

Flexi eBook

for end users

A guide through our most advanced EMS+



Welcome to FlexiO by LIFEPOWR.
With this eBook, we give you an
insight into the world of energy.
We show where sustainable
opportunities lie and how smart
choices can really create added
value. You will discover how an
efficient EMS+ platform such as
FlexiO works, from smart energy
management to your complete
relief. We also take you through
what benefits you can expect,
before and after the installation of
your FlexiObox.



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LIFEPOWR

LIFEPOWR plays a key role in the energy transition by smartly directing energy flows. This is how we help to keep the electricity grid in balance and harness the flexibility of thousands of home batteries.

With our technology, you reduce your energy costs and you can even generate additional income. At the same time, we are actively contributing to the energy transition. When you deploy batteries together with thousands of others, you help to avoid peak consumption being absorbed by expensive gas power plants.

Our team of experts, based in Antwerp and active since 2015, develops advanced technology based on years of experience in energy control and energy storage.

Our smart steering platform FlexiO is more than a standard EMS. We optimize both before and after the digital meter and try to offer the widest possible range of compatible devices and energy suppliers. This way, you retain your freedom of choice and we offer you complete peace of mind!

Are you ready to join more than 6,500 other households in choosing FlexiO? Read all about it in this eBook.



Dries Bols
CEO LIFEPOWR

Understanding THE ENERGY TRANSITION





Energy Then and Now

There used to be stable nuclear power plants and flexible gas and coal plants to supply our country's electric consumption.

Today, the focus is on renewable energy such as solar and wind, with electric mobility and heating as accelerators of electrification. We need to be climate-neutral by 2050, and that means drastically reducing fossil fuel emissions.

“Flexibility is the solution. We can shift and match supply and demand by storing energy.”

The Challenge

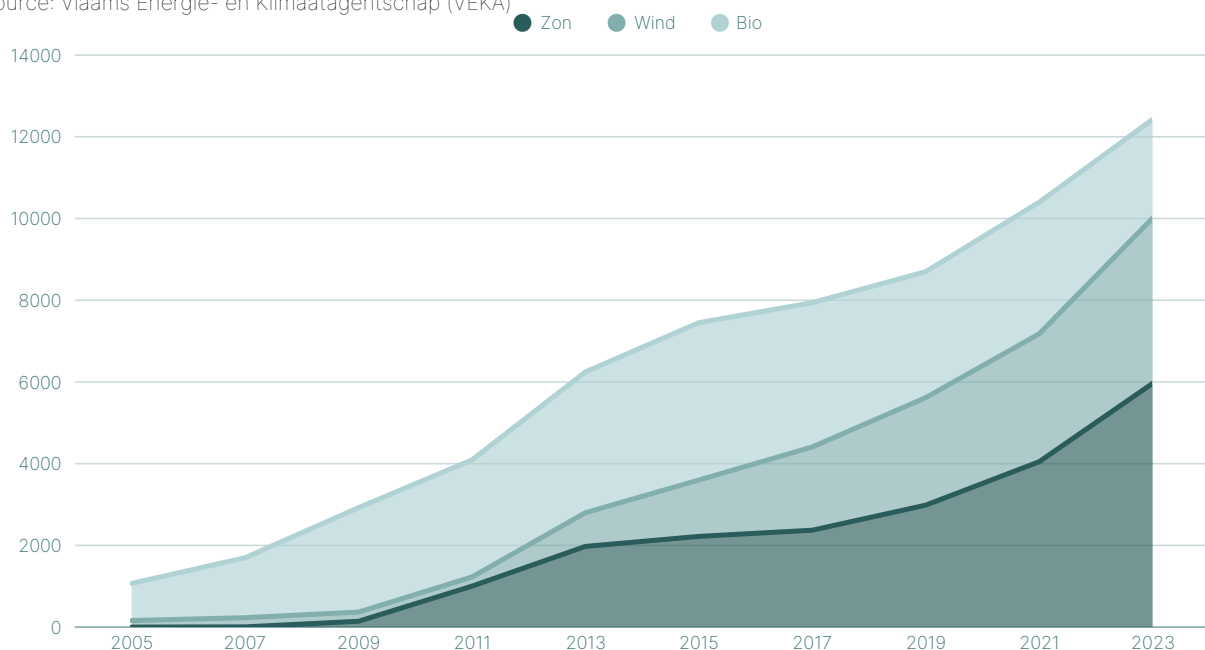
Renewable energy is not controllable. We depend on external weather factors such as sun and wind. These produce very cheap power when conditions are right, but not necessarily when demand is high. This creates an imbalance on our power grid. There can be surpluses of power at quiet times, and shortages when demand for electricity peaks.

