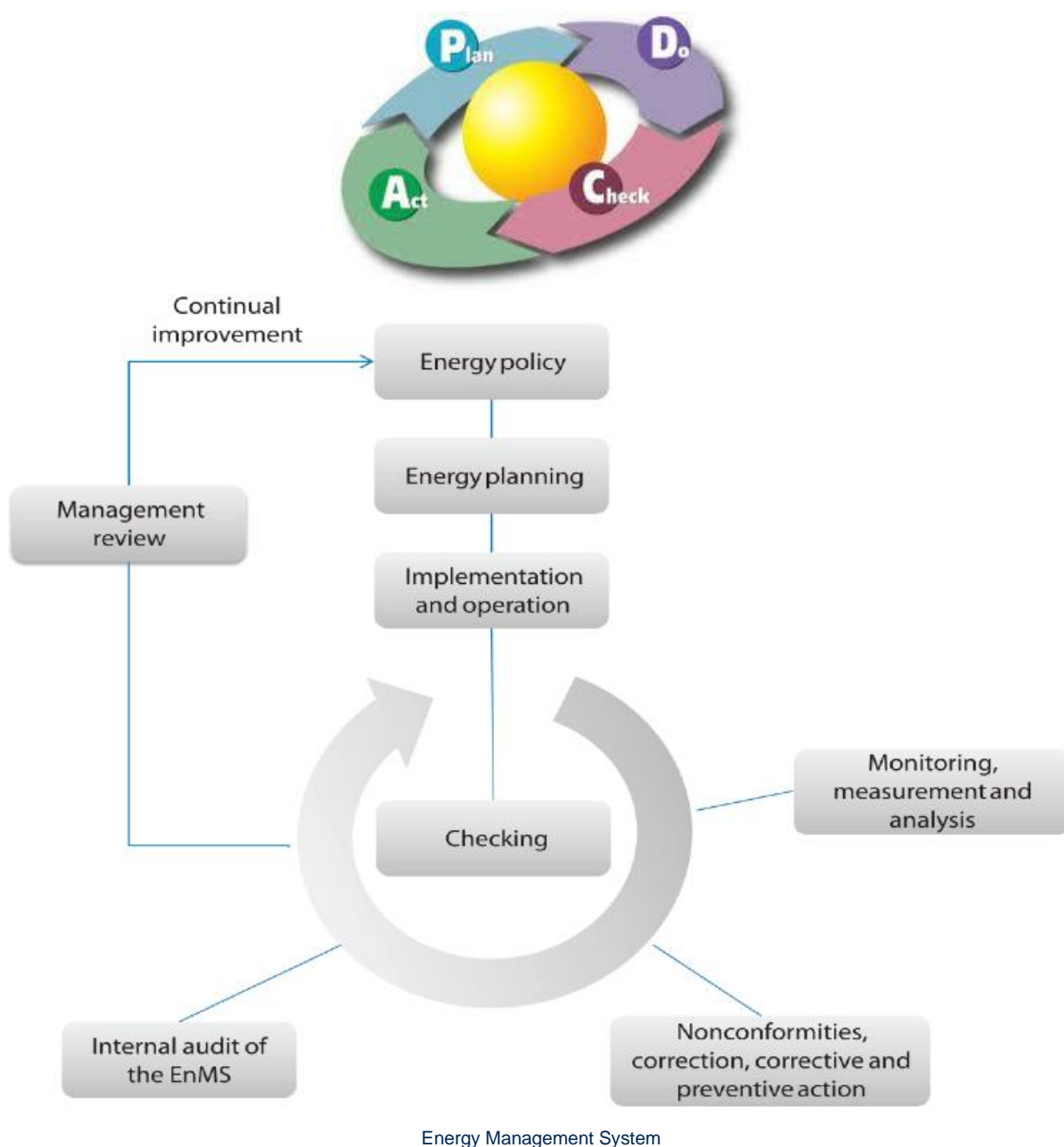
Roles involved in Energy Management

The Global Corporate Facility Management Director is responsible for updating the Energy Review. He/she is also responsible for carrying out energy monitoring.

The Global Corporate Facility Management Director is also responsible for ensuring that an initial Energy Review is carried out in new centres where an Energy Management System is implemented.

## 6.2. Energy management system

The Energy Management System is structured in order to establish, implement, maintain and improve the energy management system, with the purpose of achieving continuous improvement in energy performance in Almirall's centres, including energy efficiency, use and consumption. This is implemented by means of the continuous improvement cycle established by the requirements of the ISO 50001-2011 international standard (See table 2).





# 2024 Energy Review

Legal requirements and audits

Objectives and goals

Energy performance

Energy consumption

Significant uses and energy performance indicators

## 6.3. 2024 Energy Review

This section is devoted to the review of the **energy management system** in 2024.

The following aspects have been considered in this section:

- a) The results of internal audits and evaluations of compliance with legal requirements related to energy efficiency and other requirements to which the organization is committed.
- b) The environmental performance of the organization.
- c) Energy policy, objectives, goals and action plans.
- d) Energy monitoring.
- e) Measurement of the results.
- f) Opportunities for improvement.

Energy monitoring has been carried out over the course of 2024 and an annual Energy Review has been completed for each of Almirall's centers in which an EnMS is in place.

## 6.3.1. Industrial Safety legal requirements (Energy Efficiency)



Almirall contracts the services of NOVOTEC-SALEM, a specialized external company that provides an online database accessible through the Internet for the identification, access, maintenance, and periodical evaluation of the Energy Efficiency requirements applicable in each of Almirall's centers.

Over the course of 2024 an evaluation has been carried out of the legal requirements regarding Industrial Safety (Energy Efficiency) for each center.

- Royal Decree (UE) 2024/2174 regarding the format of the labels of certain products and appliances containing fluorinated greenhouse gases and repeals the Commission Implementing Regulation (EU) 2015/2068.
- REGULATION (EU) 2024/590 of 7 February 2024 on substances that deplete the ozone layer, and by the repealing Regulation (EC) No 1005/2009.
- REGULATION 2024/573 of the European Parliament and of the Council of 7 February 2024 on greenhouse gases amending Directive (EU) 2019/1937 and repealing the Regulation (EU) No 517/2014.
- RESOLUTION EMT/4139/2023, of 7 November, which makes public Instruction DGI 12/2023, in which that the conditions and the procedure to be followed, in the field of industrial safety, are established to put in place Service Photovoltaic self-consumption installations that benefit from the surplus compensation regime Low voltage.

Energy Audits has been submitted to Industria according to RD 56/2016.

## 6.3.2. Audits

### 6.3.2.1. ISO 50.001:2018 internal audit

In July 2024, the internal audit was passed **with a favorable result**, with 0 non-conformities, 5 Observations and 5 improvement opportunities were detected.

#### 1. Observations:

##### General (ISO 14-45-50K):

- Update context and include Climate change (Internal Issues)
- Update Dafo Matrix with 2024 relevant projects and changes.
- HSE Policy. Finish the review.
- Update "Stakeholders excel sheet".
- Study to include change controls and UR's in PREVAL in the incoming projects.

##### ISO 50K:

- Consumption trends analysis is not carried out when quarterly KPIs are received. (Pharma SAB)
- Install more energy partial meters. (Ranke SAB)
- Solar plant extension generates less than Veolia forecast (Sant Celoni)
- Document all the projects (not only GMPs initiatives) and include the energy savings calculations. (Pharma SAB)
- It could not be shown at Reinbek site whether new tenders / contracts have energy related criteria.

#### 2. Improvement opportunities:

- Include HQ photovoltaic extension in energy efficiency action plans (EEAP) excel sheet.
- Consider incorporating the new building at Sant Celoni for the changing room service in the that energy efficiency installations have been carried out such as a aerothermal energy and solar thermal panels for the generation of DHW and climate.
- An analysis of potential projects in Ranke SAB is required (most important scope as lower impact too).
- Reinbek have 28 internal meters, and they are not calibrated given that it is considered not necessary.
- Reinbek: Only major projects are included in the risks and opportunities analysis. Considering other smaller projects might be a good idea.

### 6.3.2.2. External annual audit ISO 50.001:2018 accredited Dakks



The annual external audit of the ISO 50001 (Dakks accredited), carried out by TÜVRheinland, was passed in October 2024 with a **positive rating**.

#### As **positive findings**:

##### General:

- Natural Gas elimination at Headquarters (decarbonization Roadmap).
- Various aspects related to the Management of the Energy management and sustainability:
  - Very comprehensive and complete baselines, updated.
  - General achievement of savings objectives and reduction of energy consumption.
  - Commitment to investment in technological improvements (Climate) and sources renewable energy (photovoltaic).
- Energy improvements coming from operational control in the ZFEC by enhancing the slow drive forward in various areas (clean aisle, equipment storage area, etc.).

##### Headquarters:

- Improvement of the green roof in almost 800 m2 in the center of Mitre, which must allow improving the evaluation performance for the
- LEED certification

#### Recommendations and opportunities for improvement

- The following risks should be assessed:

- Power limitation: if in the development of the decarbonization plan no longer consuming gas, the need for power increases in electricity (very limited). It would be advisable to evaluate it as a risk.
- Limitation of some refrigerant gases: R404A, R422B and R434A, although the procedure has been updated (4479 in its annex of inspections/verifications) in the event that they support processes operations could pose a risk to be analyzed.
- To promote the training as an internal auditor of Albert Ayala, who in the audit acted as support to audit the operational control part of the projects. It would be advisable to review the closure of the corrective actions of the internal audit, one of which expired on 06/10/2024.



## 6.3.3. Objectives & goals

### Energy efficiency improvements

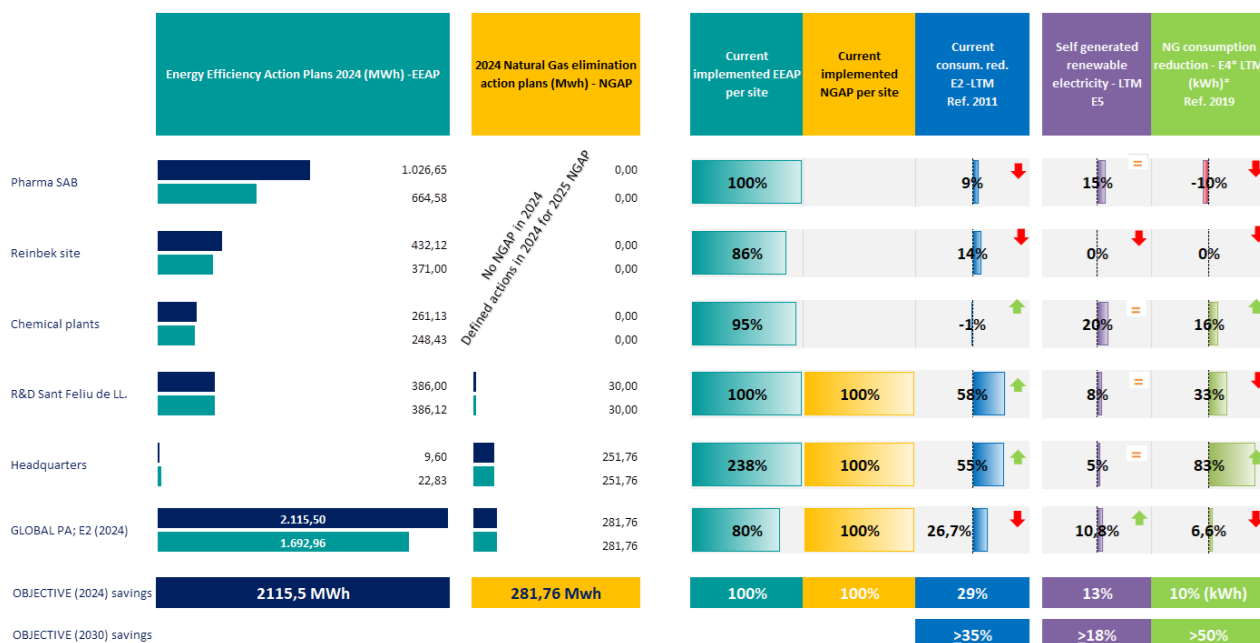


**Goal achieved: 1.693 MWh/yr**

The objectives and goals of the Facility Management Area in 2024 are listed in the table below:

The following graphic shows achievement degree (Met 2024 Natural Gas objective and Energy Efficiency objective is slightly below the 2024 energy efficiency target).

### 2024 Action plan objectives



E2: Energy consumption reduction vs 2011. Includes electricity, natural gas & photovoltaic electricity. Last 12 months

The calculated savings include the carry-overs from 2023. The savings in consumption through energy efficiency projects calculated by the Facility Management Directors.

80% of the target has been reached. 100% objectives have not been achieved due to:

- Photovoltaic Phase I & II at Pharma SAB has not generated has expected in the previous study.
- Delay in Reinbek photovoltaic plant commissioning.
- Chemical Plants has cancelled one action plan.

Milestones achieved:

The objectives and goals of the Facility Management Area in 2024 along with its degree of compliance as of 31/12/2024, are listed in the table below:

2024 objectives and results

**2115,5 MWh (80% achieved)**

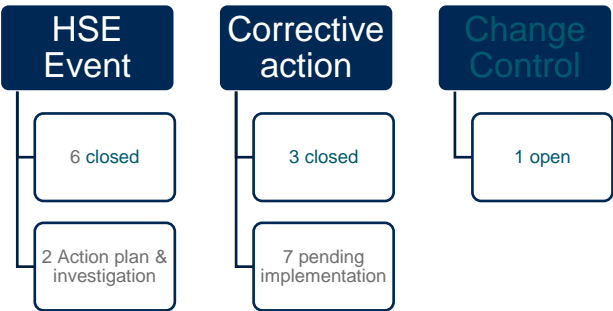
Goal: Percentage of savings on electrical/gas natural energy consumption of a center. This percentage is obtained from the annual savings in kWh obtained in the projects for the improvement of energy efficiency in respect of the total electricity/gas consumption of the center in kWh.

In Almirall sites which an energy management system is implemented, 18 energy efficiency action plans were completed over the course of 2024 and 2 decarbonization (natural gas elimination) action plans has been commissioned.

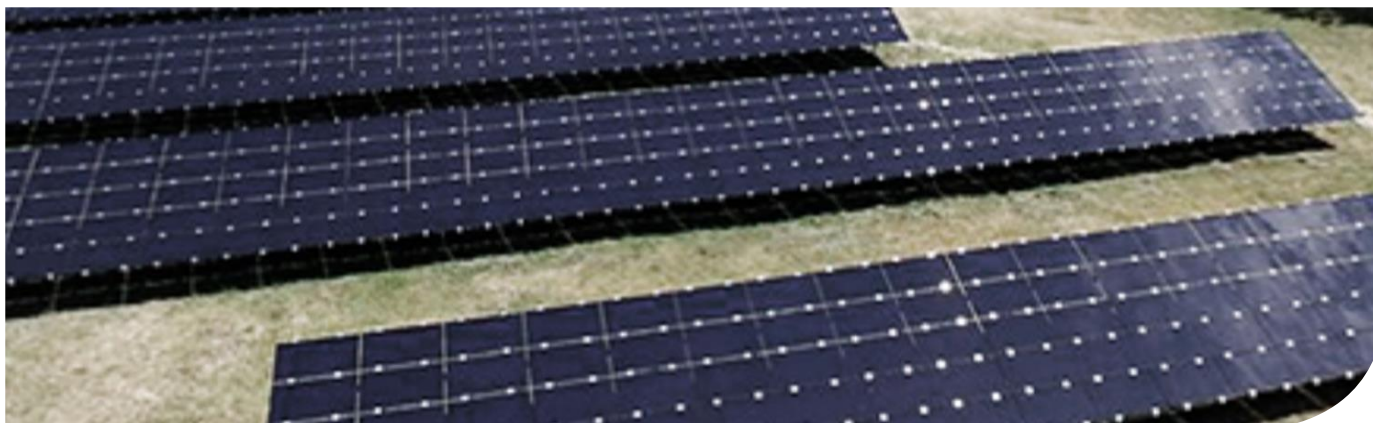
*18 finished projects*

6.3.4. Corrective and preventive actions 2024

Significant deviations identified through the monitoring of the baselines of each center are managed through the PREVAL application.



## 6.3.5. Energy performance



Over the course of 2024 the following actions were carried out in order to improve the EnMS of the energy efficiency system in Almirall's centers.

### 1 Green energy contracts & Spain electricity PPA contract

As a part of Almirall's atmospheric emissions reduction, the purchase of Green electric power has been renewed in the Almirall Reinbek site.

A 10-year PPA contract for Green electricity has been closed at Spanish sites from 2023 (50% of the energy will be from "Acciona Green Energy" renewal portfolio & the rest will be purchased in the energy market with GDO's).

*Thanks to these agreements, CO2 emissions will be zero in this area.*



### 2 Communications plan on the



The news published on Almirall's intranet (Sphere) is attached below:

- Almirall receives prestigious recognition from TÜV Rheinland from implementing ISO 45001, ISO 14001 and ISO 50001.



### 3 NetZero at Headquarters



### 4 HQ Photovoltaic plant extension (73,7 kWp)

HQ extended the solar panels to 73,7 kwp on the roof of the building.

### 5 Sant Andreu Photovoltaic Plant Extension Phase II

Solar photovoltaic panels extension for self-consumption (Phase II) has been up and running since May 2024. It increases the actual power from 1052 KWp to 1,95 GWp installing more panels in SAB Sur roof, silo and the car-park canopies.

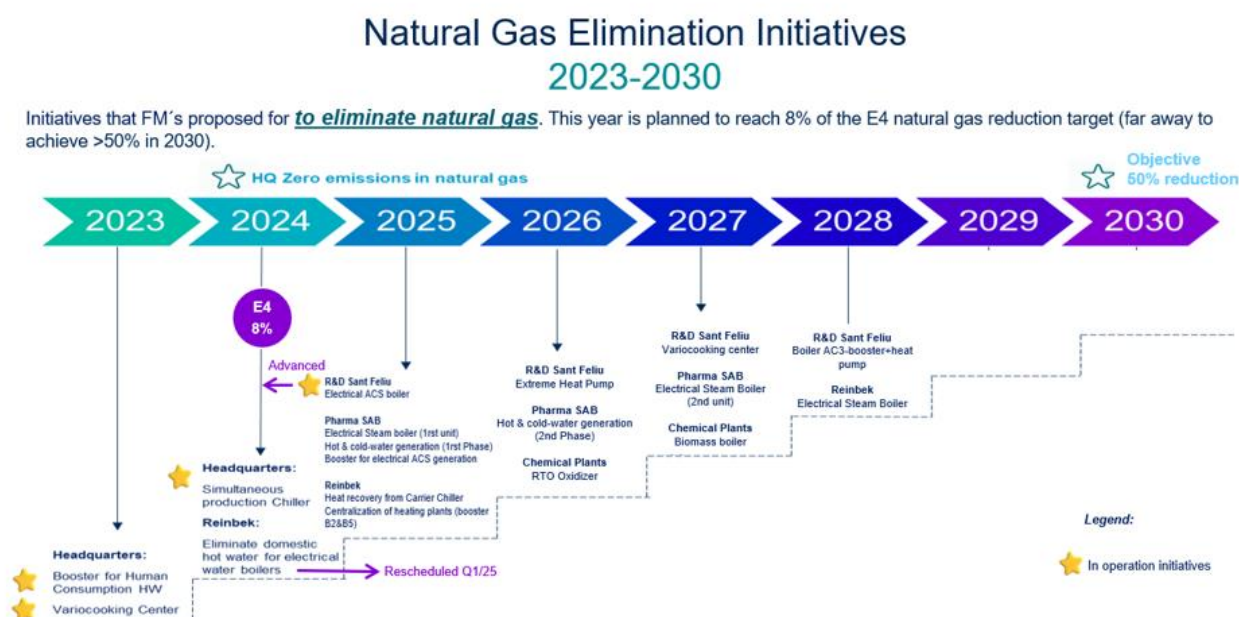
For 2025 is has been scheduled Phase III extension.

### 5 Decarbonization Roadmap 2023-2030

The company's decarbonization plan establishes the roadmap for achieving the 2030 science-based emissions reduction targets.

It has been defined a roadmap for each site with specific initiatives and the estimated Natural Gas reduction for each site. Periodically meetings they are scheduled ("Planet Program" presentation updated to IOLT last 28.11.24 and to "Planet Advisory Team" last 4.12.24. )

In the following roadmap we can see in operation initiatives marked with a star and the planned next year action plans.



During 2024 all these initiatives has been commissioned:

- Headquarters Net Zero in natural gas consumption.
- Sant Feliu ACS boiler electrification.

