# INVESTING TOGETHER IN ENERGY TRANSITION FOR ALL

2024 State of play



STRATEGIC PLAN





approved by the general meeting on 14 December 2023

2024 State of play

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Last year, following extensive consultation with stakeholders, ORES adopted a revised strategic plan which, following the direction set by the work carried out over many years, outlines a very clear objective:

# INVESTING TOGETHERIN ENERGY TRANSITION FOR ALL

In a world that is increasingly fluid and uncertain in the way it changes and shifts, it is essential to have a strategic compass. But at the same time this is a somewhat complex issue. Each year, every event and crisis that comes our way represents a risk that the targets we set ourselves will be swept away by waves of unforeseen and unforeseeable events.

Against a background of this kind, it is vital that we demonstrate responsibility and transparency. Responsibility first, by daring to re-examine our strategic and industrial priorities in the light not only of changes in society and stakeholder expectations, but also by avoiding continually changing course at the slightest new development. This precarious balance between being steadfast in implementing the strategic plan and remaining adaptable in the face of changing circumstances is a perilous exercise that requires collective intelligence. To make sure this happens, ORES will continue to be increasingly open to its stakeholders by demonstrating an ability to listen and to be transparent in both setting and implementing priorities by talking openly about the company's successes and difficulties and by making our customers and stakeholders essential partners for meeting the challenges of energy transition.

The past year has once again seen a period of change. In both the Walloon Region and in Belgium at large, elections resulted in the establishment of a new coalition in the Walloon government.

Meanwhile, out in the wider world, there were continued and increased geopolitical tensions and conflicts, particularly in Ukraine and the Middle East.

However, the main strategic points outlined by ORES in 2023 remain entirely relevant. The need to step up the pace at which we take **action** and implement measures that will have a positive **impact** on energy transition and opportunities for our customers and market players must remain our strategic focus, as can be seen from the Walloon government's new Regional Policy Statement.

This new version of the strategic plan underlines the objectives set last year. It also adds practical achievements from the past year and new elements for the future. In particular, these include:

- The analysis conducted by ORES of the 70,000 electrical circuits that make up its low-voltage network, viewed against the backdrop of soaring photovoltaic production, the rollout of electric mobility and the electrification of heating through the implementation of heat pumps.
- The prioritisation of work to modernise the network on 1,250 critical circuits in 2024.
- The investment targets for the coming five years, translated into kilometres of cable and number of power cabinets.
- The growing importance of smart meters in meeting the challenges of energy transition and as a tool for identifying and planning investments for modernising the network.
- The need to involve customers more and more and with greater significance in energy transition by offering them new services and opportunities, through digitalisation, tailored support and advice, incentive tariffs, greater flexibility, etc.

While 2023 underlined the relevance of our willingness to invest together in energy transition for all, it was above all marked by the practical achievements recorded by ORES in its network and for its customers. In this sense, 2023 has been fully in line with our need to take action – and once again, this will be our primary motivation for 2025.

#### Karl De Vos

Chairman of the Board of Directors

#### Fernand Grifnée

Chairman of the Executive Board

# COMBATING **CLIMATE** CHANGE AN ABSOLUTE NECESSITY AND A MATTER OF URGENCY



Climate change is already affecting Wallonia. If we don't act now, we will experience more heatwaves and droughts, as well as extreme rainfall and flooding. To combat these events, we simply must reduce our greenhouse gas emissions dramatically. As the energy sector is the biggest emitter of greenhouse gases, energy transition is key, and the role of the distribution network operator is to make it possible.

We are therefore fully in line with the decarbonisation targets set by the Walloon Region as part of its "Air-Energy-Climate" plan, adopted by the Walloon Government on 21st March 2023. The Walloon government is committed to reducing greenhouse gas emissions by 55% and more than doubling renewable energy by 2030.

At the same time, the federal and regional authorities have initiated a **complete phase-out of fossil fuels by 2050**, in particular by taking measures to promote electric-powered mobility and by planning the steps required for replacing coal, oil and, eventually, natural gas heating.

These various decisions lead us to the following conclusions: we are going to have to produce energy differently, travel and move about differently and heat ourselves differently.