The Solution

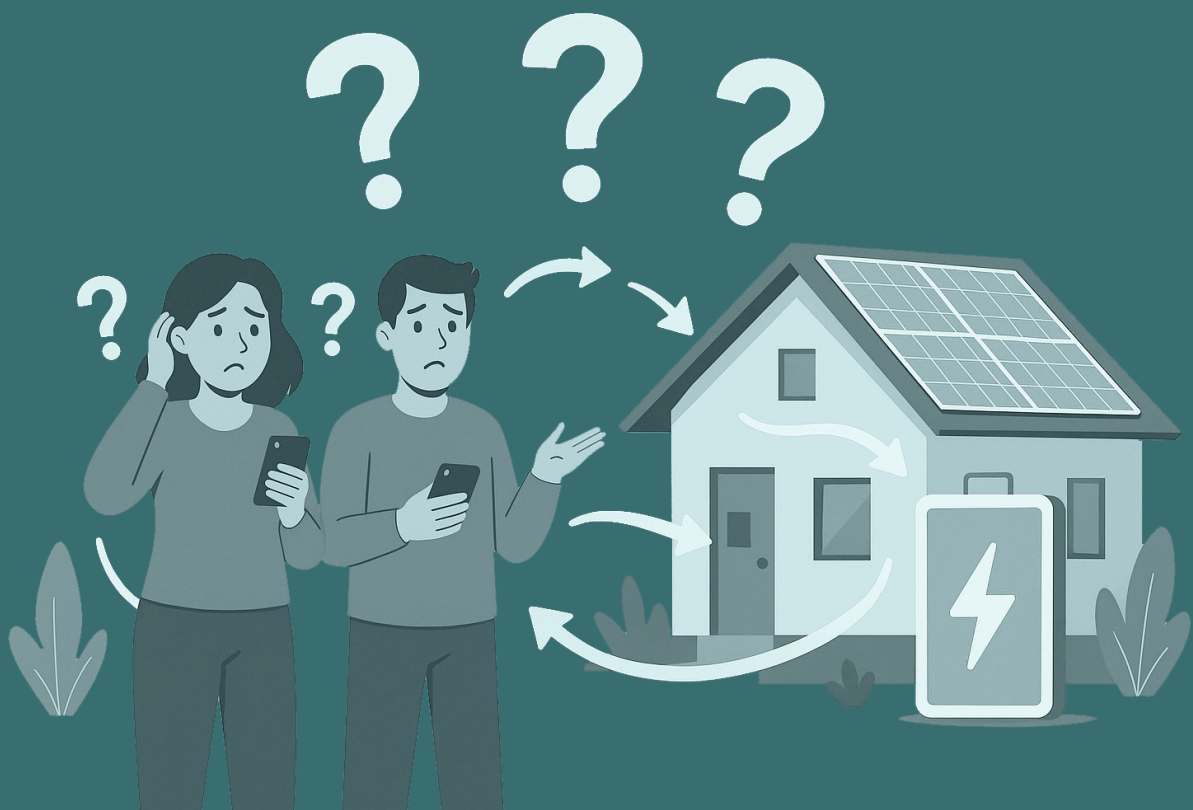
Flexibility is crucial: by storing green energy when there is a surplus, we can deploy it when there is a shortage. Batteries, whether at home or on a larger scale, make this possible, creating a more stable, sustainable and affordable energy system.

Green electricity production per renewable energy source in Flanders (GWh)

Source: Vlaams Energie- en Klimaatagentschap (VEKA)



WHAT IS AN EMS+ AND DO I NEED IT?





The Home Battery

A home battery increases your own consumption of solar energy and thus reduces your energy costs. During the dark winter months, solar panels do not produce enough power, so batteries are often left empty. This extends the payback period and harms their lifespan.