## 6 Next Gen Grants projects review:

PROYECTO	PRESUPUESTO	SUBVENCIÓN	
Sustitución Clima Sant Celoni 2021 – IDAE Industria	235.530,00 €	57.891,00 €	JUSTIFICADAS
Sustitución Enfriadora Sant Feliu 2021 – IDAE Industria	263.360,82 €	49.808,65 €	
Fotovoltaicas Sant Feliu 2021 – IDAE Autoconsumo	95.119,97 €	12.133,80 €	
Cargadores Eléctricos Sant Andreu SAB 2022 – IDAE MOVES III	179.254,12 €	53.776,24 €	CONCEDIDAS
Sustitución Enfriadoras y ACS Mitre 2022 – IDAE EERR	889.357,24 €	262.385,28€	
Fotovoltaicas Sant Celoni 2023 – IDAE Autoconsumo	295.890,00 €	36.041,88 €	
Fotovoltaicas Sant Andreu SAB Fase 1 2023 – IDAE Autoconsumo	260.100,00 €	27.919,00 €	PRESENTADAS
Inversiones Productivas SAB 24 – ACCIO	1.050.056,70€	498.142,70€	
Inversiones Productivas Ranke 24 – ACCIO	2.610.048,68€	500.000,00€	
			DENEGADAS

## 7 CAEs certification study for Spanish sites with fi Group.

Fi group sent a previous study analysis with initiatives that would fit in CAES, which are not compatible with ICAEN subsidies, etc... A summary has been sent to the Facility Directors so that they can fill in a form in case of feasibility.

**8** Financial Times & Statista have recognized Almirall as one of Europe's Climate Leaders 2024 (click here to access the information on the Financial Times page). Within the group of pharmaceutical companies, Almirall appears in fifth place of the nine pharmaceutical companies considered Europe's Climate Leaders, behind Astra Zeneca, Novartis, GSK and Sanofi; and ahead of Icon, UCB, Roche and Grífol.

*"The list focuses primarily on businesses that have achieved the greatest reduction in their Scope 1 and 2 GHG emissions intensity over a five-year period (2017-22 for this edition). Scope 1 and 2 emissions — "core emissions" in the table — come respectively from a company's own operations and from the energy it uses, while intensity is defined as tonnes of emissions of CO<sub>2</sub>-equivalent per €1mn of revenue. Other factors are considered, too, such as companies' transparency on Scope 3 emissions, which arise elsewhere in their value chains, and their collaboration with sustainability assessors, such as CDP and the Science Based Targets initiative (SBTi). These factors are assigned a score, which is combined with the reduction in emissions intensity figure, to produce an overall total for each company."*



# 6.3.6. ESG program

2024 objectives (related to energy efficiency, renewables and natural gas reduction) & achievement.

Objective definition:

E2: % energy consumption reduction (includes photovoltaics)

E4: % carbon footprint reduction in natural gas consumption

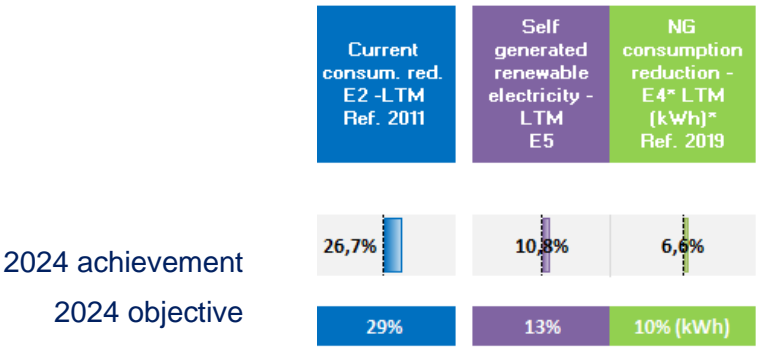
E5: % self-generated renewable electricity

	2023	Q2 24*	2024	2030
E1 % carbon footprint reduction S1+S2	8%	15%	12%	> 50%
E2 % energy consumption reduction	29%	29%	29%	> 35%
E3 % renewable electricity consumption	100%	100%	100%	100%
E4 % carbon footprint reduction in natural gas consumption	13%	16%	13%	> 50%
E5 % self-generated renewable electricity	8%	8%	13%	> 18%
E6 % carbon footprint reduction in internal vehicle fleet	7%	11%	7%	> 50%

\* Q2-24 is partially updated and estimations have been done for more realistic result.

2024 achievement:

2024 objectives have not been met due to Pharma SAB increase in production and delay in Reinbek photovoltaic plant commissioning (planned in June and commissioned in December).





## 6.3.7. Energy consumption





# Overview

## Energy consumption

In Almirall centers, the monitoring and registration of electricity and natural gas consumption is carried out through the energy data management program of the NUS Consulting Group. The consumption and annual cost of energy in Almirall's centers are shown in the graphs below.

Electricity and gas natural consumption according to the 2024 utility bills was lower in non-industrial sites than in the previous year. Due to unit productions increase at Pharma SAB and the normal activity return of Sant Celoni Chemical Plant, consumption has increased in the industrial sites.

A record of diesel/LPG consumption is also made.

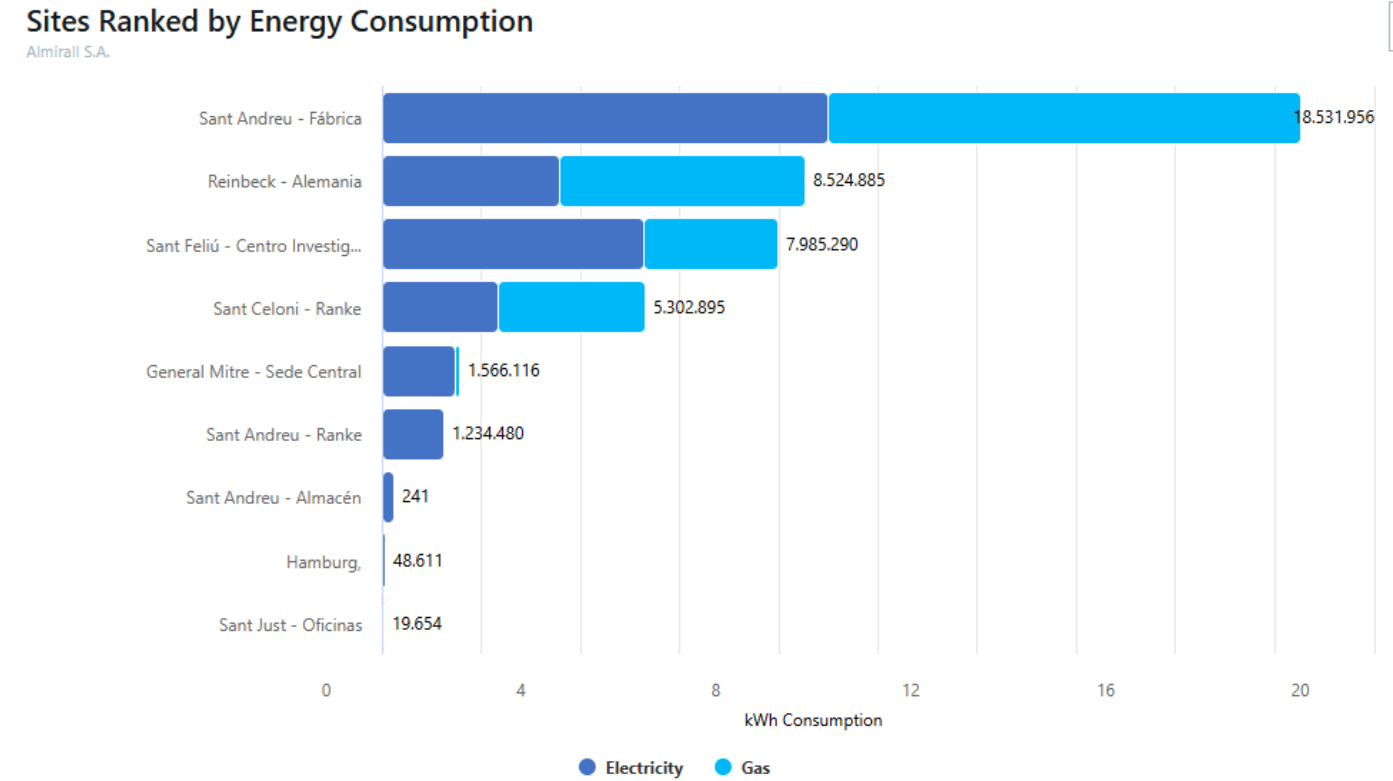
Energy type MWh	2023	2024
<b>Electricity grid</b>	<b>23.415,858</b>	<b>23.122.589</b>
Sant Andreu Pharma Plant	9.153,53	8.982,43
R&D Sant Feliu	5.470,56	5.279,45
Reinbek	3.914,43	3.575,019*
Ranke – Sant Celoni	1.875,06	2.312,73
Headquarters	1.420,51	1.477,83
Ranke SAB	1.277,99	1.234,48
Sant Andreu –Sab Sur	287,16	241,00
Sant Just Office	9,87	19,65
SAB- Aux ser FV	6,73	0
<b>Photovoltaics</b>	<b>2.048,68</b>	<b>2.806,87</b>
Ranke – Sant Celoni	356,94	593,01
Sant Andreu Pharma	1.116,15	1.672,58
R&D Sant Feliu	486,24	457,77
Reinbek site	0	0
Headquarters	89,34	83,51
<b>Thermal</b>	<b>19.412,84</b>	<b>20.296,24</b>
Sant Andreu Pharma SAB	9.490,98	9.549,53
Reinbek site	5.022,89	4.975,33*

(\*) Some Reinbek estimated because yet.

R&D Sant Feliu de Llobregat	2.870,93	2.706,02
Ranke – Sant Celoni	1.626,89	2.977,08
Headquarters	401,15	88,35

invoices has been they have not arrived

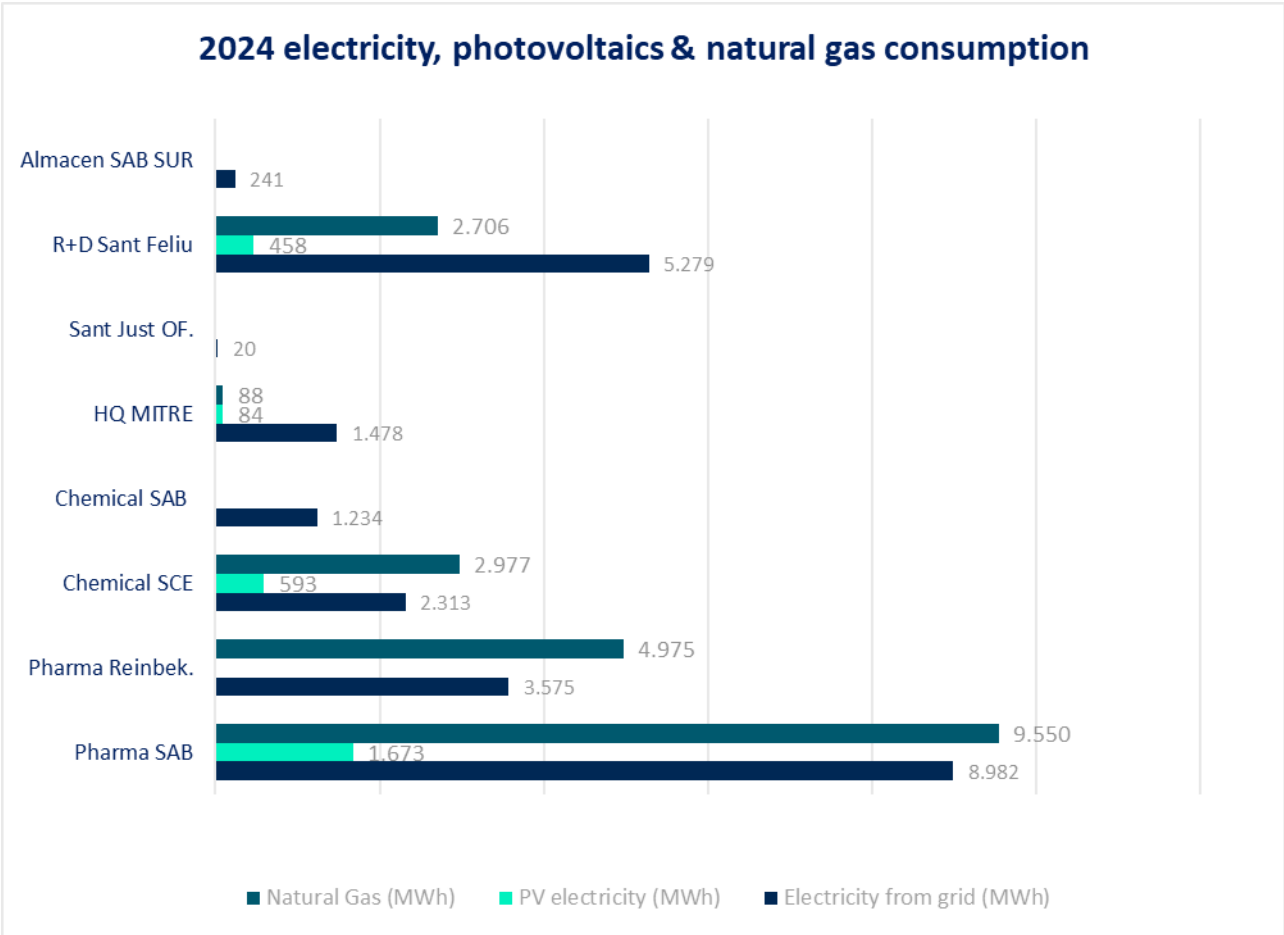
Energy invoiced consumption per site (electricity & natural gas):



Hamburg is not included in ISO 50K scope.

Reinbek natural gas and electricity December invoices have not been received yet. Our estimation differs just a little bit from NUS. We take the data from Almirall partial meters.

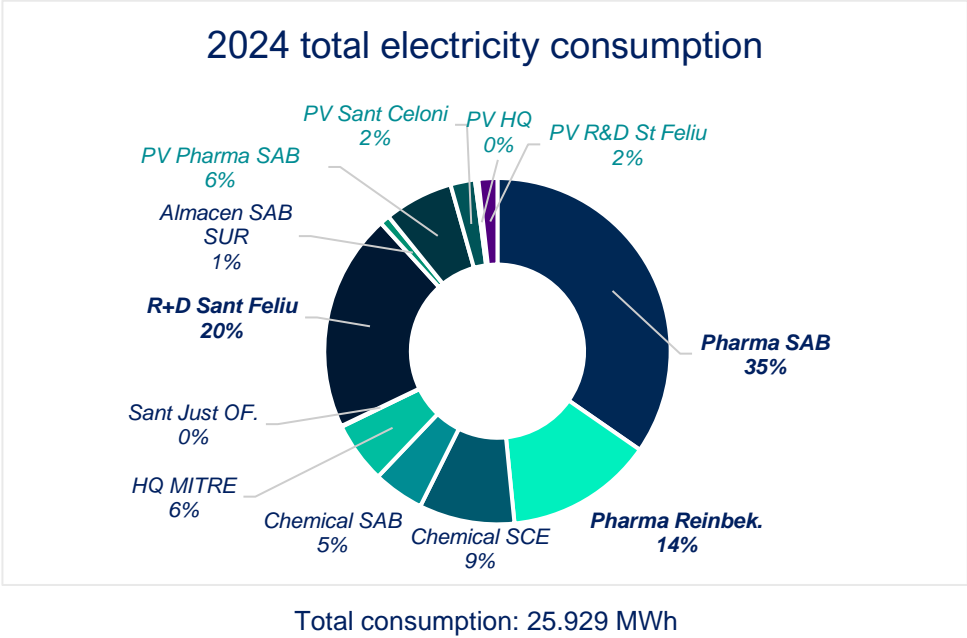
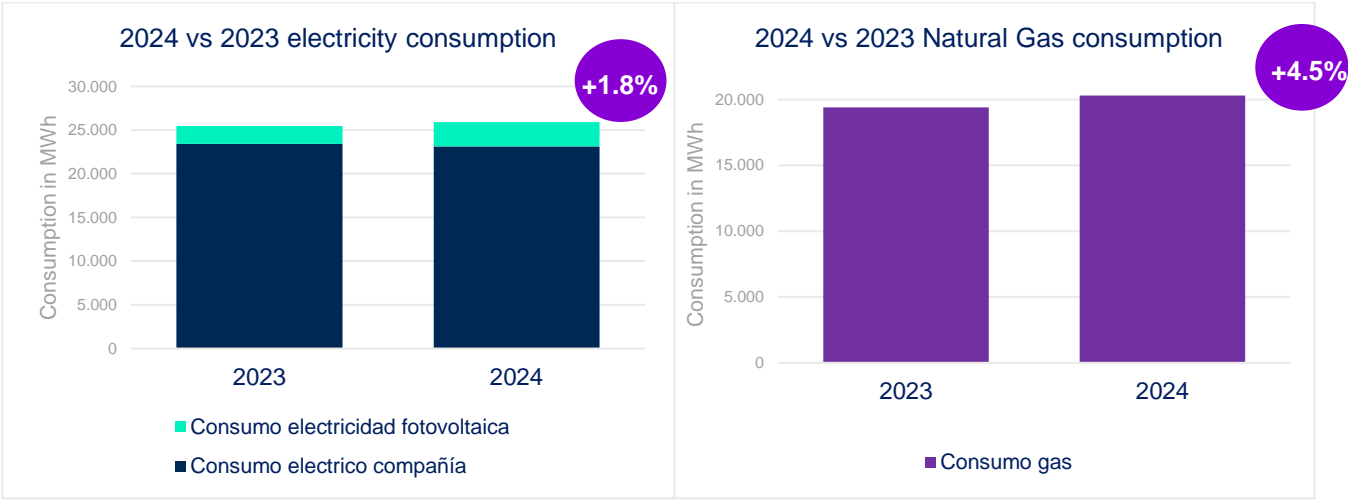
QR consumption of natural gas is included in the consumption of the Sant Andreu pharmaceutical plant because it is a common service for Sant Andreu de la Barca.

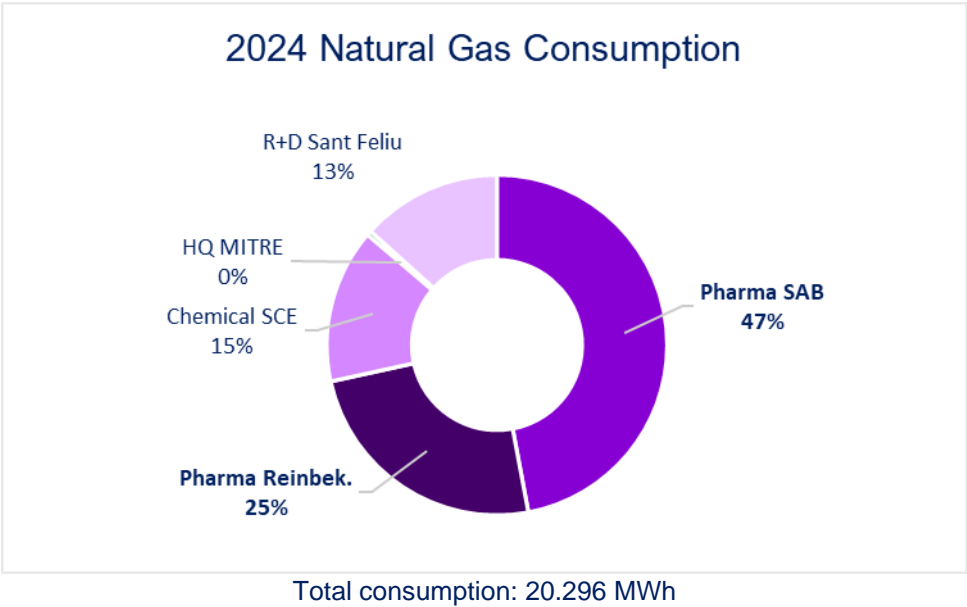


## Electrical and natural gas consumption

The consumption percentage per work center is split as shown in the graph below, the Sant Andreu Pharma Plant (34,6%) and the de Sant Feliu Research Centre (20,4%) being the centers with highest electricity consumption.

The Sant Andreu Pharma plant (47%) is the center with the highest gas consumption, followed by the Reinbek center (25%) and the Chemical Plant SCE (15%).