These forecasts have been translated by Climact, at the request of ORES. According to these experts in energy transition, there are three main electrification trends for 2030 and 2050 in Wallonia.

#### **3 MAIN ELECTRIFICATION TRENDS**

RENEWABLE PRODUCTION

BETWEEN 2021 AND 2030



ELECTRIC VEHICLES

+500,000

BETWEEN 2021 AND 2030

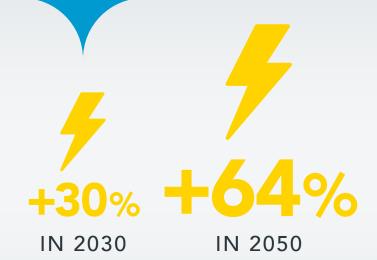


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ELECTRIC HEATING

44%

IN 2050



ORES NETWORKS
WILL DISTRIBUTE
MORE ELECTRICITY
IN THE FUTURE:

Result of the study carried out by Climact for ORES in 2022, the central scenario known as CORE 95, which is based on "a balanced approach between the behavioural and technological dimensions" and makes it possible to reduce greenhouse gas emissions by almost 95% by 2050 compared with 1990 (residual emissions being offset to achieve carbon neutrality).

For distribution networks, these changes are more than just a major development or a break with the past, they imply a genuine change in nature. In addition to managing bidirectional flows, network operators are faced with highly unpredictable consumption profiles, which require them to know, in near-real time, the energy flows on their networks and their status, right down to low voltage.

To this end, ORES has been deploying measurement and remote control tools on its network for a number of years. These tools are made up of a series of building blocks, of which the deployment of smart meters is an essential part. At the same time, ORES is implementing digital systems to operate its network, again in virtual real-time.

In addition to the fact that energy flows are becoming bidirectional and increasingly variable and unpredictable, energy transition is also significantly increasing the volumes of energy injected into and drawn down from the grid, as well as the peaks in grid usage. This is forcing us to rethink the dimensions and structure of our network. The scope of this project is unprecedented and will require around fifteen years of major investment. And it is a challenge that ORES is tackling this task head on.

The conclusions of the Climact study are unequivocal and confirm this change in nature: while changes in behaviour and new technologies will drive down overall energy demand, demand for electricity will inexorably continue to rise to compensate for the gradual phase-out of traditional, more polluting fuels.

In practical terms, the amount of electricity transiting through ORES networks will increase by 64% between now and 2050, with significant growth of 30% in the decade between 2020-2030 alone.

While there may be discrepancies between the figures and analyses, all the studies converge on the major trends and on the fact that changes in behaviour and technologies are fundamentally and rapidly changing the way in which the public and businesses use distribution networks. This, in turn, is changing their expectations in terms of service quality and diversity.

Finally, while the electrification of society is an underlying trend, it is worth remembering that the heating energy most used by Walloon households in 2023 was natural gas. Natural gas is also used in the processes of many large and small industries. In addition to its work to support the electrification of uses, ORES wants to facilitate the integration of molecules of renewable origin into the gas network in order to support Wallonia's decarbonisation targets.

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# **A STRATEGY** CONSTRUCTED WITH OUR CUSTOMERS AND STAKE-HOLDERS



## To build this new strategic plan, ORES has met with its customers and stakeholders.

In recent years, private citizens, businesses and public authorities have been faced with a dual challenge: coping with the rising cost of energy and making the transition to a more sustainable world.

Faced with these challenges, there is no single solution, but rather a multitude of actions to be implemented collectively. Each stakeholder seeks to identify and adopt the best combination in terms of its objectives, resources, constraints and specific characteristics.

That's why, in the process of drawing up its new strategic plan, ORES wanted to talk to a wide range of customers and stakeholders: consumer protection associations, organisations helping the most disadvantaged, environmental protection associations, renewable energy producers, mayors, companies and federations, etc.

Above all, our teams have listened to them in order to understand their needs and the energy solutions they intend to implement in the years ahead. They then asked them about their expectations of their network operator, now and in the future.

The responses received converged on a strong expectation: ORES must be beyond reproach in the way it conducts its business

because it is essential to the social and economic life of the Walloon Region; it must also support and even guide its customers and partners in their energy transition.