In addition, you miss out on the many opportunities that arise. The solution? A smartly controlled home battery using an EMS+ (Smart Energy Management System).



“An EMS, or energy management system, is a system that helps monitor, manage and optimize your energy flows.”



The EMS+

An EMS+, or smart energy management platform, is a platform that helps monitor, manage and optimise your energy consumption and production in real time.

An EMS+ also takes into account your personal energy tariff and knows all associated costs, in order to steer you in the best possible way.

By using your energy smarter and more efficiently, an EMS+ gets the most out of your solar panels and battery. You earn back your investment faster, reduce your energy bill and contribute to a sustainable future.



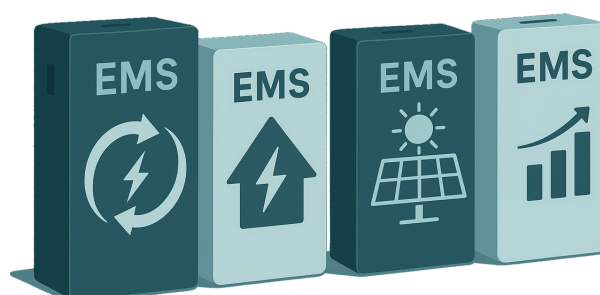
Do I Need an EMS+?

Let's start with this question, the answer is no. You don't need an EMS+ at all, but what are the drawbacks? If you choose not to use an EMS+ and still want to save on your energy bill, your consumption and comfort will come at the expense of energy prices. This means you have to continuously monitor energy prices, consumption, solar production, capacity tariff and a host of other factors yourself. And to be honest, are we really willing to do that?

"An EMS+ offers flexibility and peace of mind, taking care of everything for you behind the scenes. This allows you to yield maximum savings on your energy bills, without sacrificing comfort."

The benefits of an EMS+

- **Smart energy control:** Responds automatically to real-time market signals and your consumption profile.
- **Maximum yield:** Optimizes when you consume, store or inject power for the highest yield.
- **Cost savings:** Avoids expensive injection moments and exploits dynamic energy prices.
- **Grid support:** Earn extra by helping to support the grid!
- **Fully automatic:** You don't have to do anything manually, the system makes smart decisions for you.
- **Future-proof:** Prepare your installation for a flexible, decentralised energy system of tomorrow.
- **More peace of mind:** Worry less about your energy management, with more control over your energy bill.





WHAT DOES FLEXIO, THE EMS+, OFFERS?





INTRODUCTION: FLEXIO IN A NUTSHELL

FlexiO is a smart-advanced energy management platform (EMS+) that goes far beyond traditional solutions. Whereas standard systems often work according to fixed patterns and charging schedules, FlexiO controls your installation in real time and is fully customized. It is a tailor-made EMS+, tailored to your unique energy pattern and tariff. FlexiO analyses, predicts and continuously adjusts to actively reduce your energy costs.

Besides realising savings, FlexiO is also in a position to generate revenue. Thanks to smart technology, FlexiO bundles the batteries of different users into one virtual power plant. This allows you to participate in grid balancing services, something previously reserved for large energy companies. FlexiO always chooses according to your portfolio: are the savings more valuable than the revenues? Then FlexiO chooses savings and visa versa.

With FlexiO, you benefit twice: you reduce your energy bill as well as receive additional compensation - automatically and without any worries.



Save on Your Bill with FlexiO

In this chapter, we dive deeper into how FlexiO is designed to structurally reduce your energy bill by smarter control of your energy consumption, production and storage.

Powerful Algorithm

At the heart of FlexiO is a powerful algorithm that continuously monitors your energy flows. Every minute it looks at how much energy you are generating and consuming, and what the best strategy is at that moment.



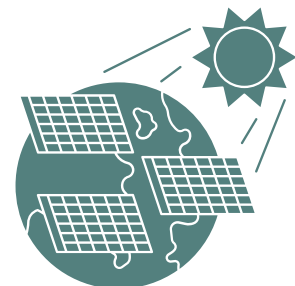
FlexiO is a customized EMS+. It knows your personal energy prices, consumption and production.