## 6.3.8. Photovoltaic installations

### Solar photovoltaic electricity installations at Almirall:

Site	2022 (kWp)	2023 (kWp)	2024 (kWp)
Sant Celoni	310	526	526
Sant Andreu	802	1.052	1.946
Sant Feliu	356	356	356
Sede Central	57	57	74
<b>TOTAL</b>	<b>1.525</b>	<b>1.991</b>	<b>2.901</b>

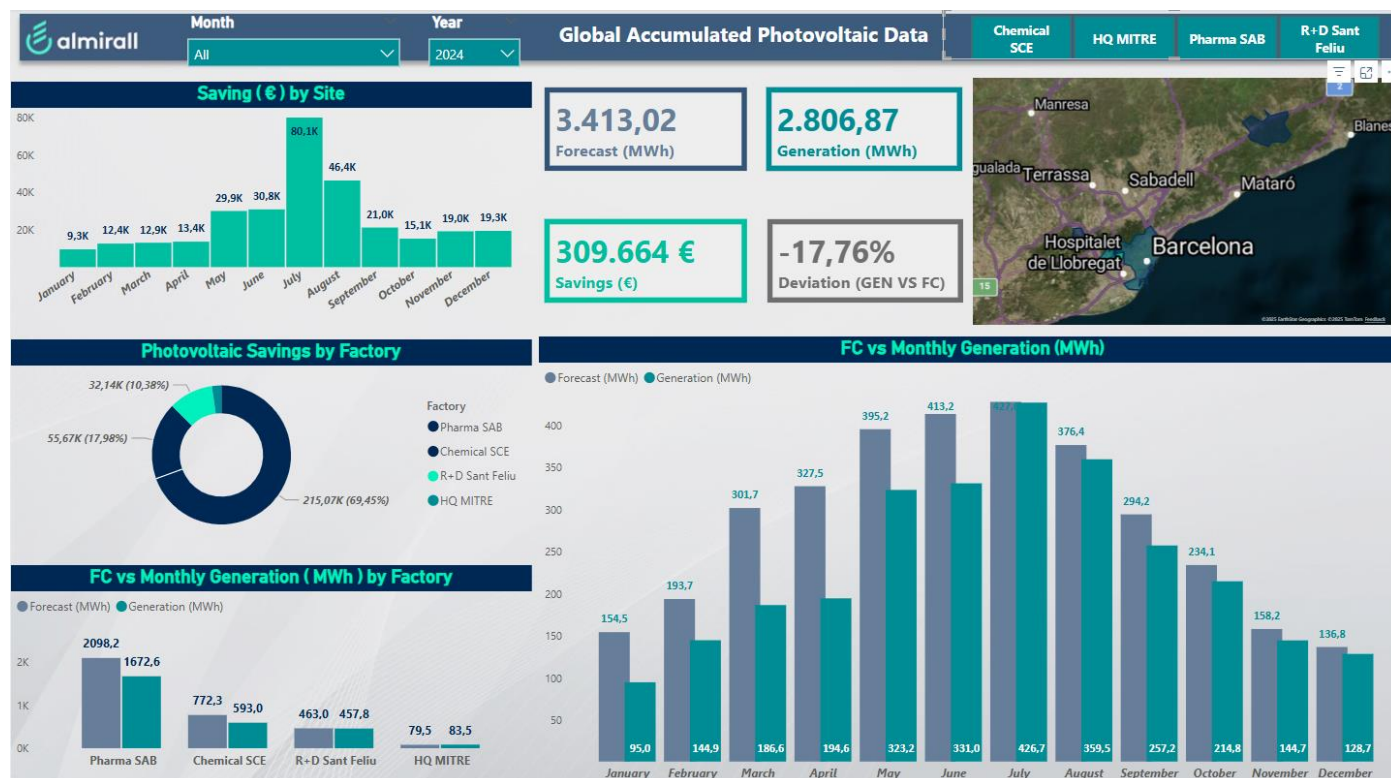
Pharma SAB has extended the solar plant power during 2024 (Phase II).

Solar panels at Reinbek site have been installed at mid-January 2025.

New power BI has been developed with purchase department. PV Data, consumption/cost energy can we tracked monthly (Directors Facility and VP can access too).

The graph below shows globally Almirall generation per site. The total PV generation has been 2,8 GWh and it has generated an accumulated saving of 309.664 € (electricity not purchased). Headquarters has generated more than estimated but Sant Celoni & Pharma SAB have generated less than expected.

Globally:



## Sant Celoni

The following graph shows the solar electricity generated in the PV plant and the comparison with the estimated production. The solar plant has generated 593,01 MWh during 2024.

The graph shows that the generation has been less than expected due to several breakdowns due to grounding failures. It has been solved.



## Sant Andreu de la Barca

The installation of solar photovoltaic panels (801 kWp) for self-consumption at SAB Pharma Plant has been running since 2019. A Phase I extension in power was installed at end of 2023 and a Phase II in 2024. The total power has been increased to 1946 kWp.

To sum up, PV plant has generated 1,67 GWh in 2024 and accumulated a saving of 215 k€ during 2024.





R&D Sant Feliu de Llobregat

PV plant has generated 0,45 GWh in 2024 and it has generated an accumulated saving of 32.135 € during 2024.





Headquarters

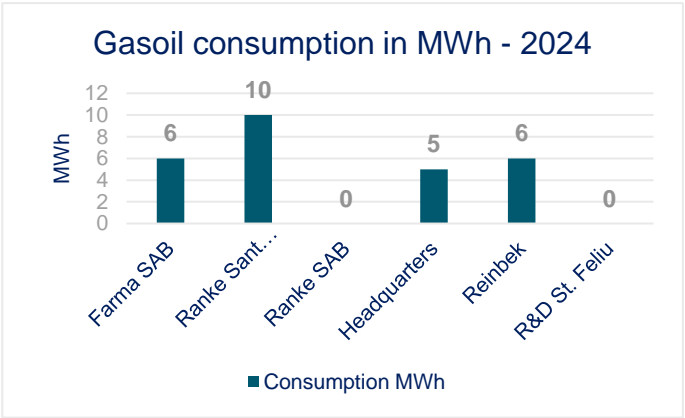
An extension in power was installed in 2024. The total actual power is 74 kWp. PV installation has generated 83 MWh in 2024. The production has been by 5,2% higher than the estimated and it has generated an accumulated saving of 6.792 € during 2024.



6.3.9. Consumption of Diesel and LPG

In some centers there is a small diesel oil tank which is used for the diesel generator, fire-fighting equipment and/or forklift trucks. The purchases of diesel oil per center in 2024 are listed below.

In Germany a small LPG consumption to heat Building nº14 was removed in June 2024. This fuel was stored in a small external tank. All the fuel will be filled in building 6 tank.



# 6.3.10. Significant uses and energy performance indicators (EnPIs)

## Headquarters

HQ is Neutral Carbon since April 2024 (natural gas is not used. Only for back-up). Please, consider that during 2024 the site has been electrified, so the electricity and thermal uses have been changed. The most significant use in HQ is **comfort climate (HVAC)**.

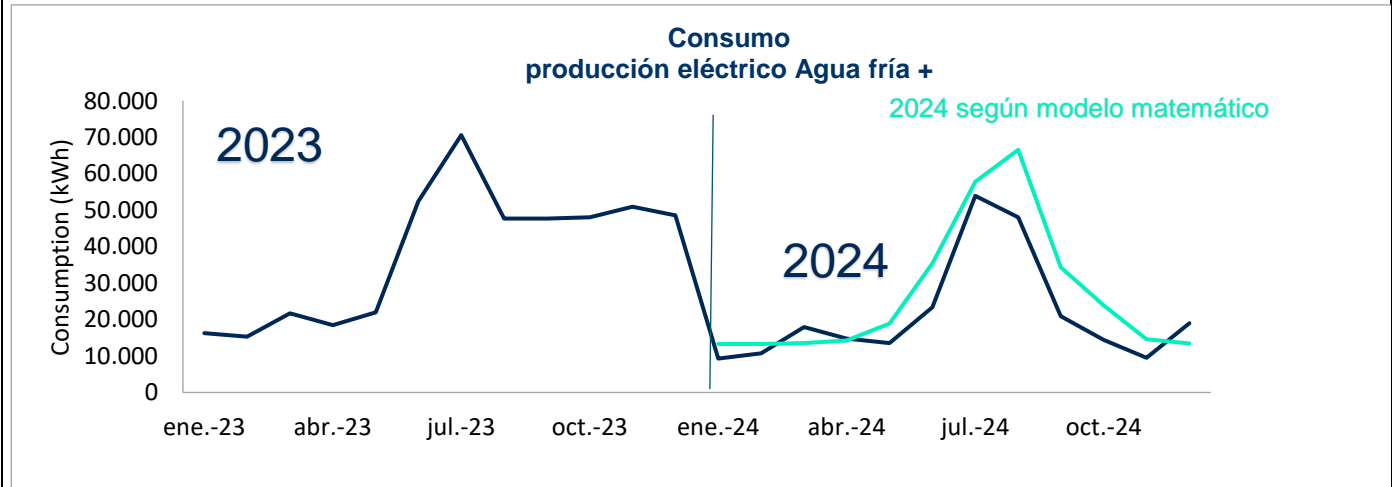
### MONITORING INDICATORS

- Three monitoring indicators are defined for significant energy uses that correspond to:
- electrical HVAC generation (chillers), for monthly electrical consumption in Ee\_Kwh/month
  - Principal HVAC devices (climatizadores principales) for monthly electrical consumption in Ee\_Kwh/month
  - Fancoils and HVAC for monthly hot thermal consumption in Et-Kwh/mes

### ENERGY MONITORING

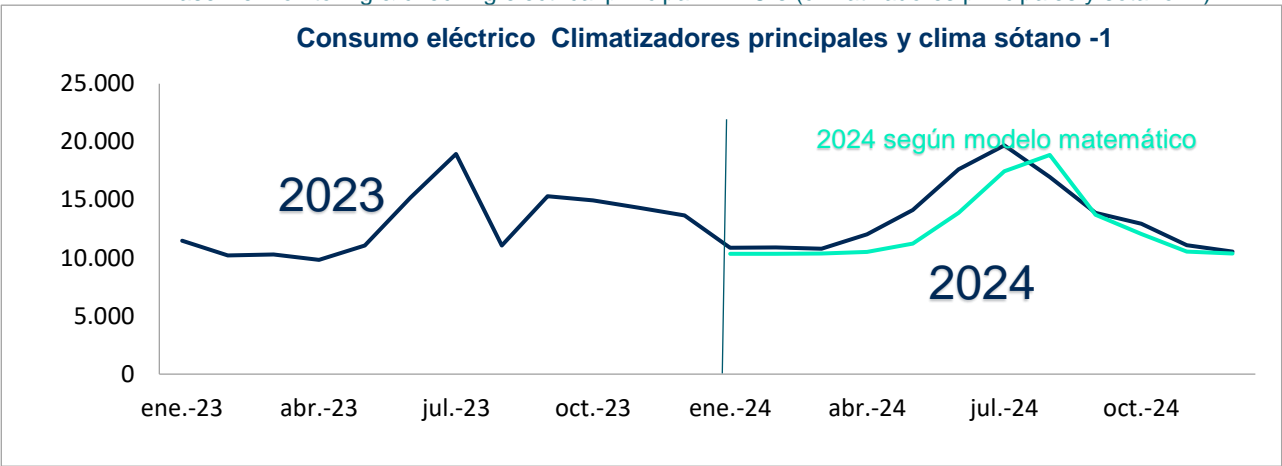
Energy monitoring has been carried out of the significant use of climate by means of the electrical and thermal baseline, as shows below. Consider that during this year the site has been electrified. Next year the follow up will be more reliable.

Baseline monitoring & checking electrical climate generation (chillers+ pump distribution)



Baseline monitoring & checking electrical principal HVAC's (climatizadores principales y sótano -1)

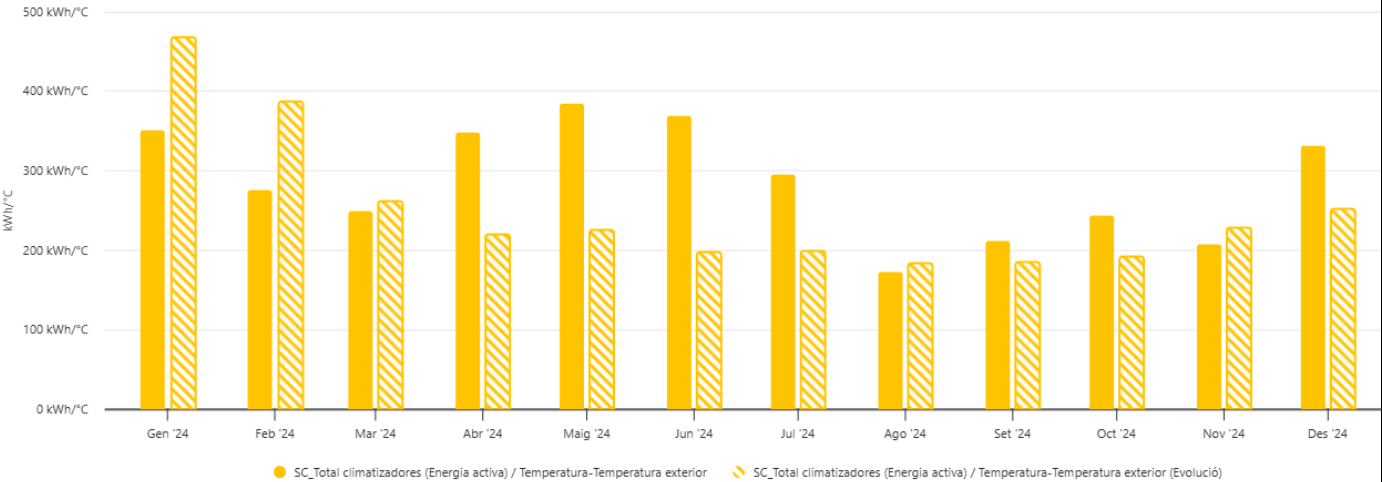
Consumo eléctrico Climatizadores principales y clima sótano -1



KPI HVAC (kWh e/°C)

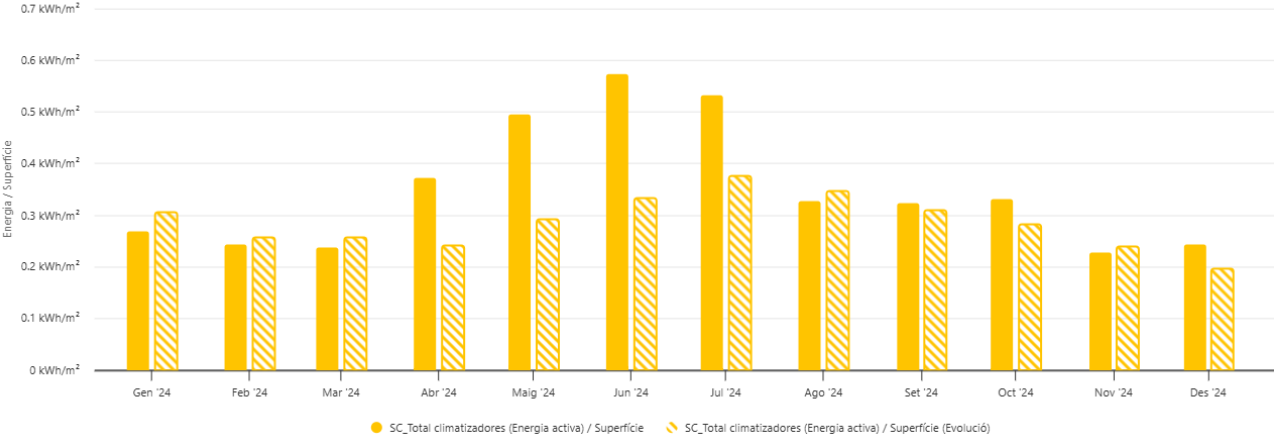
< 01/01/2024 - 31/12/2024 >

KPI Climatizadores (kWh/tª exterior)

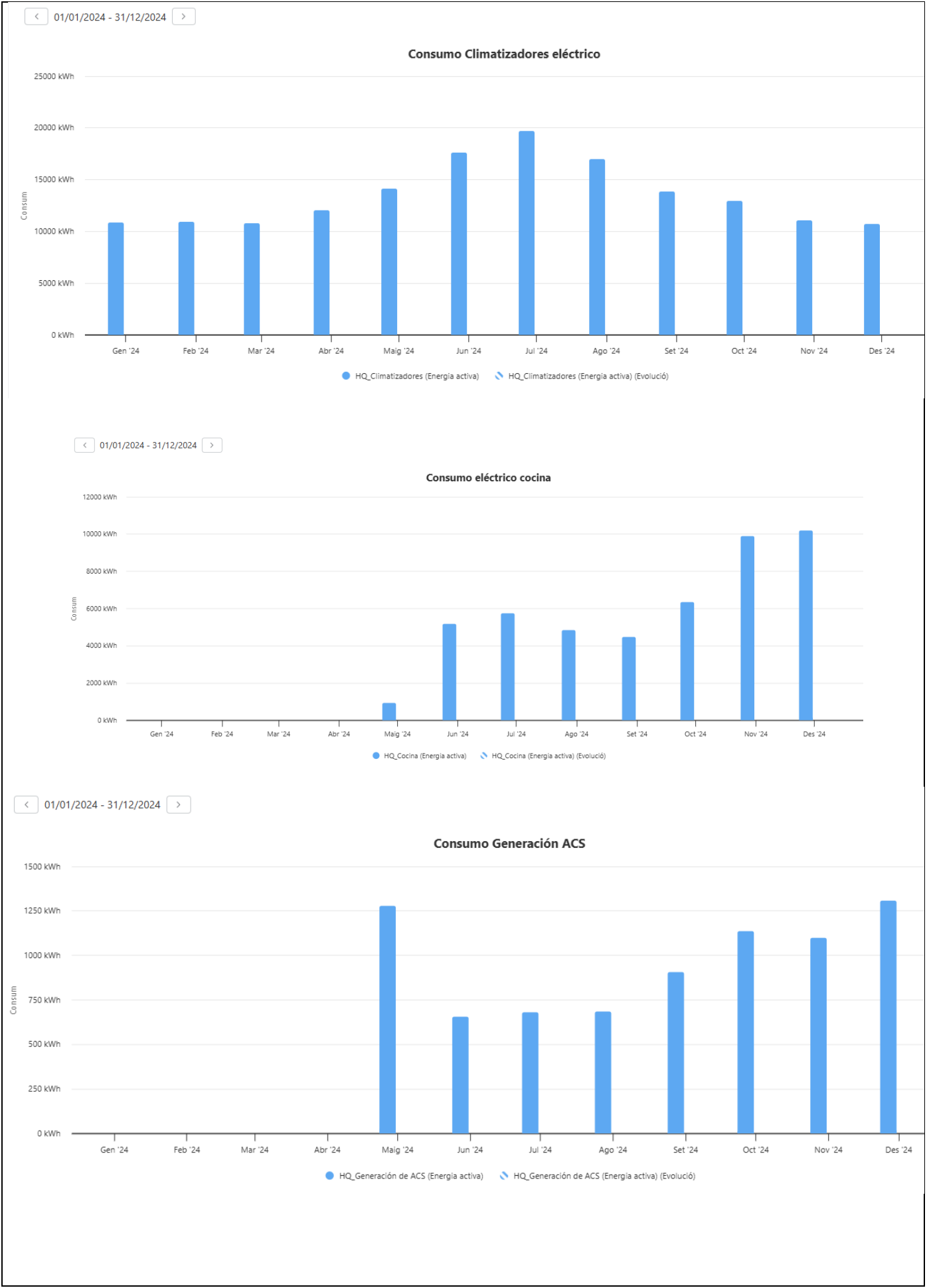


KPI HVAC (kWh e/m2)

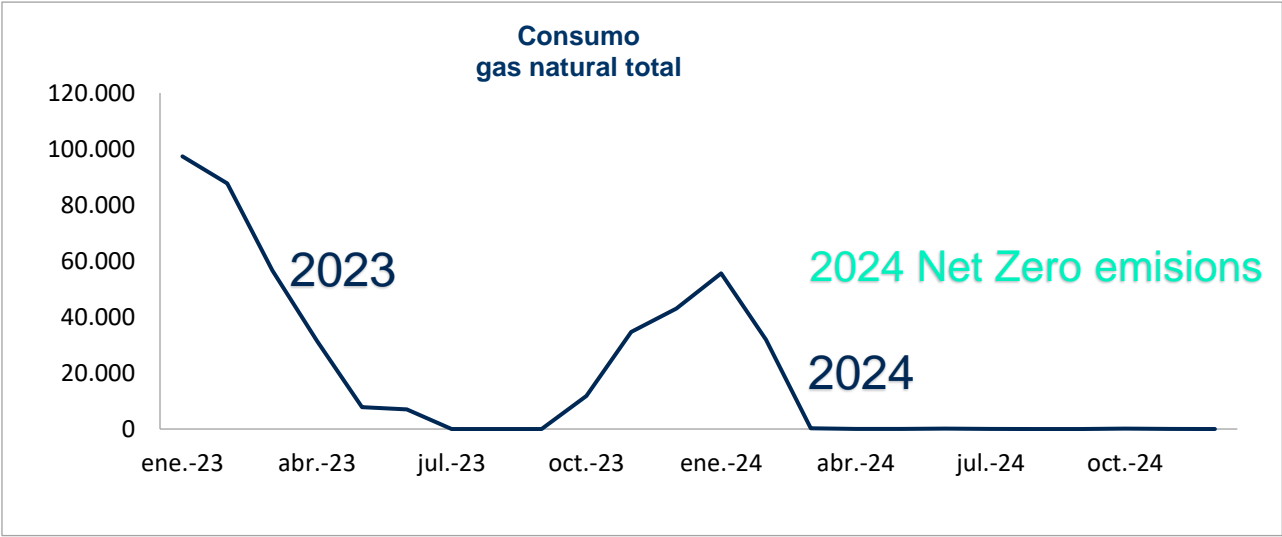
KPI Climatizadores (kWh/m2)



More partial meters have been installed in 2024. It is planned to implement more KPI in 2025. HQ is acquiring the data since meters installation. Here you can see some examples:



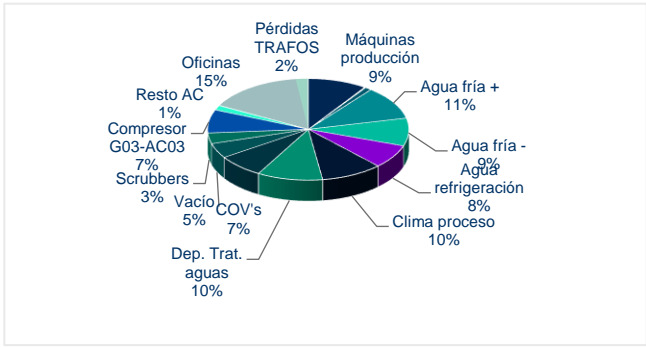
Baseline monitoring & checking thermal climate (Natural Gas)



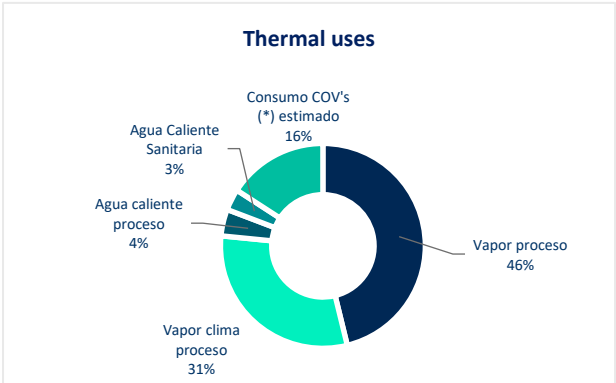
Electrification project finished in April 2024, so the natural gas is only used since then for back-up (maintenance of the existing boilers).