On this second point, many have stressed the urgency of the situation. Just a few years ago, energy transition seemed to be a matter for insiders only. But changes in the economic context and the worsening impact of climate change mean that it is now an absolute necessity for everyone.

We have learned a great deal from all the discussions during this consultation. The key messages we have received reinforce our ambition to invest massively in supporting energy transition. Strengthening the network, using new cutting-edge technologies and digitalising the systems we are putting in place to improve both network management and customer service will enable us to take effective action.

The commitment that ORES has made to listening to its customers and stakeholders is not limited solely to the development of this strategic plan. The aim is to meet them regularly in order to communicate proactively and transparently on the implementation of our strategy and to incorporate their ideas and suggestions in a co-construction approach.

REINFORCED, RESILIENT, HIGH-QUALITY NETWORKS

AN ECOSYSTEM FOR
CAPTURING AND MANAGING
DATA TO SERVE THE
DATA TO SERVE THE
ELECTRICITY DISTRIBUTION
OF THE PROPERTY OF THE PR

Taking action by investing massively in networks and data management

To support the Walloon Region's energy transition and meet the expectations of its customers and stakeholders, ORES has developed

## AN AMBITIOUS, COMPLEMENTARY THREE-PRONGED STRATEGY

Based on three strategic priorities, it should enable considerable resources to be mobilised efficiently, with the aim of continuing and expanding the upgrading of networks and IT tools. This strategy is essential to guarantee quality of supply and service in a context of energy transition and increasingly complex customer need.

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**TARGETED INVESTMENTS** 

INCORPORATING ENERGY INTO OUR
REVENABLE
NETWORKS IN THE
REST POSSIBLE WAY ADVICE AND RECOMMENDATIONS TAILORED TO CUSTOMER NEEDS

Continuing to modernise our business and our tools to meet the challenges of energy transition

ORES 🏠

## Taking action by investing massively in networks and data management

To keep pace with societal changes in terms of energy production, mobility and heating, and to guarantee a quality energy supply in a more sustainable world, ORES is going to invest massively in its physical infrastructures and data management systems.

The ORES networks cover more than 50,000 kilometres of electricity lines and 10,000 kilometres of gas pipes. These infrastructures act as a cardiovascular system for the whole of the Walloon Region: they supply energy to homes, businesses and public services, with the aim of ensuring optimum quality. Power supply problems are rare and taken very seriously by the technical teams at ORES, who act as quickly as possible in the event of a problem to guarantee continuity. Energy is an essential commodity, vital for both private individuals and the economy as a whole.

As a result of energy transition, the expectations placed on distribution networks are becoming more diverse, stronger and more complex.

ORES has been preparing for the acceleration of this energy transition for a number of years, in particular through the implementation of a transformation plan that has enabled us to modernise our company, increase its efficiency, deploy new tools for the benefit of customers and strengthen our analysis and planning capabilities.

ORES is now looking to implement an ambitious investment plan for networks

and data management systems over the next fifteen years, to enable everyone to play their part in energy transition.

## REINFORCED, RESILIENT, HIGHQUALITY NETWORKS

To maintain this quality of supply at a time when more and more customers are switching to new production and consumption methods, it is essential to increase the capacity of the networks. In other words, these networks need to be able to distribute a growing volume of energy, but one that is also more variable (for wind and photovoltaic energy, for example) and takes increasingly diversified routes, starting from hundreds of thousands of small production units scattered throughout the region. To cope with this paradigm shift, ORES is going to increase the capacity of its networks, in particular by replacing sections and implementing a project to convert low-voltage lines from 230 V to 400 V.

#### ORES connects Wallonia's first biomethane production sites to its gas network

Biomethane is a 100% renewable gas produced from organic matter and waste from the food industry, catering, agriculture and households, as well as sludge from sewage treatment plants. This purified biogas can be injected into the gas distribution network. In this way, it contributes to the development of a local circular economy in which local waste becomes a renewable resource that can be used locally. Thanks to its short carbon cycle, biomethane emits ten times less  $\mathrm{CO}_2$  than natural gas, making it comparable in this respect to electric renewables. Since 2020, ORES has connected three biomethane production centres to its network. Our teams also support investors, particularly from the agricultural sector, in their biomethane projects, providing them with technical expertise and facilitating their administrative procedures.