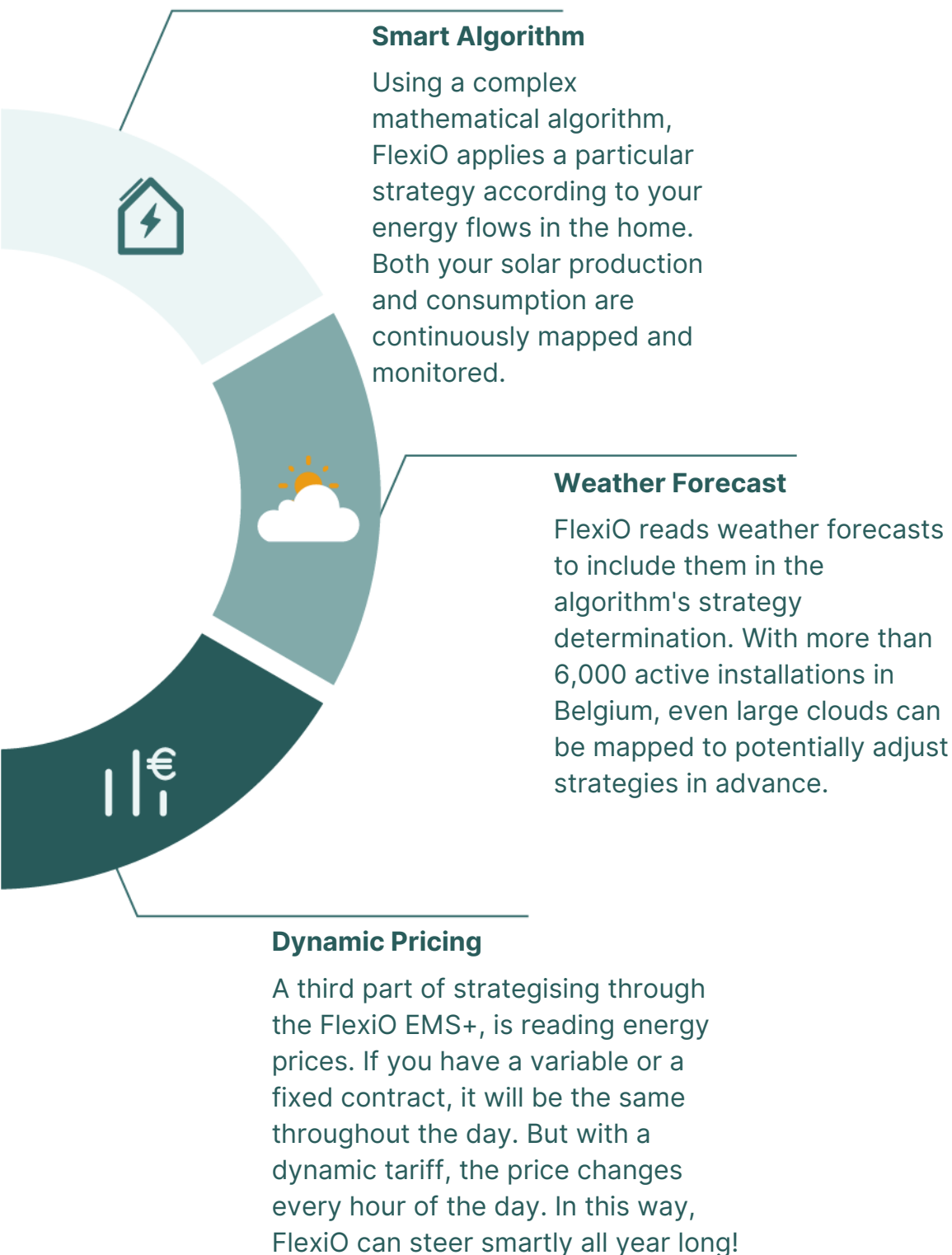
Tailor-made

FlexiO constantly analyses all relevant parameters; from your consumption pattern and solar production to weather forecasts and your personal energy prices. Based on this information, the system makes automated choices that aim to maximize savings on your energy bill every time.

Local Forecasting

FlexiO also uses accurate, local weather forecasts to anticipate solar radiation in the coming hours. This allows the algorithm to adjust proactively: for example, by draining your battery in advance when a lot of sunshine is expected, or just the opposite in case of upcoming cloudy weather.