# Sant Celoni Chemical Plant

The following results are obtained according to uses from the 2024 **electrical** energy evaluation.



The following results are obtained according to uses from the **2024 thermal** energy evaluation.



## MONITORING INDICATORS

The following results were obtained according to uses from the 2023 energy evaluation. The following significant uses (2024) were identified in the Sant Celoni Chemical Plant.

- Process steam for monthly **thermal consumption** in Et\_Kwh/month.
- Process HVAC for monthly **electrical consumption** in Ee\_Kwh/month.
- COV's , for monthly **thermal consumption** in Et\_Kwh/month
- Photovoltaic electricity , for monthly **electrical consumption** in Ee\_Kwh/month

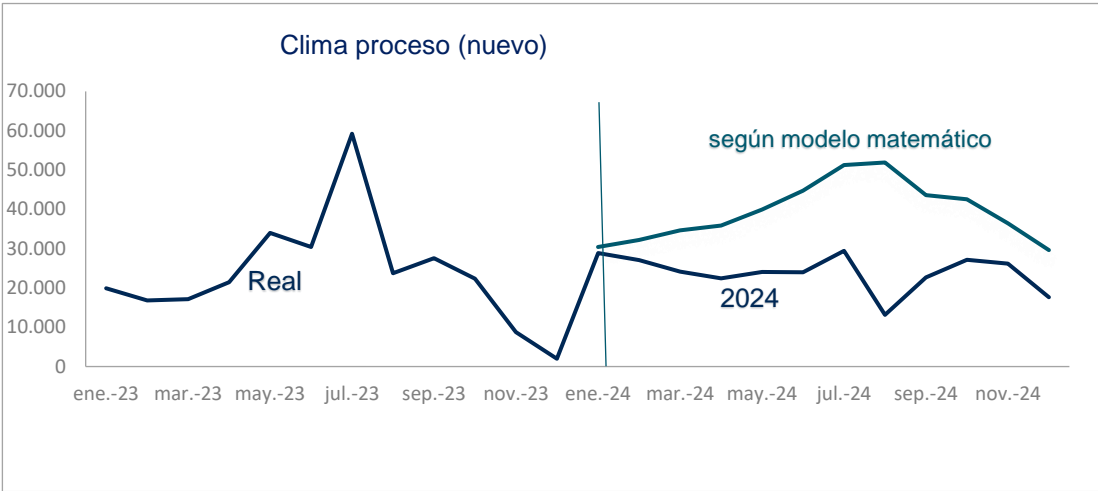
Apart from the significant uses, Almirall installed partial meters. So the waste water plant have also been monitored.

## ENERGY MONITORING

Energy monitoring was carried out of the uses shown below.

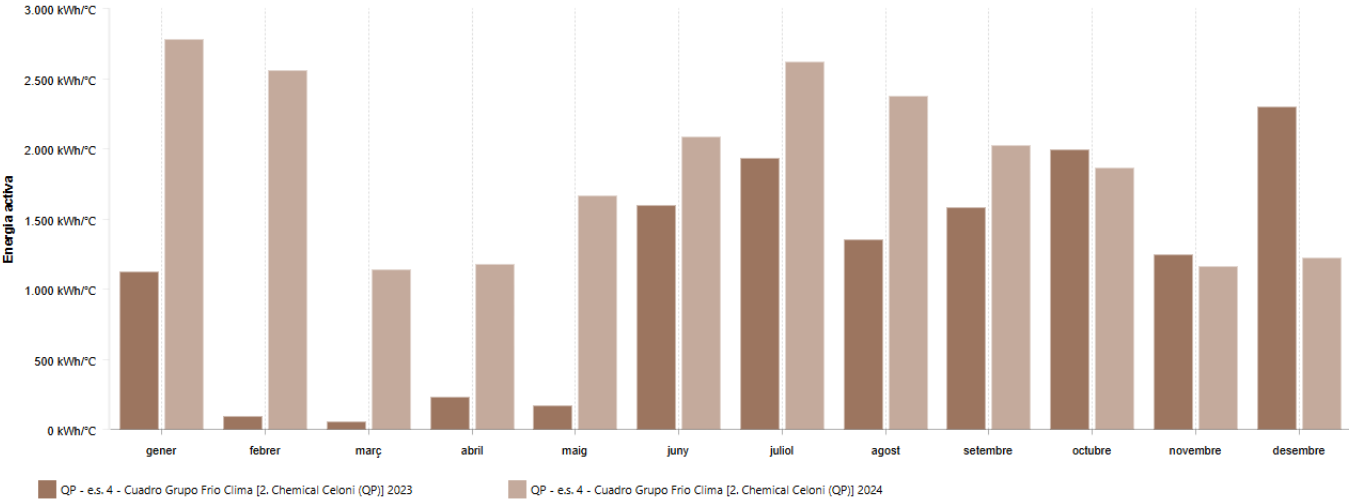
Due to the fire, the consumption does not correspond to the mathematical model. The site has been producing less during first semester.

Electrical electricity baseline monitoring and checking (Process HVAC )

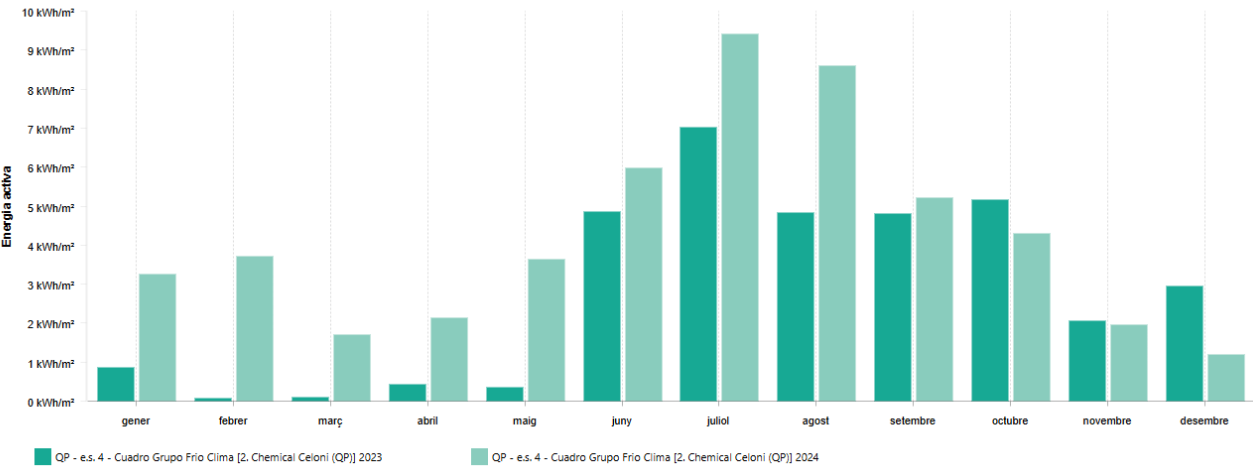


In 2024, part of the plant is still with less operation due to the fire that originated in 2022. Therefore, the mathematical model does not correspond to of a normal year.

KPI +cold water (kWh e/°C)

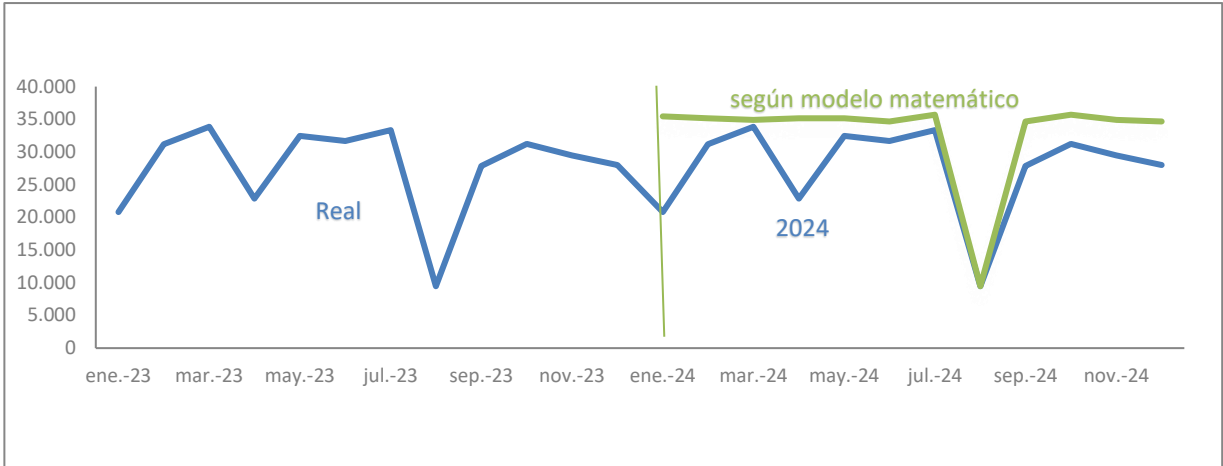


KPI +cold water (kWh e/m2)

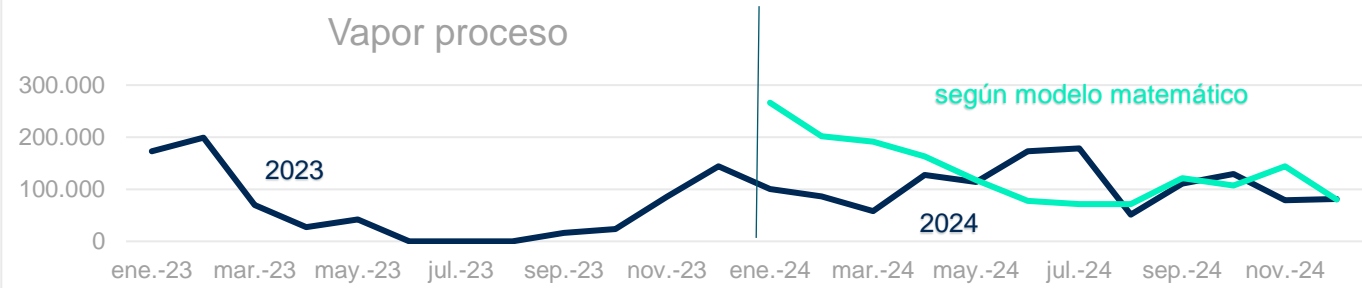


Production begins to stabilize in the second half of 2024.

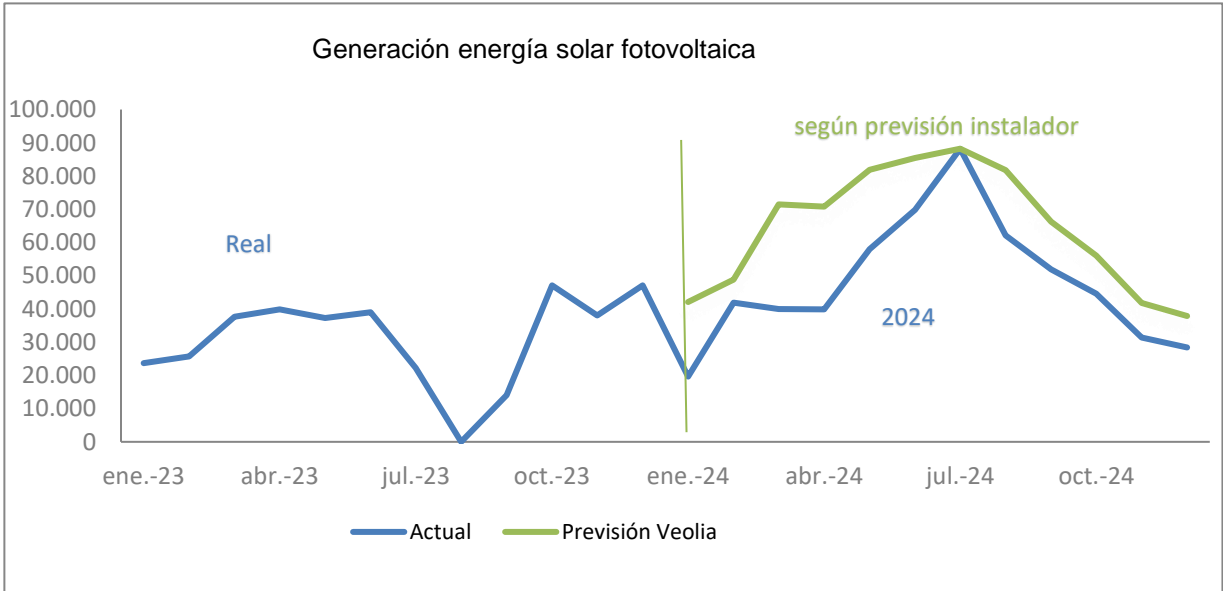
Thermal baseline monitoring and checking VOC's



Thermal baseline monitoring and checking Process Steam



Electrical baseline monitoring and checking Photovoltaic electricity

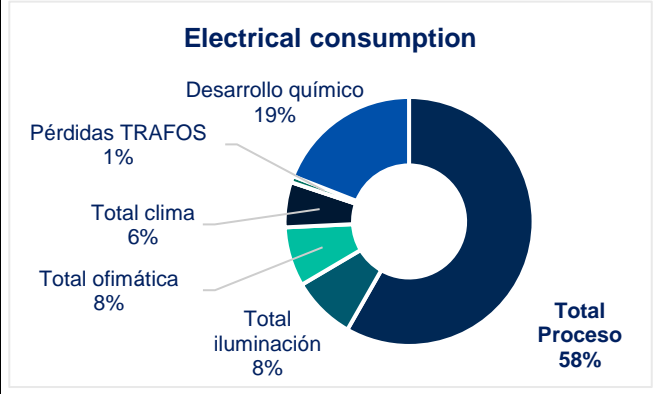


The PV plant was shot down from mid- July/23 to mid- September/23 because the project extension implementation. 105 KWp of solar panels were replaced for new efficient ones, increasing the total generation PV. During firsts month of 2024 some breakdowns due to problems with the power line grounding implying a drop in generation. The differential of the plant jumps.

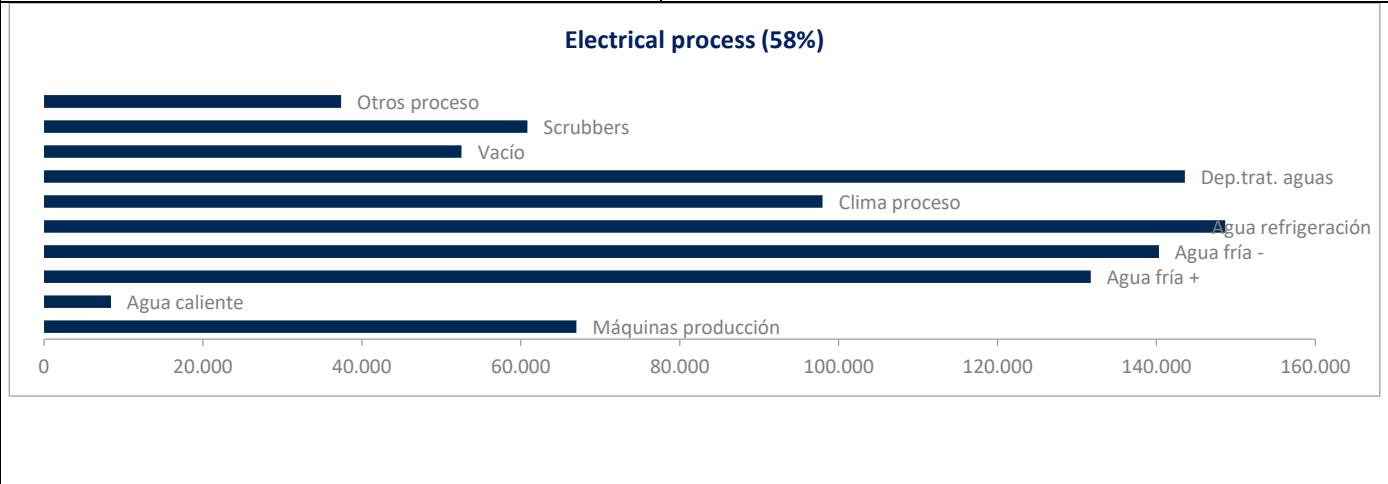


# Sant Andreu de la Barca Chemical Plant

The following results are obtained according to uses from the 2024 electrical energy evaluation.



From the thermal evaluation of 2024, we obtain the annual gas consumption for steam production is 28 % (1,730,420 kg/h of steam consumption in Ranke). A steam pipe arrives from the Sant Andreu pharmaceutical plant to supply the needs of the chemical plant. There is a partial steam meter on the branch of the network that goes to Ranke.



## MONITORING INDICATORS

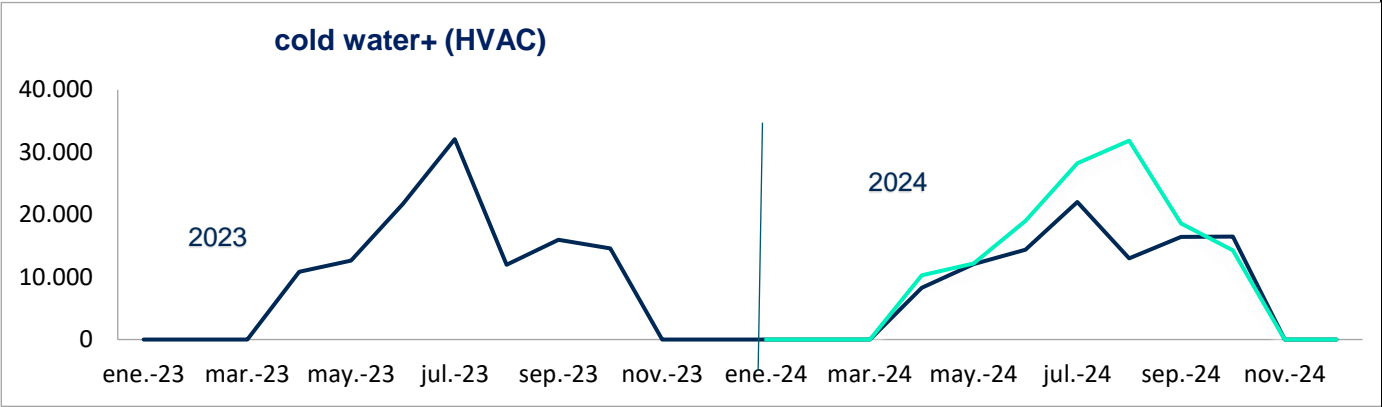
The following results were obtained according to uses from the 2023 energy evaluation. The following significant uses (2024) were identified in the Sant Andreu Chemical Plant.