However, it is not necessary to reinforce the network everywhere. It would not be financially sustainable, nor would it be humanly or technically feasible. That's why ORES is pursuing an ambitious but targeted investment policy, aimed at investing in the right place at the right time.

Investment is also planned in the gas distribution network, to maintain it and enable the integration of renewable molecules such as biomethane. Thanks in particular to its abundant amount of agricultural land, Wallonia has large quantities of organic matter and waste that can be transformed into a renewable gas with the same properties as the natural gas imported by Belgium. This approach complements the electrification of the economy and will enable the Region to achieve its renewable production and decarbonisation targets more quickly. Individuals and the many industries that use gas in their manufacturing processes will also be able to take part in energy transition.

The resilience of distribution networks is also at the heart of the investment strategy. The increasing number of major climatic phenomena in recent years, such as the storms that hit Wallonia in the summer of 2021 and the catastrophic

floods that followed, have prompted ORES to anticipate more significantly the possible consequences of these natural disasters on its electricity and gas networks in its investment projects. The aim is to prevent and reduce the impact of disasters by preserving and being able to restore essential energy services more quickly to support the population, rescue operations, hospitals, emergency shelters, etc.

# AN ECOSYSTEM FOR CAPTURING AND MANAGING DATA TO SERVE THE ELECTRICITY DISTRIBUTION NETWORK AND CUSTOMERS

As well as investing in the network's physical infrastructure, ORES is continuing to invest in data collection and management systems. Data is an essential resource for ORES and for energy transition. It enables networks to be measured and controlled in near-real time and is an



### The benefits of renewable energy are now more easily accessible to everyone

Renewable energy communities, energy sharing within the same building or peer-to-peer energy exchanges: since the Government adopted a legal framework governing these three new forms of energy sharing in 2023, it is now possible in Wallonia to invest collectively in renewable energy and share it locally. An example might be a photovoltaic installation on the roof of a church or local school that supplies renewable energy at a stable and competitive price to several neighbours (with or without panels) participating in the community. ORES has already prepared for the arrival of these different collective self-consumption methods, notably through a pilot project carried out over the last two years with a public housing company in Verviers. Our company is now available, in its role as support provider and data manager, to help customers who want to set up a practical energy-sharing system. With the end of compensation for new photovoltaic installations in 2024, future "prosumers" now have a new range of solutions for maximising the use of their production and the profitability of their investment.

essential tool for identifying the most appropriate investments to be made in the network. It also makes it possible to offer high-quality services to customers, either directly or by enabling market players to develop new, innovative solutions.

ORES implements a communications infrastructure that enables data and information to be transmitted between the various elements of the distribution network, from the smart meters on the customer's premises to the organisation's IT systems and, beyond, to market players. This communications chain is essential if we are to make energy transition a reality: while it already provides access to new services (remote metering and prepayment of consumption, new offers from suppliers, intelligent management of electrical appliances in the home, etc.), in the future it will make it possible to put in place new market mechanisms that are essential to the transition: incentive-based and differentiated

pricing with more time slots, flexibility offers based on the model of the products that are currently offered to customers connected to the high-voltage electricity grid and, finally, the various types of energy sharing, etc.

From 2024, ORES will be able to make customer consumption data available to suppliers so that they can offer new energy services that are more in line with new production and consumption trends. Of course, this will always require the prior formal agreement of customers.

These changes, which are radically transforming the way the market is organised, have very clear objectives: to manage our networks more efficiently, optimise our investments, encourage customers to consume renewable energy when it is most available, and maintain a high-quality service.



### The smart meter rollout is gathering speed

The smart meter is an essential tool in energy transition. It provides ORES with information about its network and forms the basis for tools designed to optimise network investment. In this way, it helps to maintain distribution tariffs that are bearable for all Walloons in a context of energy transition. In addition, it offers customers the opportunity to monitor their consumption more closely, take energy efficiency measures and (if they have a photovoltaic installation) to consume their own energy more efficiently. The smart meter is essential for any customer who wants to become a player in the transition process and opt for more dynamic pricing models in the future, participate in forms of energy sharing or subscribe to commercial flexibility products. Our network is now rolling out smart meters at a sustained pace: our teams are currently installing an average of 8,000 smart meters every month, with a view to reaching a total of 220,000 smart meters by the end of 2023. By the end of 2029, all customers connected to the ORES low-voltage electricity network will be equipped with this tool, which is essential if we are to move towards more sustainable energy management. The smart meter also exists for gas. The equipment is mainly installed with customers who prepay for their energy and want to benefit from closer monitoring of their consumption and easier recharging.