Peak Control

FlexiO knows your monthly peak and the cost to increase it. FlexiO's goal: to keep your monthly peak as low as possible! Unless there is a financial advantage to increasing it anyway.



Curtailment

Are injection prices negative?
No problem, FlexiO knows this the day before and ensures no solar power is injected into the grid! (Only applicable to compatible inverters)



All Charges Calculated

Taxes, transmission costs, DSO, TSO, energy losses and battery degradation. Everything is fully mapped out, so you can always be sure of a net benefit!





Generate Revenue with FlexiO

FlexiO doesn't just help you save money. The platform can also actively generate additional income for you. Besides optimizing your energy consumption and reducing your energy bill, FlexiO also gets financial benefits from your flexibility.

FlexiO always calculates the day before what you will save the next day. FlexiO does this based on known energy prices, weather forecasts and the mapping of your consumption and production.

"Smart steering prevents waste and allows you to deploy your battery capacity at times when it would be more financially beneficial than just saving."

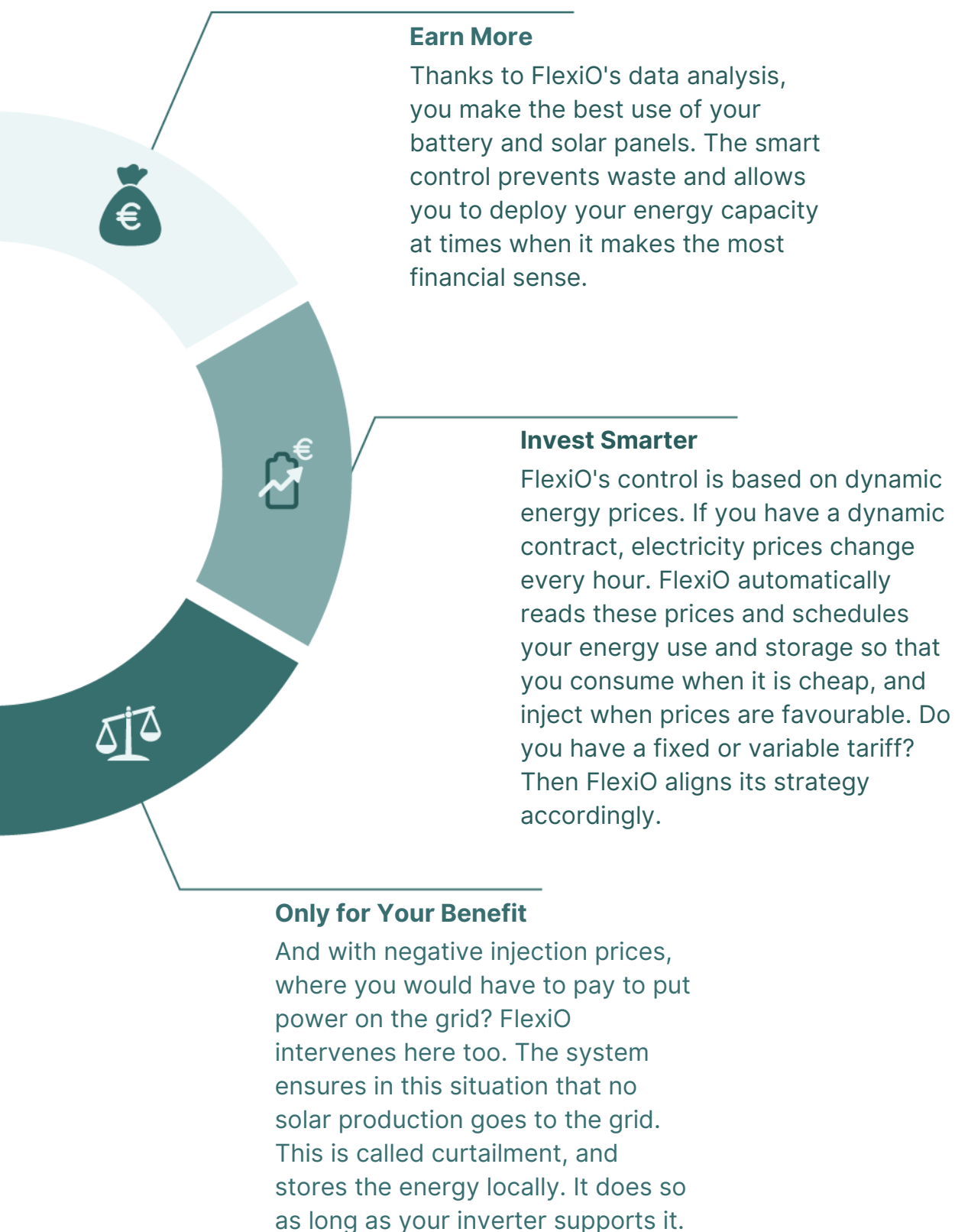
After mapping the savings for the next day, FlexiO makes a bid for participation in grid balancing. This bid will always be higher than your achievable savings.