- Process HVAC (+ cold water), for monthly electrical **consumption** in Ee\_Kwh/month and monthly **thermal consumption** in Et-Kwh/month
- Steam for monthly thermal **consumption** in Et\_Kwh/month.
- DQ area, for monthly **electrical consumption** in Ee\_Kwh/month

## ENERGY MONITORING

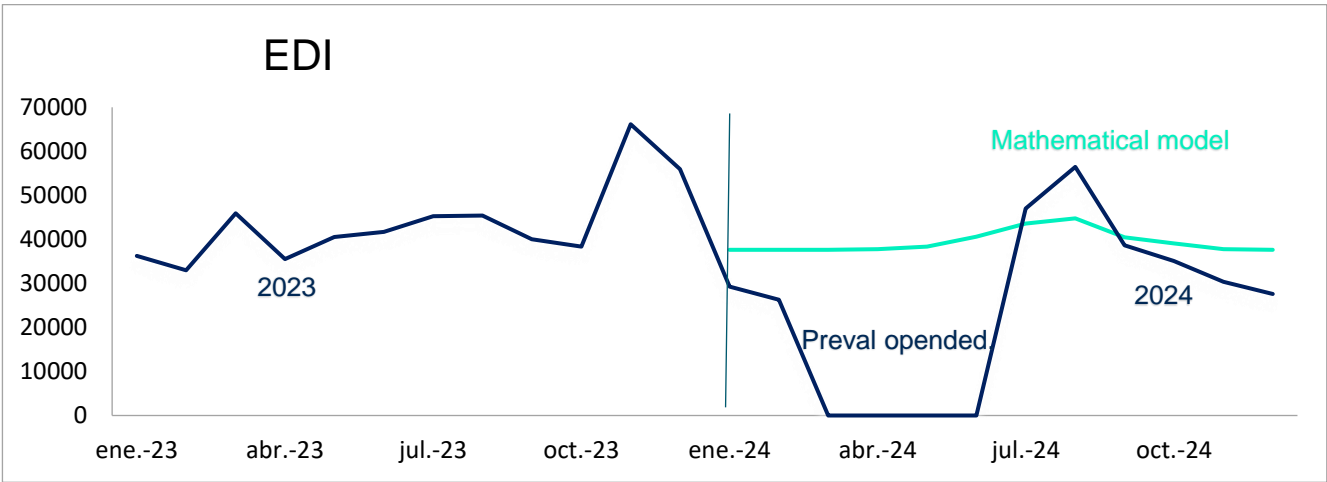
Energy monitoring was carried out of the uses shown below.

### Electrical baseline monitoring and checking + cold water for HVAC



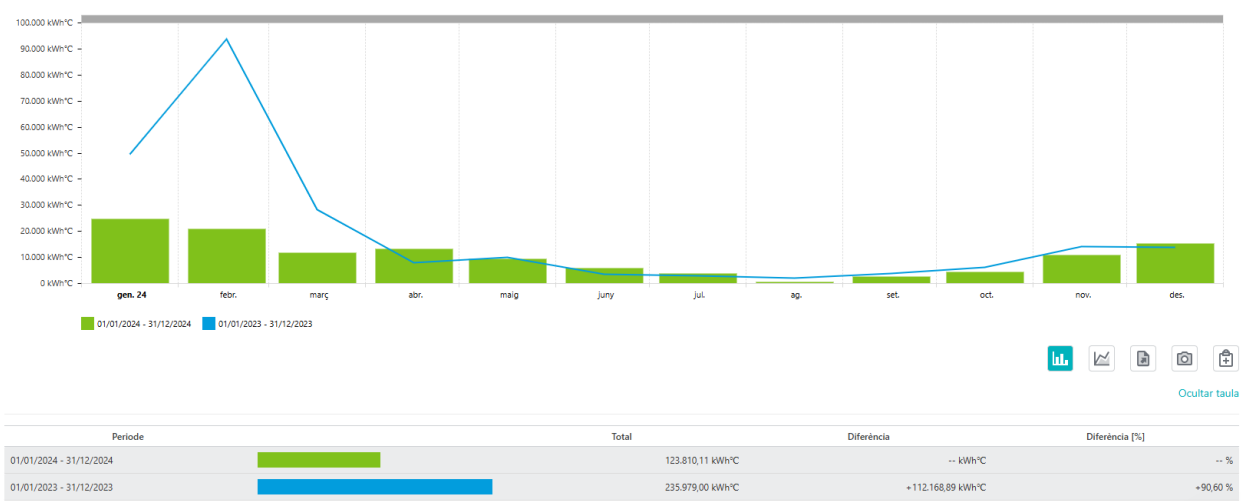
2024 consumption has not follow the paterns due to 2023 production was higher in order to compensate Sant Celoni shut down (fire).

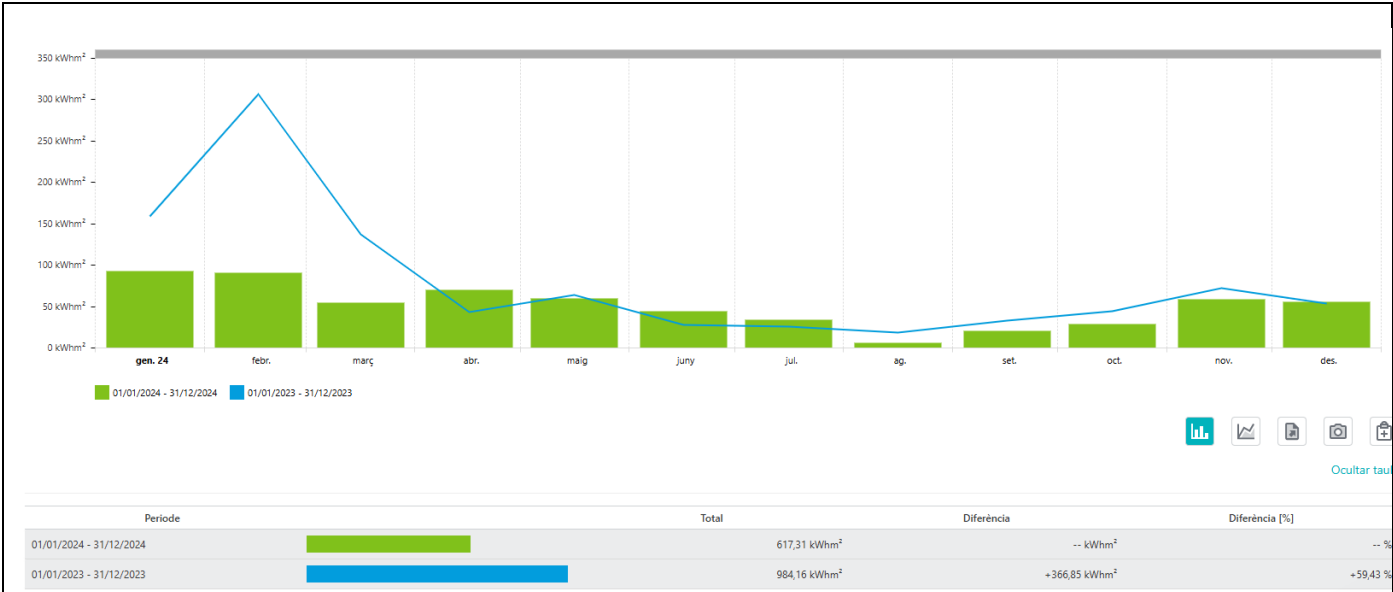
### Electrical baseline monitoring and checking DQ Area



A PREVAL has been open because gateways has been replaced. The Schendeider gateway has been broken. The actual Gateway is old and it is no longer manufactured on the market. Additionally, there is a delay in integration because the new gateways are not in Dexma portfolio, so they have to included the new ones.

### Thermal baseline monitoring and checking Steam

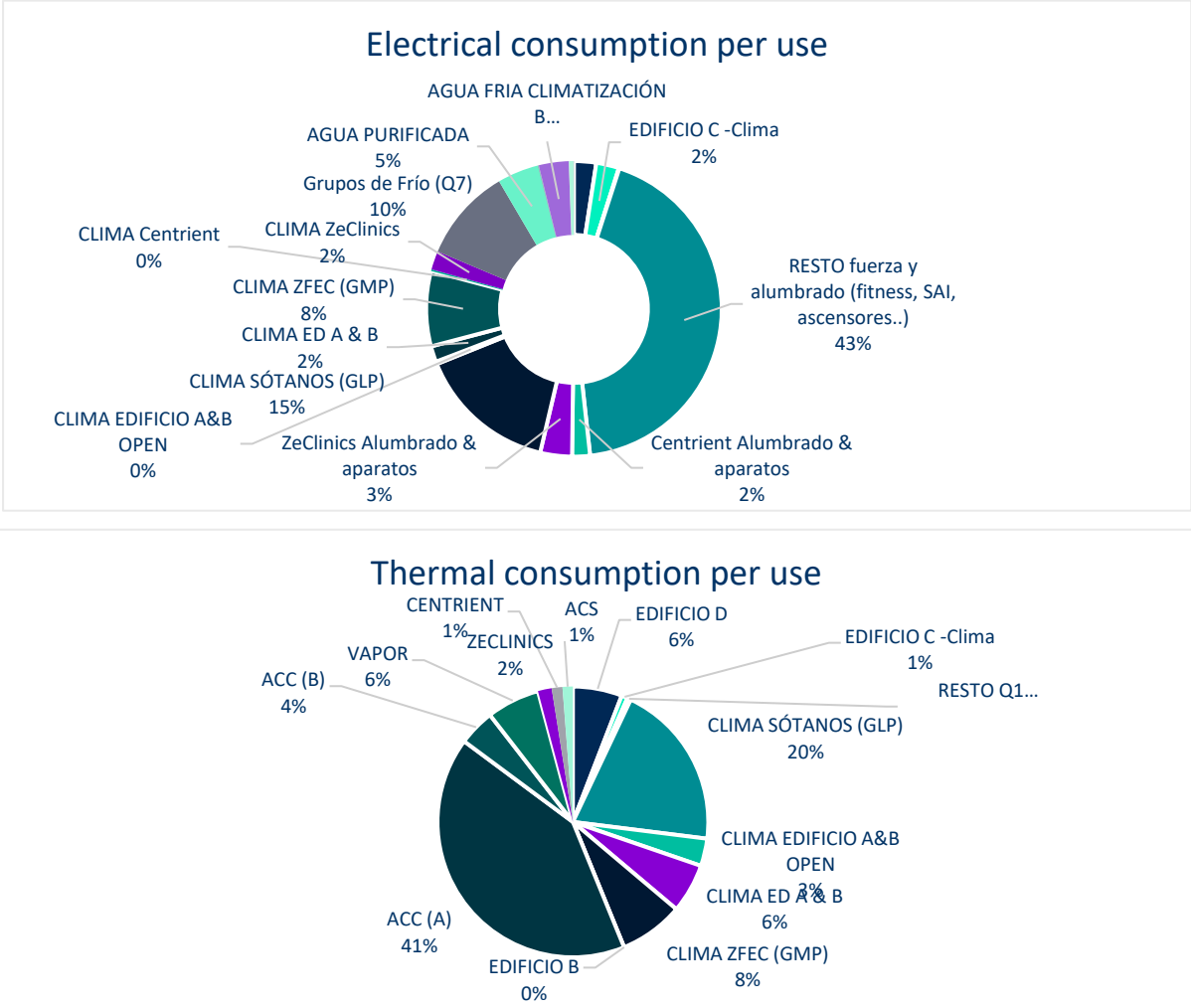




Per each ratio, we can see that 2023 was higher than 2024 consumption. It is due to the large productivity in 2023 (Sant Celoni fire). Ranke SAB absorbed a part of the production that could not be carried out in Sant Celoni.

# Sant Feliu de Llobregat R&D

The following results are obtained according to uses from the 2024 electrical & thermal evaluation.



## MONITORING INDICATORS

The following results were obtained according to uses from 2023 energy evaluation. The following significant uses were identified in the Sant Feliu de Llobregat research center (2024):

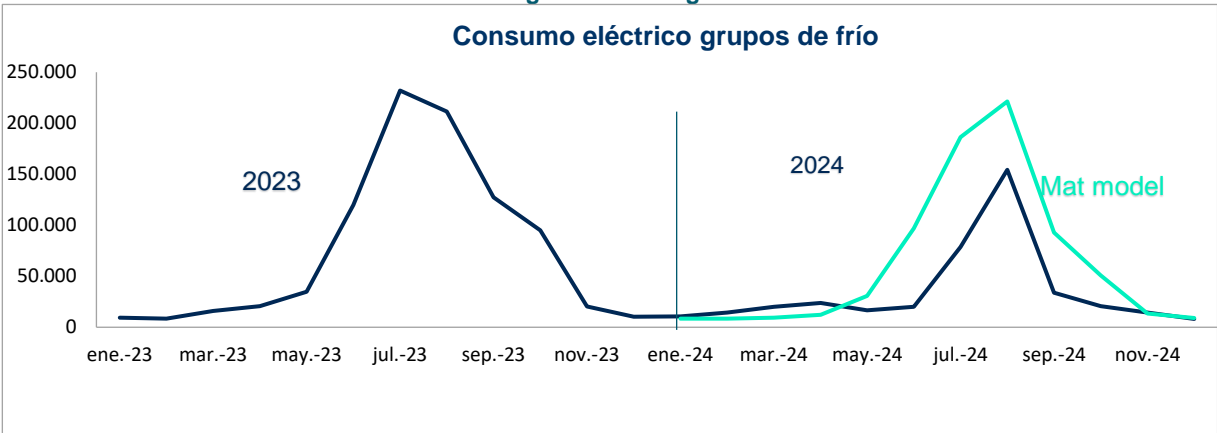
- Cold water for HVAC Building A (Q7), for monthly **electrical consumption** in **Ee\_Kwh/month**
- Climate (Hot Water climate), for monthly **thermal consumption** in **Ee\_Kwh/month**
- GLP HVAC, for monthly **electrical consumption** in **Ee\_Kwh/month**

Three monitoring indicators are defined. One for the significant use that corresponds to the monthly thermal consumption of the HVAC hot water use, expressed as **Et\_kWh/month**, , one for the monthly electricity consumption of + Cold water for HVAC (Q7) use and GLP HVAC, expressed as **Ee\_kWh/month**.

MONITORING INDICATORS

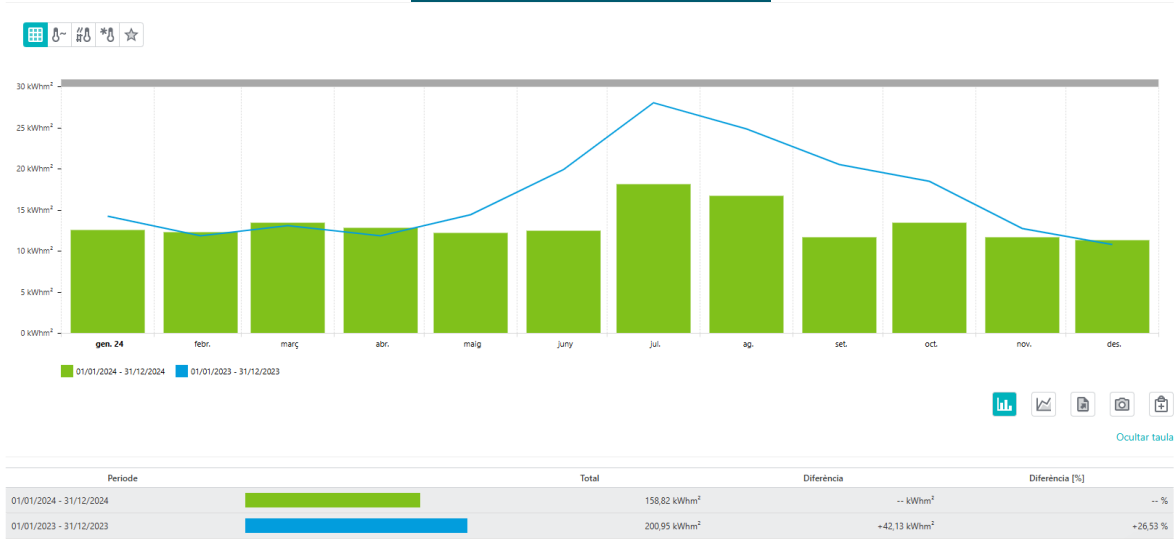
Energy monitoring was carried out of these uses by means of the electrical and thermal energy baselines shown below.

Baseline monitoring and checking electrical Chillers

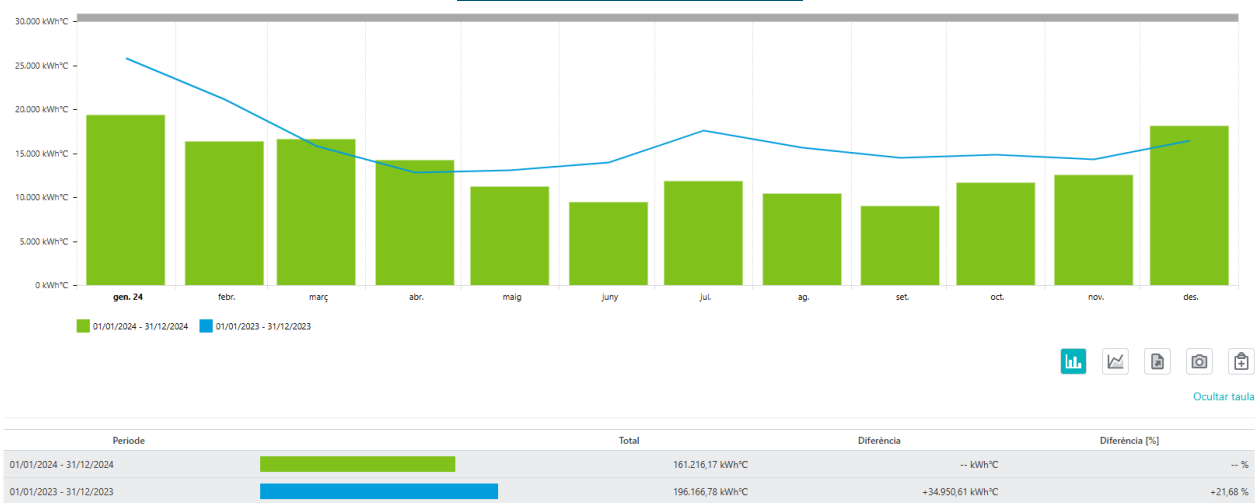


An old chiller was replaced (Trane 1) for a new more efficient one. The mathematical model reflects the consumption with the old chiller. So, we can see how the climate generation consumption is lower since it was installed last year.