## 2024 State of play

After 2023, which saw the commissioning of almost 100,000 new residential photovoltaic installations, ORES embarked on 2024 by taking a determined approach to modernising its electricity distribution network. This unprecedented acceleration in the use of photovoltaic energy, combined with the likely outlook for electrification in the mobility and heating sectors, has meant that efforts to strengthen and modernise our infrastructure need to be stepped up without delay if we are to be able to guarantee a reliable and secure service for all customers.



#### **IN-DEPTH ANALYSIS** OF THE LOW-VOLTAGE **ELECTRICITY NETWORK**

In practical terms, ORES has taken action since the beginning of the year by carrying out an in-depth analysis of the 70,000 local electricity circuits that make up its low-voltage network. This analysis covered a number of different dimensions: data from smart meters already installed in homes, incidents of inverters dropping out reported

by customers, network characteristics (length, condition, type of cable) and troubleshooting and maintenance operations carried out by field teams. In addition, ORES also enriched its approach using socioeconomic data obtained from work carried out with academic and industrial partners.

This integrated vision has a three-pronged objective: to resolve problems regarding congestion on the grid that limit renewable power generation from customers, to anticipate future challenges such as the rise of electric mobility, and to provide customers with the most detailed and most transparent information possible.

# IDENTIFICATION OF CIRCUITS THAT ARE AFFECTED BY INJECTIONS OF PHOTOVOLTAIC POWER, AND COMPLETION OF 1,250 NETWORK MODERNISATION PROJECTS IN 2024

The result of this analysis of the low-voltage network was the identification of 10,000 electrical circuits (out of a total of 70,000) vulnerable to injections of surplus renewable energy generated by photovoltaic panels, and the arrival of electric vehicles.

By taking stock in this way, ORES was able to prioritise its actions and undertook to upgrade 1,250 critical circuits before the end of 2024. It has also continued taking the necessary administrative steps (obtaining authorisations and permits from local and regional authorities, locating and purchasing land for new cabinets, etc.) with a view to planning several thousand other sites over the next few years.

# GROWTH OF INVESTMENTS BENEFITING ENERGY TRANSITION

Beyond these immediate actions and as part of its medium and long-term vision, ORES defined an ambitious investment plan for 2024 to support the energy transition.

During the course of the next five years, ORES plans to install 8,400 kilometres of new cables across its network. 5,000 km of these new cables will be low voltage, aimed at strengthening the electricity infrastructure. In parallel, 430 kilometres of additional cables will be rolled out to help facilitate the integration of new wind and photovoltaic

fields. The company also plans to install 3,850 new electricity cabinets and transformer units to accompany this dynamic between now and 2029.



#### APPROVAL OF A WIDE-SCALE ROLLOUT PLAN FOR SMART METERS

The increase in residential photovoltaic production and the congestion observed on the electricity network in certain districts have reinforced the need for even more modern and resilient infrastructures. This development has also highlighted the importance of having tools in place that are capable of accurately measuring the local risks of voltage anomalies - whether these are overvoltages linked to excess photovoltaic production or undervoltages caused by the increase in the number of electric cars and the electrification of heating. In addition to their traditional metering role, smart meters can be used to 'diagnose' the network by feeding data back into our systems, thereby providing essential leverage for successfully implementing energy transition and enabling investment to be made where it is needed.

In response to this development, in 2024 the Walloon Parliament made changes to the electricity decree 2024 by planning the replacement of all traditional meters with smart meters by the end of 2029. ORES is putting the finishing touches to an overall action plan to bring this ambitious target to fruition.

## Making the customer relationship the springboard for energy transition for everyone

The evolving and increasingly complex world of energy is raising its share of questions. In its role as a neutral player in the market, ORES aims to support and guide its customers along the path of energy transition.