Does FlexiO reach the bid? Super, then you can benefit from your system even more than if you would have optimized locally!

Thanks to FlexiO's data analysis, you make optimal use of your battery and solar panels. The smart control prevents waste and allows you to deploy your battery capacity at times when it is financially more profitable than if you would only save.

So with FlexiO, you not only save automatically, you also get more out of your existing installation. Fewer peaks, lower costs, higher efficiency, fully tailored to your energy profile.





FlexiO's Subscription

During your trial period, you are free of subscription fees! Ask your installer what the duration of your free trial is.

Free does not exist. If you invest in solar energy, you want this investment to last at least 20 to 25 years. Because FlexiO charges subscription fees, we as EMS+ have to prove ourselves to you every day!

In this way, our EMS+ undertakes actions with what is most valuable with the end user in mind.

Not satisfied? Your notice period is only 15 days. This also obliges FlexiO to always offer you the best service.

The Benefits of FlexiO Summarised



Free choice of energy supplier



Compatible with several brands of inverters and charging stations



Real-time adjustment of the strategy when behaviour or weather forecasts change



The manufacturer's warranty remains guaranteed by maintaining the BMS as primary



Maximizing savings and revenues by tapping different energy markets



FlexiO always acts on your personal portfolio



Flexible and transparent subscription, only 15 days' notice



One app for PV, Battery and EV



5-year warranty on the FlexiObox



Complete unburdening, FlexiO takes care of everything for you behind the scenes



MyFlexiO App





Track Your Consumption in the MyFlexiO App

Complete control over your installation

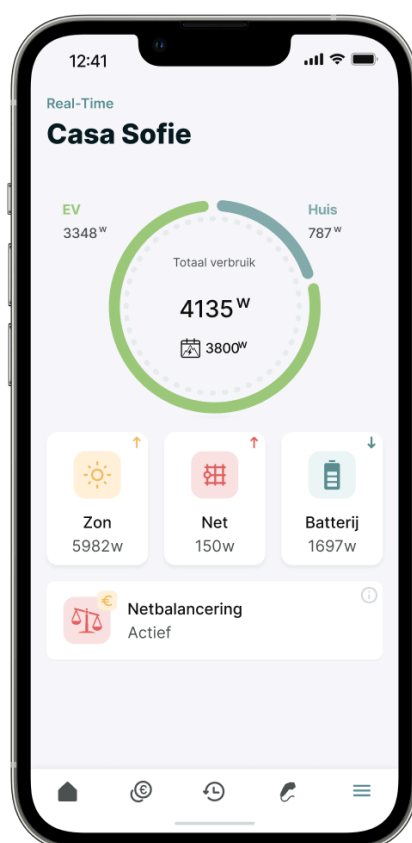
With the MyFlexiO app, you as a user have insight into how your energy system is performing at any time. Whether you are at home or on the road, via your smartphone or browser you can see real-time how much you are consuming, generating, storing and injecting.

Clear visualisations of your energy flows

The app shows your energy flows in an intuitive graph. It shows what comes from your solar panels, what is taken from the grid, how much goes to your battery or is consumed directly in your house. Thanks to this visual display, you quickly understand how your installation is performing.

Insight into battery use and flexibility

MyFlexiO shows when FlexiO deploys your battery for grid balancing or peak control. This shows you which actions the EMS+ logic takes to maximize your benefit.



Overview of dynamic pricing and planning

With a dynamic contract, the app gives you an overview of hourly prices, so you know when energy is cheap or expensive. FlexiO automatically tunes to this, but through the app you can track how the system anticipates this.