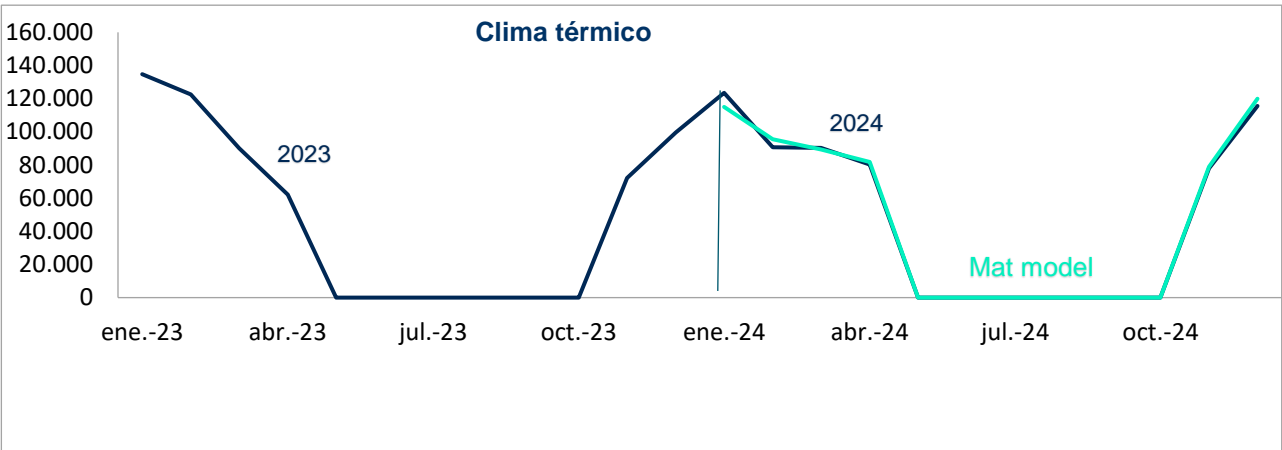
KPI Climate generation (kWh e/m2)



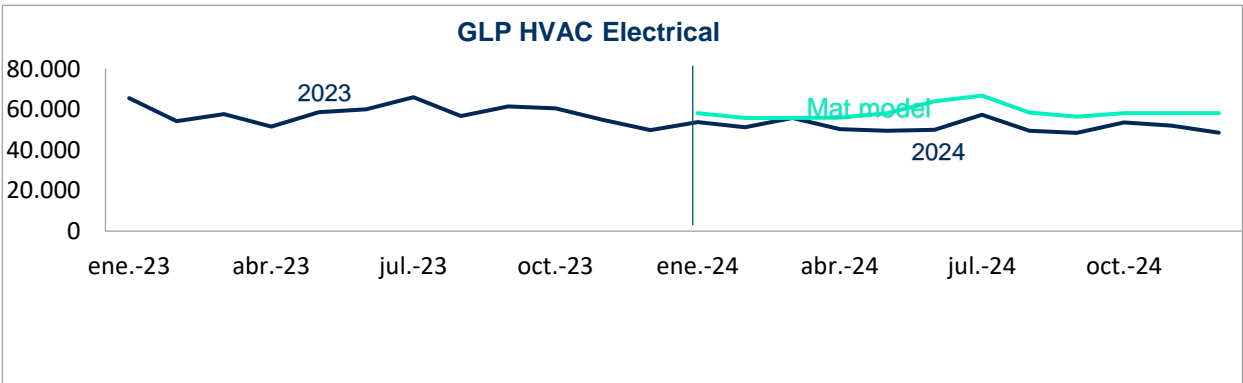
KPI Climate generation (kWh e°C)



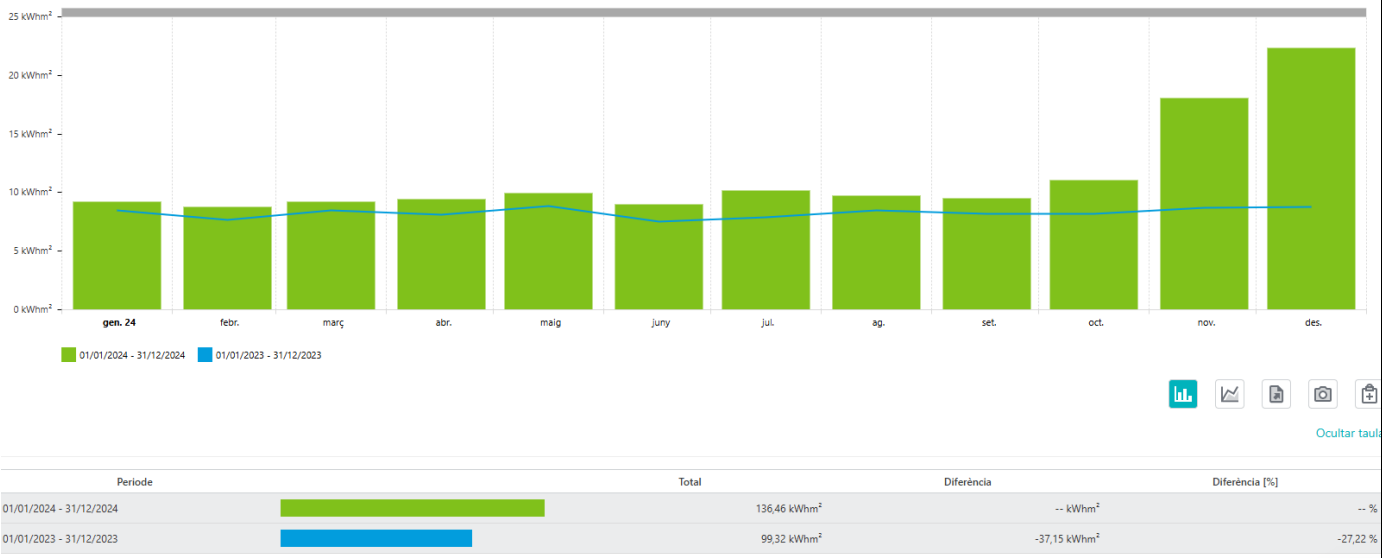
Baseline monitoring and checking Thermal HVAC (hot water climate)

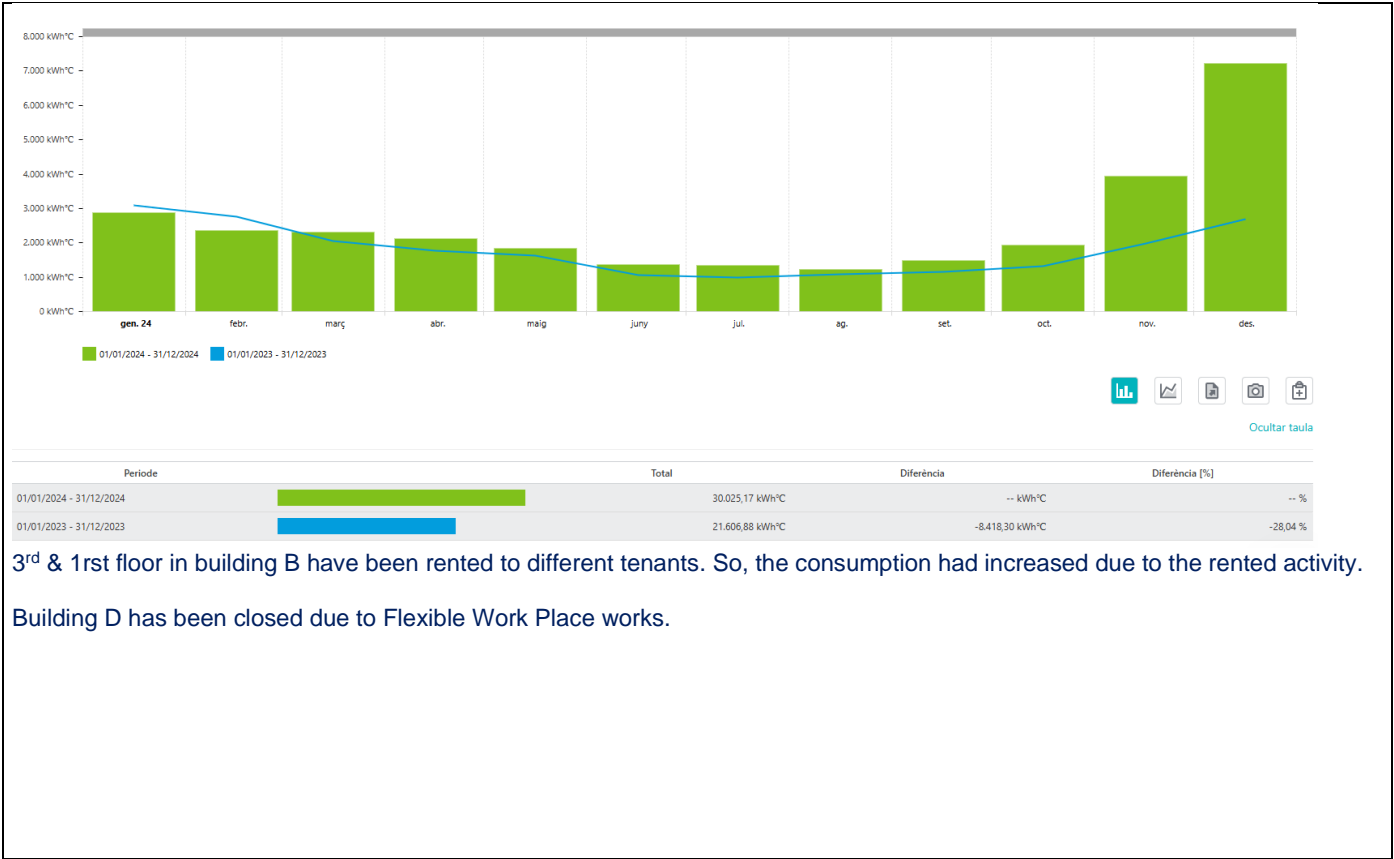


Baseline monitoring and checking electrical GLP HVAC



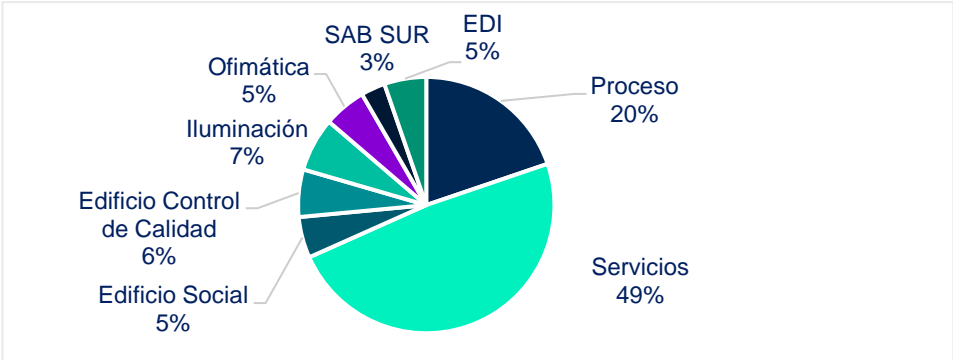
Other KPI's  
Building B



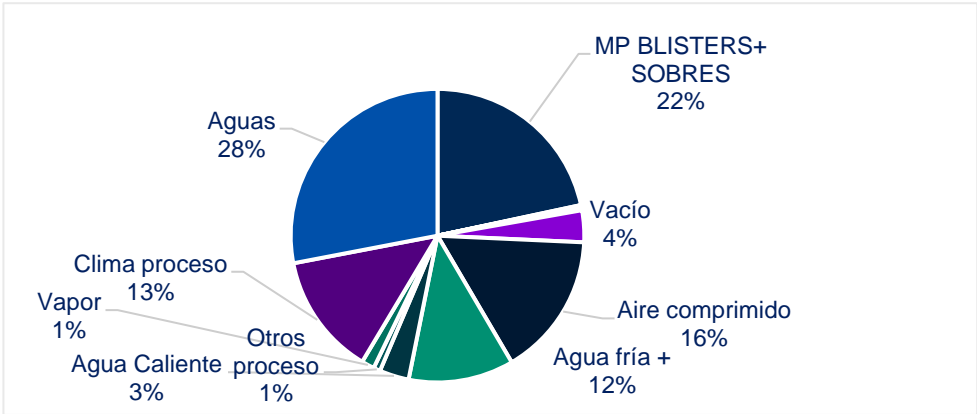


# Pharmaceutical Plant of Sant Andreu de la Barca

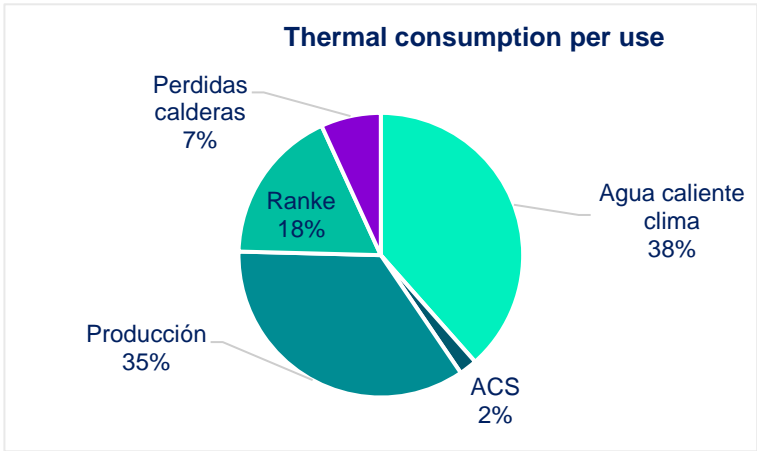
The following results were obtained according to uses from the 2024 electrical evaluation.



The process use & services, that has an electrical consumption percentage of 69%, is divided in the following uses.



### Thermal Consumption



A percentage of the generated steam is used for process steam at Ranke SAB.



## MONITORING INDICATORS

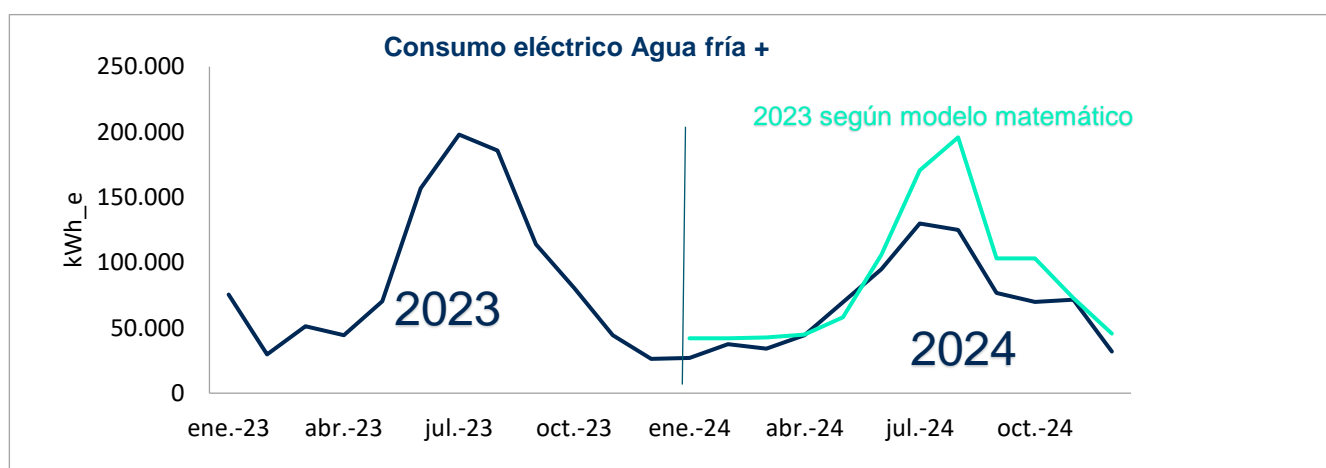
The following results were obtained according to uses from the 2023 energy evaluation. The following significant uses were identified in the pharmaceutical plant:

- Cold water +, for the monthly **electrical consumption** in Ee\_kWh/month
- Steam production, for the monthly **thermal consumption** in Et\_kWh/month
- Compressed air, for the monthly **electrical consumption** in Ee\_kWh/month
- MP Blisters+sobres, for the monthly **electrical consumption** in Ee\_kWh/month
- Hot water boiler, for the monthly **thermal consumption** in Et\_kWh/month
- Renewal photovoltaic Energy , for the monthly **electrical consumption** in Ee\_kWh/month

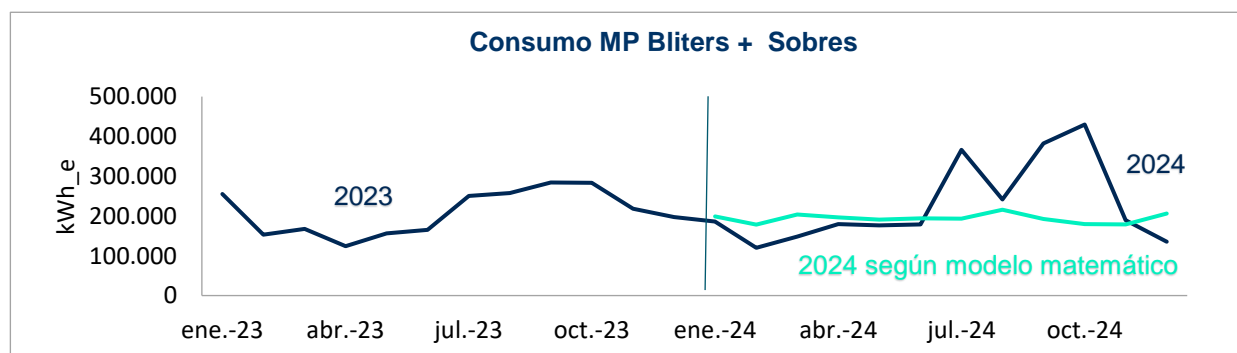
## ENERGY MONITORING

Energy monitoring was carried out of these uses by means of the electrical and thermal energy baselines shown below.

### Baseline monitoring and checking + cold water (electrical)



### Baseline monitoring and checking MP Blister & Sachets (electrical)

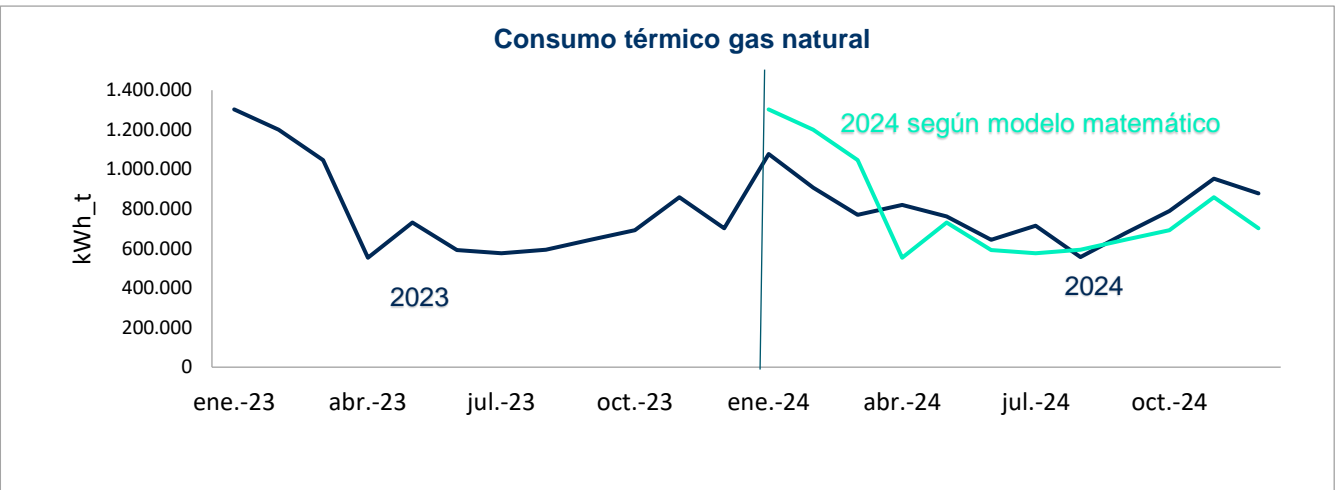


Las desviaciones son debidas al gran aumento de producción (produccion 2023 de 60,1 millones de ud vs 70,8 M unidades)

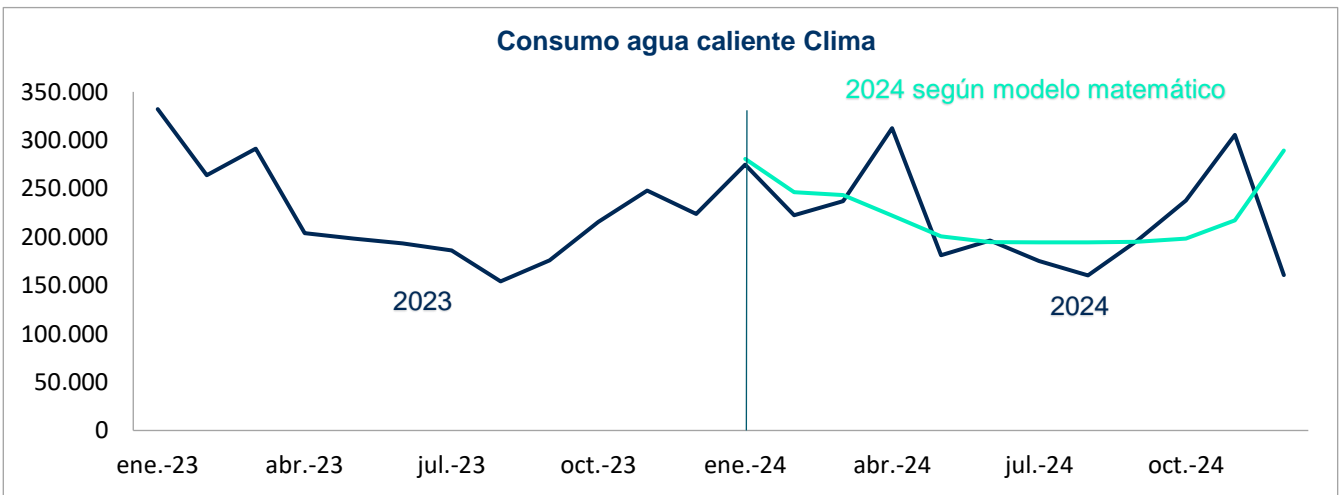
Baseline monitoring and checking Compressed Air (electrical)