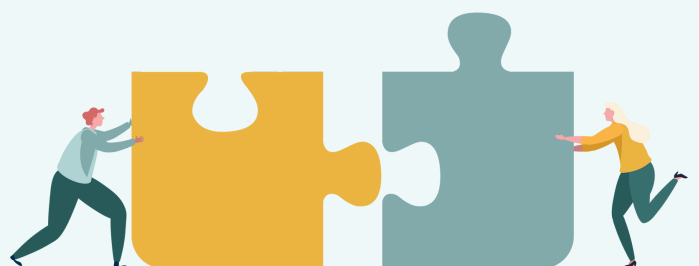
Analysis of your peak consumption

The app meticulously tracks your monthly peak and shows how much it builds up in real-time. So you immediately know if you are heading towards a higher peak, and how much that could cost you.

Transparency and peace of mind

What exactly does FlexiO do and why? In the MyFlexiO app, you see transparently which strategy the system chooses: charge, discharge, limit or inject. This is how FlexiO builds trust, and you generate maximum benefits.

You Have Chosen FlexiO: Now What?





Checklist for Your Installation

- ✓ Install the MyFlexiO App
- ✓ Check your energy contract
- ✓ Get your digital meter installed
- ✓ Open your P1 port on your digital meter

Download the MyFlexiO App

Download the MyFlexiO App from the Appstore or Google Play create your account and fill in all required details:

Make sure you include the EAN number of your electricity connection (not your gas connection!). You can find the EAN number on your energy bills. This number consists of 18 digits, starting with 54.

Having trouble finding your EAN number? This may help:
<https://www.fluvius.be/nl/contact/contactformulier/ean-code>

You will also be asked to enter your IBAN number. This is used by FlexiO (LIFEPOWR) to deposit the income generated from market flexibility directly into your chosen account.

Any subscription fees will only be charged after the free trial period.





Check your energy contract

The FlexiO system is fully customized and works best when your electricity tariff is read correctly. Make sure you inform your installer about your current energy contract.

To maximise the benefit of FlexiO, we recommend opting for a dynamic energy contract. This type of contract allows FlexiO to respond better to fluctuating energy prices, leading to greater savings and higher revenues compared to a fixed or variable contract.

Still unsure which type of contract suits you? Ask your installer or energy supplier about the different options.

You can always find your set tariff in the MyFlexiO App. If you change energy supplier or contract, you can adjust it yourself. Read how here: <https://docs.lifepowr.io/user/v1/rate-selection-and-rate-settings>

Get your digital meter installed

You don't have a digital meter yet? You can apply for it now. The installation of a digital meter is free and required for participation in grid balancing (generating income).

From 2025 onwards, you cannot refuse the digital meter. When you install a battery, proactively request the digital meter. That way, you can quickly sign a dynamic contract and start generating income.

Request your digital meter from your system operator: Fluvius (VL); Sibelga (BRU); Ores (WAL).

Open your P1 port

FlexiO needs access to your consumption data via the P1 port of your digital meter. This data is needed for correct regulation and to activate grid balancing. Request activation via your grid operator. (Not applicable with Ores)

FLEXIO HAS BEEN INSTALLED!

WHAT CAN I EXPECT?





Start saving!

As soon as your FlexiObox is installed, you start realizing savings immediately. It only takes a few days for the FlexiO algorithm to adapt to your personal home situation.

Important info: savings are only visible in the MyFlexiO App after 1 calendar month.

Evaluation of your FlexiO installation:

To participate in grid balancing, LIFEPOWR adds your plant to one of our VPPs (Virtual Power Plants). Before your plant can be added, a number of checks need to be carried out. Your installation undergoes an automatic 'test scan' and we send the data of all new installations to Fluvius and ELIA every month for verification.

Note: you don't have to do anything in this process, we take care of everything!

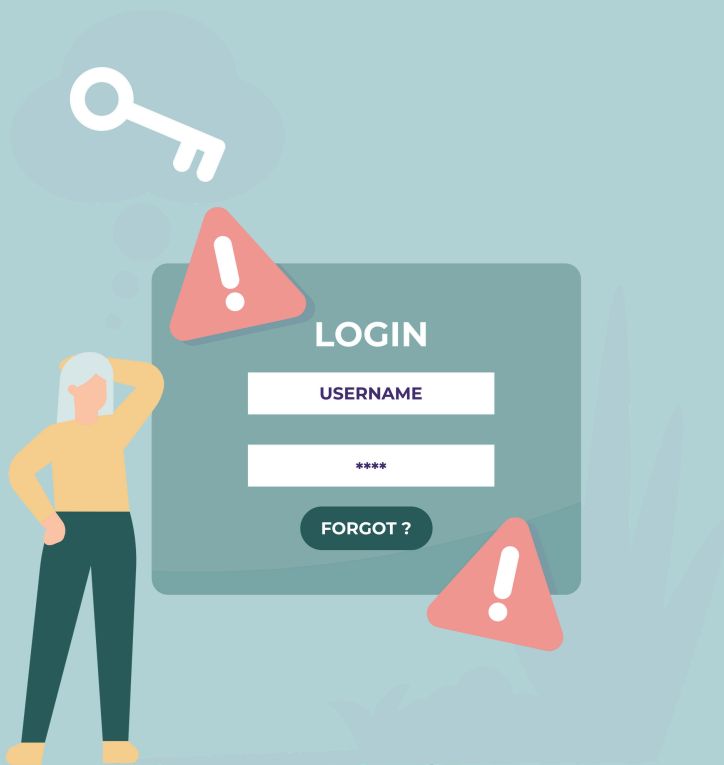
Generate revenue!

As you can see in the previous step, there are several checks before you are allowed to participate in grid balancing. This means that you cannot participate in grid balancing immediately after the installation.

Your earnings are always paid out 3 months after the month in which it was generated. For example: January income is automatically paid into your account in April.

Still no income after 3 months? Contact us, and we will help you as soon as possible.

FAQ





Frequently Asked Questions

- **Does my warranty on my battery expire if I have it powered by Flexio?**

No, the BMS (battery management system) of your home battery always takes precedence over the FlexiObox to ensure the warranty remains valid.

- **Do I have a lot of wear and tear on my battery if I use it for grid balancing services?**

A battery is usually guaranteed for 10 years or 6,000 charge cycles.

→ If you charge and discharge your battery once a day, it will take 16.5 years to reach 6,000 cycles.

→ If you set your battery to MSC (maximum self-use) mode, you can expect it to charge and discharge little to nothing for about 4 months a year, during the dark winter months. In that case, it will take 24 years to reach 6,000 cycles!

Moreover, every battery has an end-of-life. If you want to get the most out of your battery, it is a smart choice to use it for local savings, but also to take advantage of the opportunity to generate extra income with grid balancing! (So no, you won't have negative wear and tear on your battery!)

- **How many years of warranty do I have on the FlexiObox?**

The FlexiObox comes with a 5-year manufacturer's warranty.

- **How much is the monthly cost for FlexiO?**

The monthly cost for FlexiO is:

- PV and Battery only : €9.95 (incl. VAT)
- EV only: €4.95 (incl. VAT)
- EV + PV + BAT: €14.95 (incl. VAT)

→ There is always a free subscription period. Contact your installer if you don't know how long this period will be.

- **What is the notice period for my subscription?**

The notice period is only 15 days. Please contact FlexiO / LIFEPOWR if you want to end your subscription.

- **When will my income from grid balancing be paid out?**

Currently, the income is paid out 3 months after the month in which the income was generated. The reason for this 3-month period is that ELIA has a payment period of 60 days with FlexiO.

For example, January income is paid out in April.



Any questions?

Visit LIFEPOWR's **knowledge base**:

<https://docs.lifepowr.io/user/>

Or contact your **installer** or the **LIFEPOWR** helpdesk:

<https://flexio.lifepowr.io/support/contact>



Glossary



EMS+	Smart Energy Management System
LIFEPOWR	The developer of FlexiO
FlexiO	LIFEPOWR's smart steering platform
FlexiObox	The physical 'device' that FlexiO runs on
Elia	The grid operator in Belgium
Grid balancing	Services offered by Elia to balance the grid
Imbalance	Service offered by the energy supplier to keep the grid balanced
FCR	Frequency Containment Reserve
BMS	Battery Management System

Notes