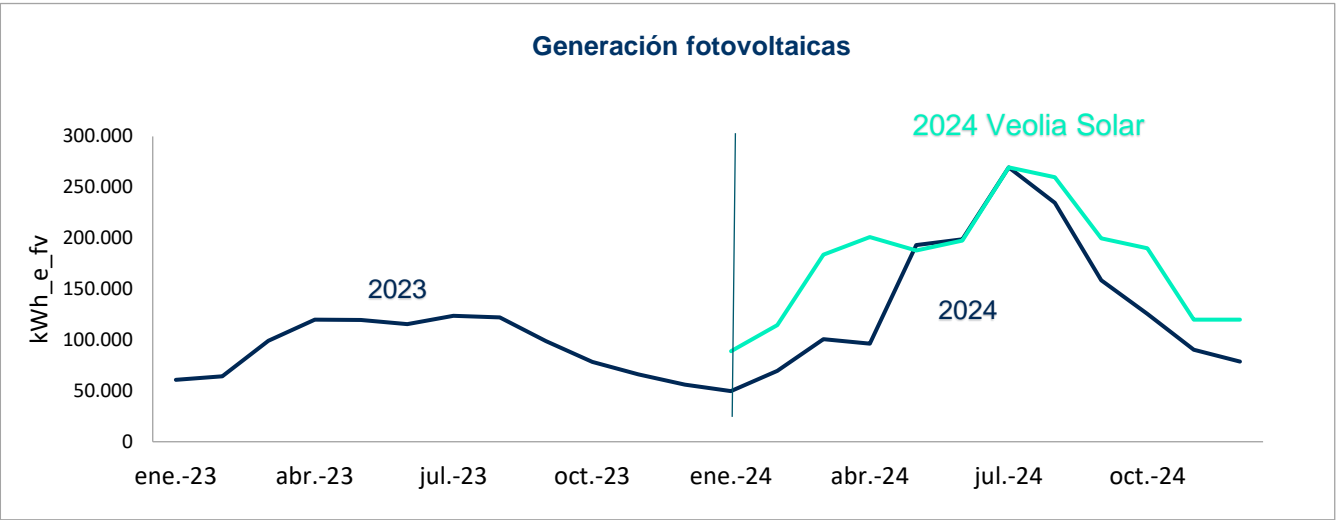
Baseline monitoring and checking Production Steam (Thermal)



Baseline monitoring and checking Hot water water (Thermal)



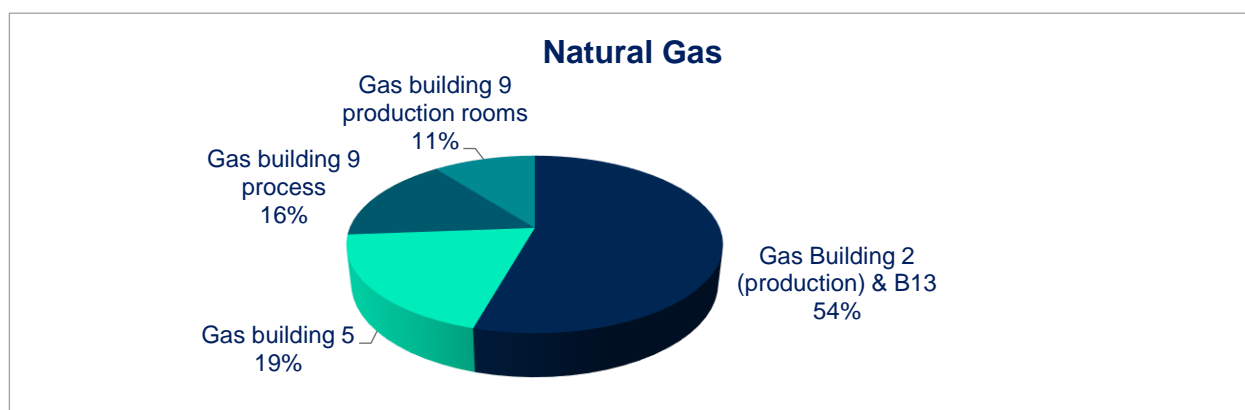
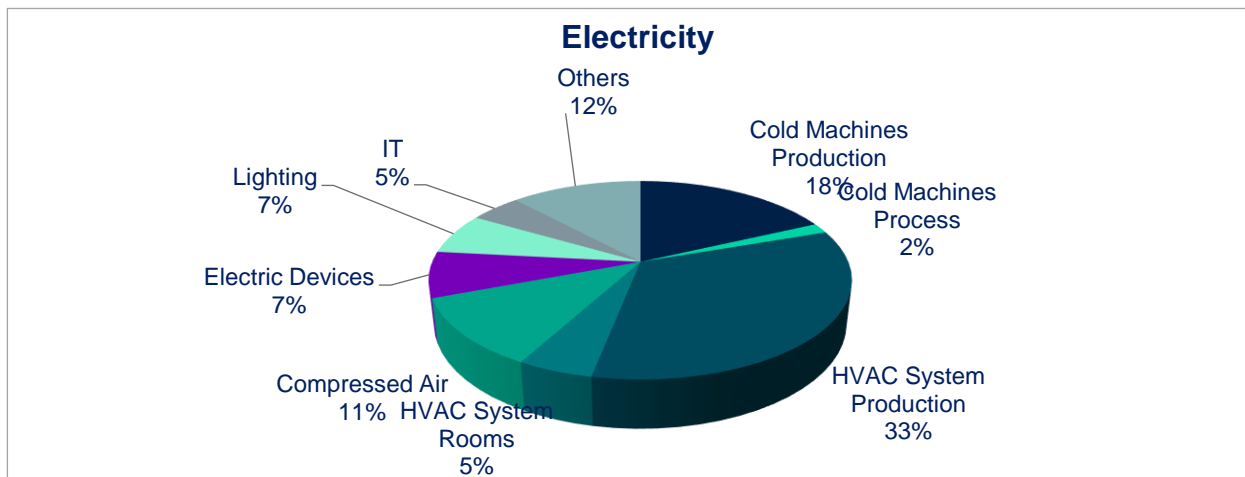
Baseline monitoring and checking Photovoltaic electricity (electrical)



Since May/24 an extension has been made (Phase II extension PV). So, you can see in the graph, that generation is higher than the previous year. Additionally, PV plant has generated less than Veolia forecast. Veolia report has been asked (Global procurement has been included in the loop ).

# Reinbek site

The following results were obtained according to uses from the 2024 electrical evaluation.



## MONITORING INDICATORS

The following significant uses were identified in the Reinbek site:

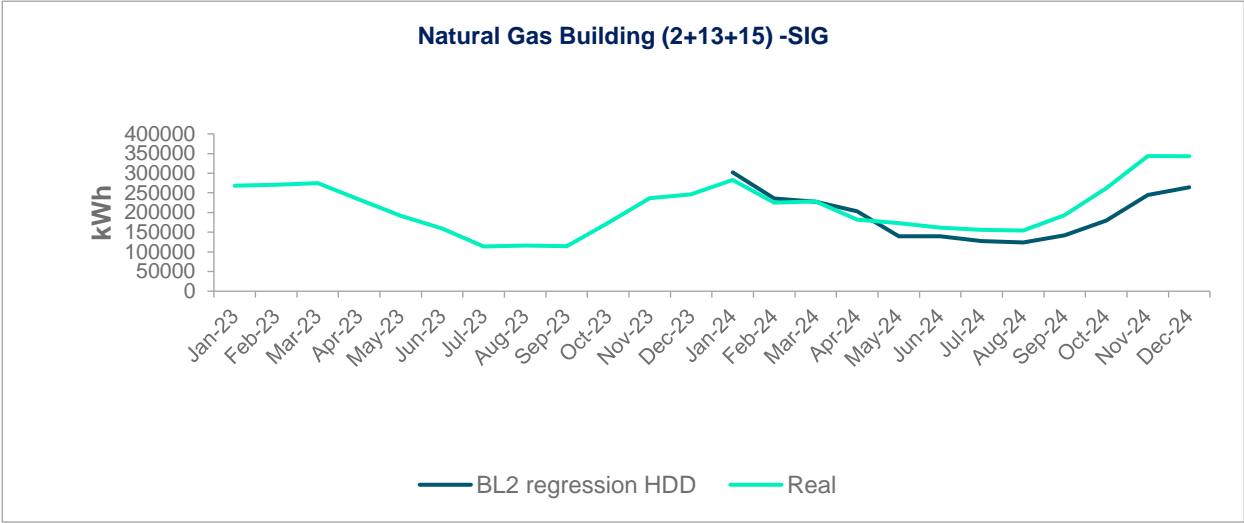
- Gas building 5, for the monthly **thermal consumption** in Et\_Kwh/month
- Gas building 9, for the monthly **thermal consumption** in Et\_Kwh/month
- Gas building 2&13, for the monthly **thermal consumption** in Et\_Kwh/month
- Cold machines production, for the monthly **electrical consumption** in Ee\_Kwh/month
- Compressed air, for the monthly **electrical consumption** in Ee\_Kwh/month

## ENERGY MONITORING

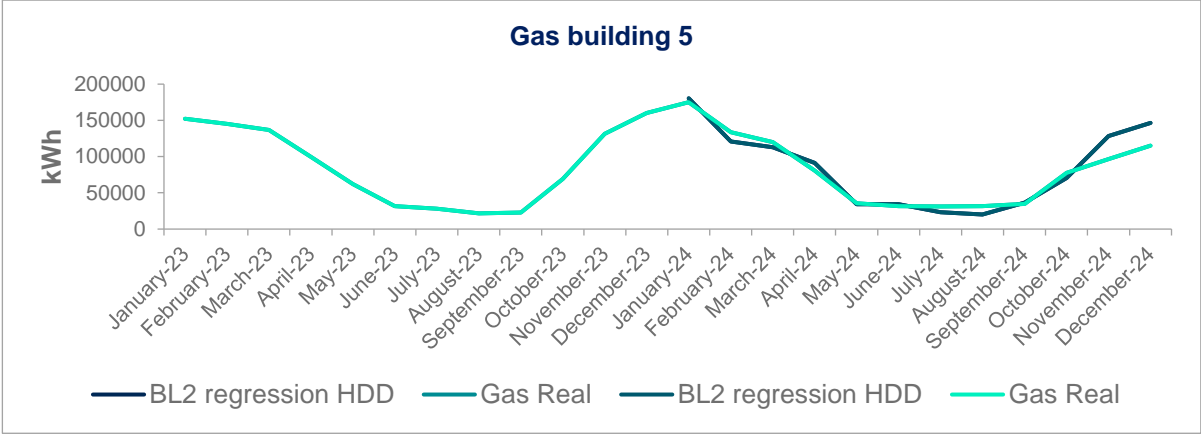
Three monitoring indicators were defined for the monthly thermal consumption of the energy uses of gas, according to buildings and expressed as Te\_kWh/month.

The monthly electricity was monitored of the Cold machines production, HVAC system production and compressed air.

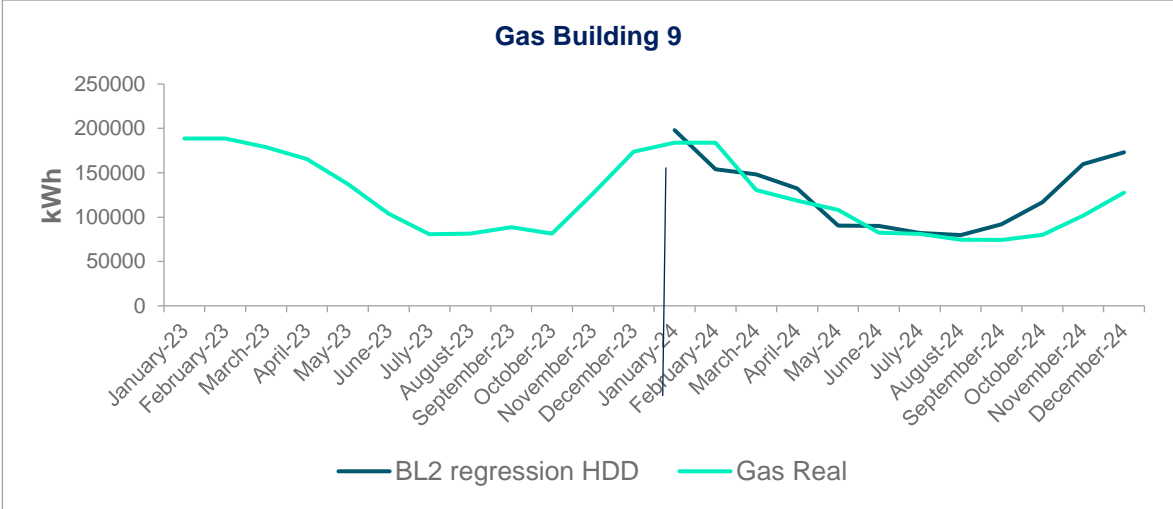
Baseline monitoring and checking gas in building 2, 13 & 15 (thermal)



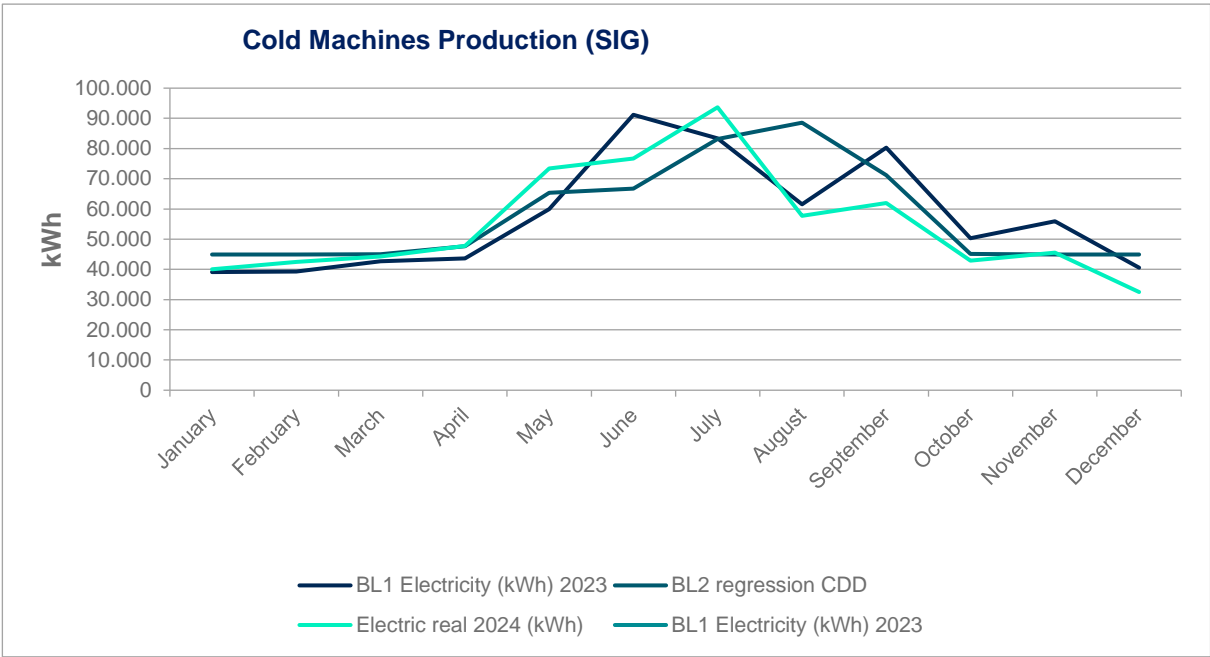
Baseline monitoring and checking gas in building 5 (thermal)



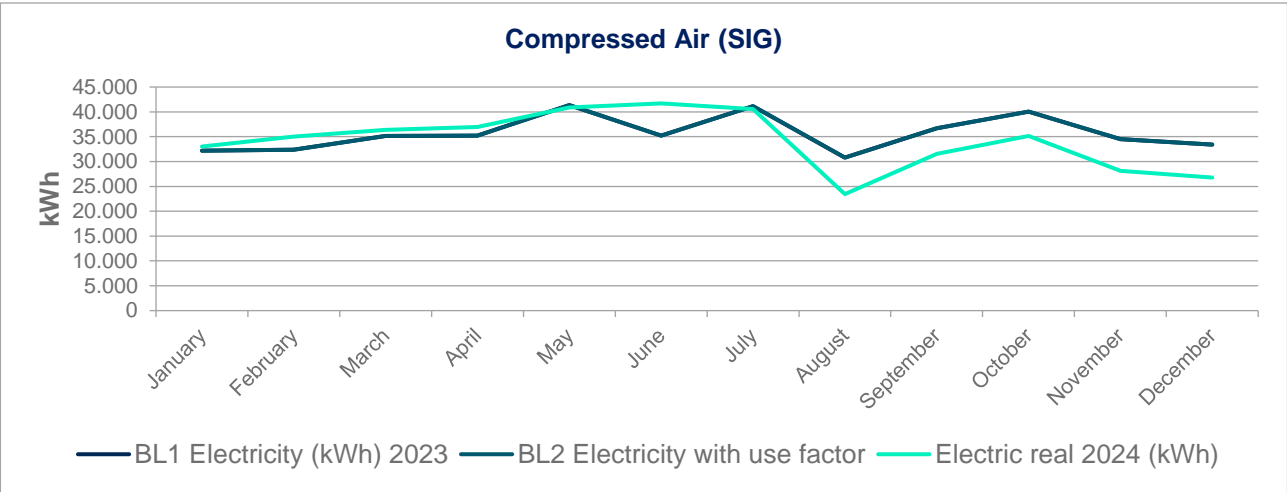
Baseline monitoring and checking gas in building 9 (thermal)



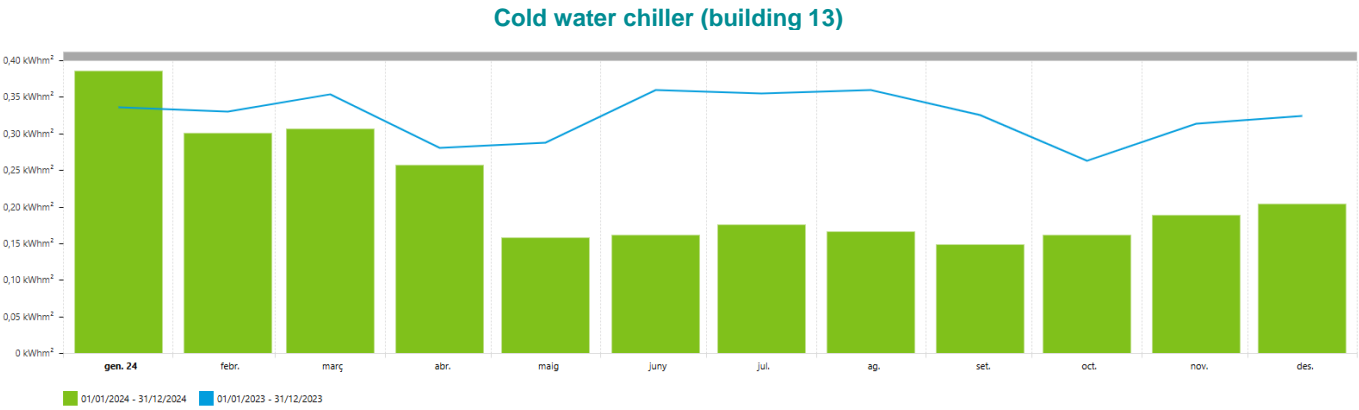
Baseline monitoring and checking Cold machines production (electrical)

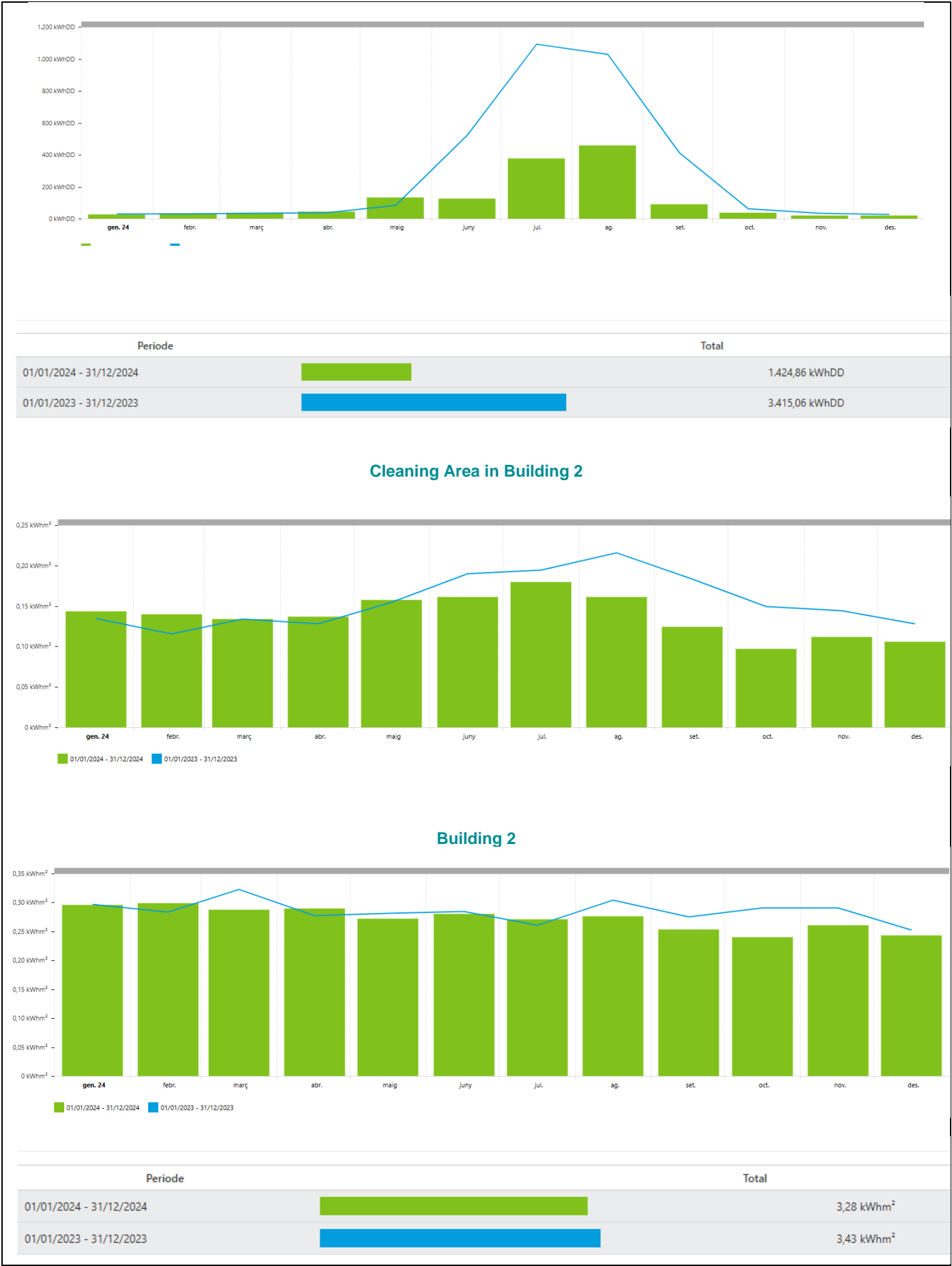


Baseline monitoring and checking compressed air



Other KPI's





## 6.3.11. Opportunities for improvement

The Energy Review process serves to determinate the Opportunities for implement of each center.

The Director of Facility of each center and/or the energy manager has drawn up proposals for improvement, some of which have been implemented in 2024. These measures are listed in the Excel file Swat Matrix.

The projects carried out in 2024 are listed in the Energy Efficiency Action Plan.

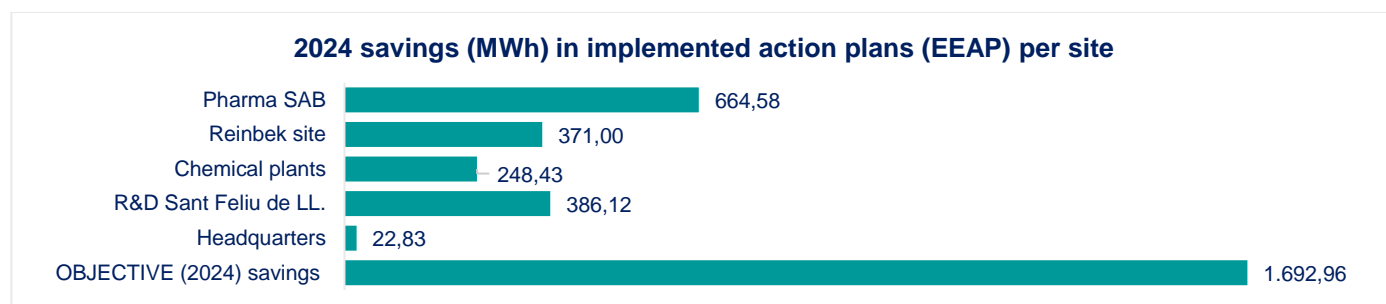
## 6.3.12. Risks & opportunities

Opportunities and risks of the energy management system are identified in the HSE Annual Report and in the SWOT matrix.

## 6.3.13. 2024 Action Plan

An Action Plan has been drawn up in each of the centers within the scope of this document.

The implementation of these Action Plans has led to energy savings in each of the following Almirall centers:



Savings (MWh) obtained through the application of the 2024 Action Plan

These savings include (but are not limited to) the following:

Site	Action Plan	Annual savings (kWh) electricity	Annual Renewal generation (kWh)	Annual savings (kWh) Natural Gas
Pharma SAB	LED en zonas nuevas (invever, FT-5...)(02K-01 ESG: Energy consumption reduction.)	500	0	0
Pharma SAB	Ampliar el parc fotovoltaic FASE 2 (02K-03 ESG: Self-generated renewable electricity.)	0	951,270	0
Pharma SAB	Equipo de frío para consumos de fin de semana(02K-01 ESG: Energy consumption reduction)	105,000	0	0
R&D Sant Feliu	Modificacion control resistencias postcalentamiento durante fase de ahorro	25,132	0	0
R&D Sant Feliu	Revisión purgadores de vapor	0	0	20,000
R&D Sant Feliu	Paro caldera de vapor 2/5	0	0	180,000
R&D Sant Feliu	Cambio Trane n°1 de tornillo tradicional a levitación magnética.	119,000	0	0
R&D Sant Feliu	Disminución consigna colectores de ACC (proyecto mejora EE vinculado a descarbonización)	0	0	145,000
Chemical Plants	Climatización Salas Blancas	2,520	0	61,250
HQ	Sustitución Enfriadoras Trane GF01, GF02, GF4, producción ACS con booster y adaptación climatizadores E	12,814	0	34,716
HQ	Detectores de movimiento en Aseos	606	0	0
HQ	Ampliación instalación fotovoltaica 16.7 kWp en techo enfriadoras	0	12,667	0
Reinbek	New central cooling plant	230,000	0	0
Reinbek	Improve Operating Times Propan cooling plant	50,000	0	0
Reinbek	Improved operation AHU's in production Building 15 (ARROW) - electricity	68,391	0	0
Reinbek	New central compressed air plant	40,000	0	0
Reinbek	Building 1 reduce heating areas and heating time schedule	150,000	0	0

List of the most significant action plans implemented (in operation) in 2024.



In addition of these energy-saving projects, other improvements have been carried out for the energy management system, listed in 6.3.6. [Energy Performance](#).

Mention should also be made of the initiative to extend SAB Photovoltaic plant plant (Phase II) and Headquarters solar cells. Reinbek is installing photovoltaic panels. It is scheduled to be launched at the beginning of 2025.

Finally, all centers within the scope of this document signed a green electric power contract. Spanish sites have a PPA contract signed for 10 years.



# Energy Program 2025

Opportunities for improvement

Objectives, goals and action plans

Significant uses and energy performance indicators

Energy consumption forecast

Energy Efficiency director Plan 2012-2025

## 6.4.1. Opportunities for improvement

The Energy Review process serves to determinate the Opportunities for Improvement of each center.

The improvement actions are geared towards reducing energy consumption and are related to the list of energy uses drawn up for each site.

The list of improvements with values of available technology, investment, energy savings and returns on investment has been used to draw up the significant uses by means of multiplying factor of “possibilities of improvement” of the use analysis table. This list can be found in the Swat Matrix of risks and opportunities.

Below is a summary of the points identified in the matrix with risks, opportunities, weaknesses, and strengths.

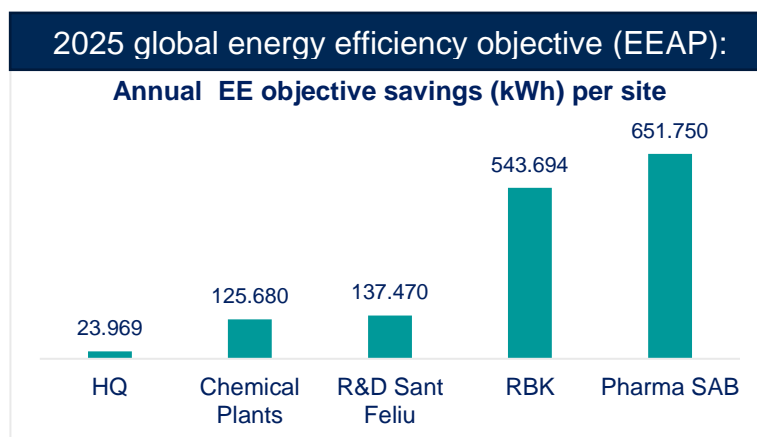
Strenghts	11 identified
Risks	8 identified
Opportunities	12 identified
Weaknesses	2 identified
2023 closed	1 identified

## 6.4.2. Objectives, goals and action plans

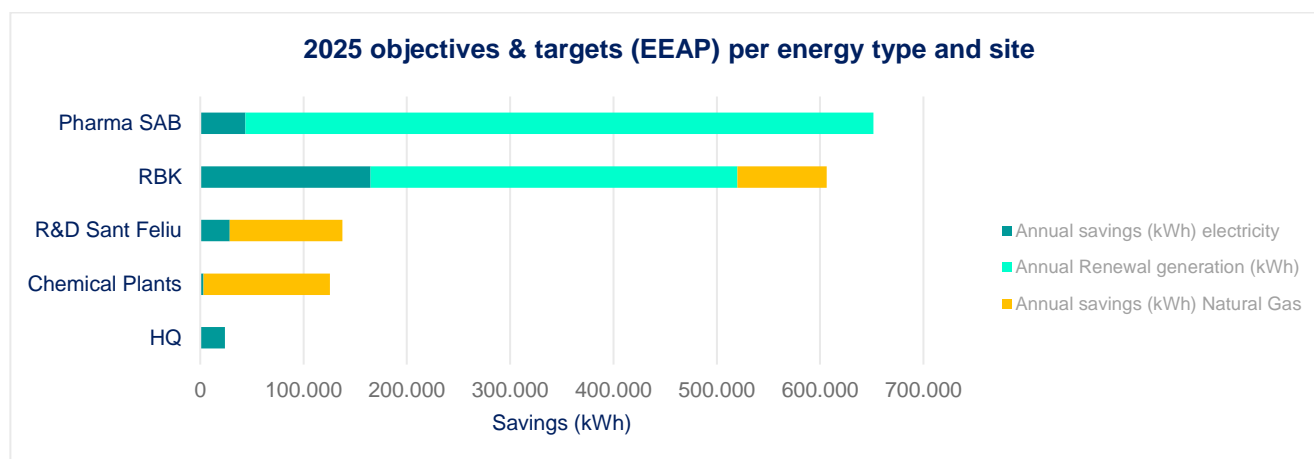
Due to the decarbonization program, savings has been split in two different parts:

- EEAP: energy efficiency action plans. Energy efficiency initiatives that reduce invoices consumption (electricity, natural gas & renewals).
- NGAP: Initiatives that eliminate natural gas (such as electrification).

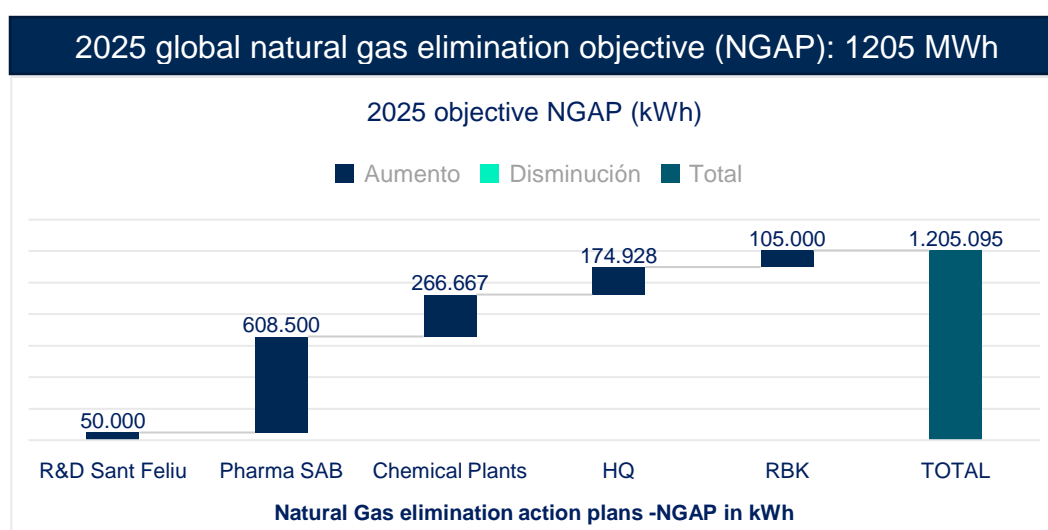
- 1) The specific **2025 energy efficiency savings objectives (EEAP)** per each site are listed in the graphic below. They have a direct relationship with E2 & E5 objective.



Each site has defined an energy saving objective in energy efficiency projects that improves the efficiency.



- 2) **2025 Natural Gas elimination objective (NGAP)** per each site are listed in the table below. They have a direct relationship with E4 objective.



These initiatives eliminate natural gas but there is in most actions an increase in electricity.

## 6.4.3. Significant uses and energy performance indicators (EnPIs)

In the 2024 energy Review, the significant uses and EnPIs for 2025 have been identified for each of the sites within the scope of this document.

Site	Significant uses	EnPIs
IF- Sant Feliu R&D site	Cold water for HVAC -Chillers Q7	kWh_e
	Hot water for HVAC (ACC) in Building A	kWh_t
	Renewals	kWh_e
	GLP Climate	kWh_e
PS- Sant Andreu pharma plant	Cold water +	kWh_e
	Purified water (New)	kWh_e
	Production steam	kWh_t
	MP Blisters+Sachets	kWh_e
	Hot water boiler	kWh_t
	Renewals	kWh_e
QP- Sant Celoni chemical plant	Process steam	kWh_t
	Process HVAC	kWh_e y kWh_t
	COV's	kWh_e
	Photovoltaic solar energy	kWh_e
QR-Sant Andreu chemical plant	Steam	kWh_t
	DQ building	kWh_e
	Process climate (New)	kWh_e
MCAR-Reinbek	Cold machines production	kWh_e
	Compressed air	kWh_e
	Gas building 2 (production) and building 13	kWh_t
	Gas building 5	kWh_t
	Gas building 9	kWh_t
SC-Headquarters	Cold water + (generation)	kWh_e
	HVAC (roof & floor-1)	kWh_e
	Fancoil & HVAC thermal consumption	kWh_t

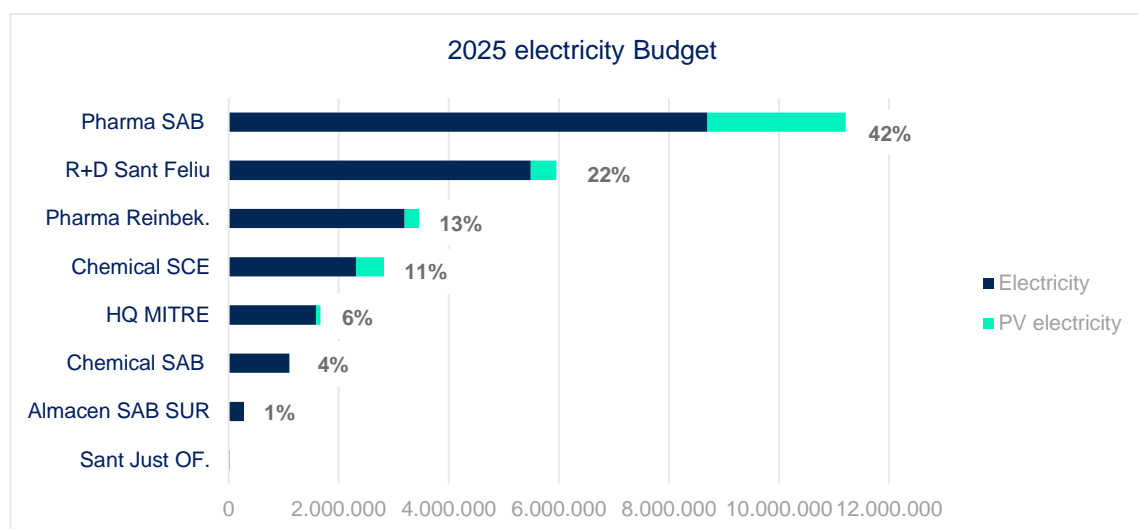
## 6.4.4. Energy consumption forecast

The 2025 energy Budget estimate is shown for the following centers:

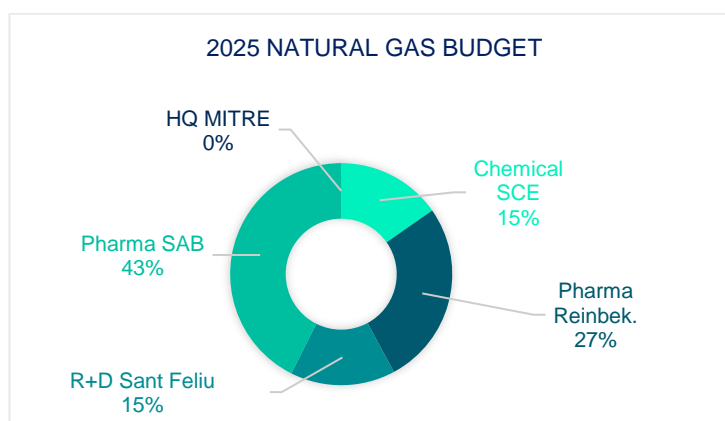
- Headquarters
- Sant Just Offices
- Sant Andreu de la Barca Pharmaceutical Plant
- Sant Andreu de la Barca Chemical Plant
- Sant Celoni Chemical plant
- Sant Feliu de Llobregat Research Centre
- Reinbek site

The 2024 Energy Review has been used to produce the 2025 energy consumption forecast for each energy use. Facility Managers provide the budget taking into account different variables as shift productions, energy efficiency projects, others. This information is in the document:

- Spain Centres: “EvaluacionEnergética\_centre\_year.xls” and tab “Previsión consumos”
- Almirall Reinbek: year n\_Ev Energética.xls” and tab “Previsions LB”
- The forecast is also filed in “Budget year n.xls” and is Split into the following percentages:



2025 electricity Budget: 26.801 MWh (includes PV)

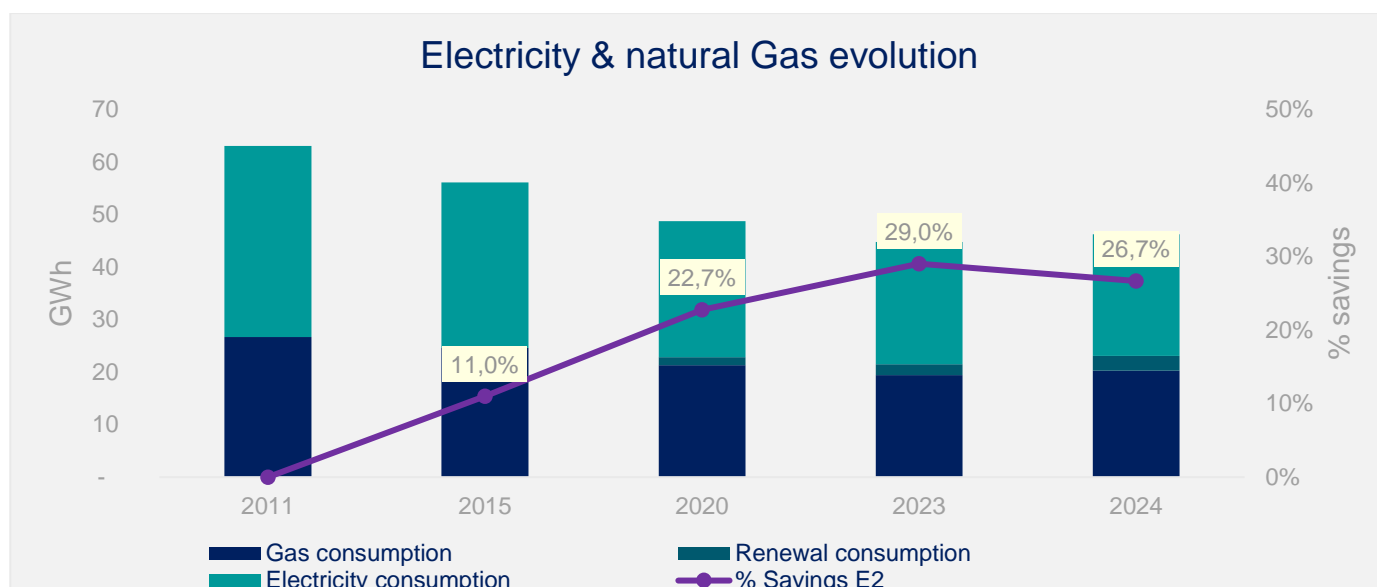


2025 natural gas consumption: 17.880 MWh

## 6.4.5. Energy efficiency director plan 2012-2025

Almirall has developed a Strategic Energy Efficiency Plan 2012-2025. The objective of this plan is to achieve global consumption savings in projects to improve energy efficiency compared to our reference year (2011). Since last year, E2 objective tracks the electricity & natural gas. 2024 goal was achieving savings  $\geq 29\%$ . The objective reached was slightly less (26,7%). It is mostly due to SAB increase production.

The accumulative savings at the end of 2024 are 19.6 GWh (26,7%). Therefore, it is in line with the achievement of the objective. For reference, the graph below shows the decreasing evolution in energy consumption at Almirall.



Some initiatives have been developed in order to eliminate the natural gas (NGAP). Please, see in the graph below the estimated decrease in consumption that these initiatives generate.