## QUALITY SERVICE FOR EVERY CUSTOMER

Energy transition is at the heart of the strategy implemented by ORES. But this transition is not always our customers' main or only concern. ORES has a duty to maintain a basic quality service at the best price for customers who expect nothing more than quality power or reliable metering data delivered on time. ORES aims to be the best choice in terms of quality of service and remain accessible in a simple and efficient way for all customers. Maintaining and making available solidarity mechanisms for all Walloons, particularly in our role as a social supplier, is also essential.

## DIGITALISATION FOR GREATER AVAILABILITY

In addition to this basic service, the needs and expectations of customers are becoming increasingly complex. To meet these needs, ORES relies on **high-quality online services** and is developing new digital means of communication enabling it to be contactable at all times.

This digitalisation of services is reflected, for example, in the ability for customers to have a personal online space, called myORES. This space is fed by data collected by smart meters and gives customers access to a number of standard actions and requests. ORES also makes simulators and other customisation tools available on its website so that customers can find answers to their every question, no matter how varied, and the solutions best suited to their needs in just a few clicks.

Customer choices and behaviour have an impact on the network, on the level of investment required and therefore potentially also on distribution costs.



The various communication tools therefore aim not only to present the different options available to customers, but also to inform them of the consequences of their choices. For example, a private recharging point that is oversized in relation to the actual use made of it could have an effect on the quality of the general power supply to the home, necessitating an increase in its power (which could represent a cost for the customer) or even, in the long term, requiring the network to be upgraded.

Faced with an ever-increasing number of customer requests, the digitalisation of services is essential for supporting the efficiency of customer relations. This priority given to digital exchanges means that, where necessary, direct and effective contact can be maintained.

Due to its location in Wallonia, its high-quality service and optimal response times, contact centre Comnexio is the main point of entry for questions that cannot be resolved immediately via the digital channel. The contact centre is also a tool in the fight against digital exclusion. Measures are taken on an ongoing basis to personalise the customer experience, anticipate needs and recommend proactive actions, as well as maintain satisfactory and acceptable waiting times and control operating costs.



### ORES helps customers to make informed decisions

on energy-related matters

The ORES website, ores.be, attracts more than a million visitors a year. Internet users browse the site's pages to submit requests for work or meter readings, but also increasingly to look for high-quality, non-commercial information on energy transition. ORES provides its customers with tutorials, chatbots, frequently asked questions and even simulators to help them determine, for example, the ideal electrical power requirement for their home or the type of charging station they should use for their electric car.

# ADVICE AND RECOMMENDATIONS TAILORED TO CUSTOMER NEEDS

As well as improving its communication channels, ORES is developing personalised support to help customers make the best choices and implement their energy transition projects.

The aim is also to help them adopt sensible behaviour with regard to the network and the electricity system so that individual and societal costs can be controlled. The aim is also to support companies in their energy transition. ORES recently decided to significantly expand its account manager service to support large multi-site companies and/ or those with energy aims and ambitions that require the support of their network operator.

All these solutions, whether they involve remote digital support or personalised contact in the field, aim to improve the customer experience in terms of their energy transition needs, while also enabling them to become actively involved in their own consumption, including for the customers of social suppliers.

#### A guidance service for businesses

Companies, both public and private, are very active in energy transition. By strengthening its team of account managers and creating a new unit for SMEs, ORES aims to put in place a 'fast track' system to speed up their projects for renewable production, technical flexibility, electric mobility and so on. Each of these professional customers will eventually be able to benefit from a support service from ORES that will be both highly reactive and proactive, since companies will be contacted spontaneously by our teams when opportunities arise for them on the energy market, as well as to better anticipate their future needs.



## 2024 State of play

In particular, 2024 was a year marked by the challenges linked to the dropping out of inverters, which contributed towards highlighting the central role played by the customer in energy transition. While the investments made in our networks are essential for supporting the development of renewables, having the commitment and involvement of customers is equally determining. We simply must develop tools that encourage customers to understand the imperatives involved in signing up to and taking part in energy transition, mainly by being flexible and consuming the electricity they generate themselves.





## FLEXIBILITY WORKING ALONGSIDE NETWORK MODERNISATION

With the rise of renewable energies, the generation of electricity is now much more variable than it was before. ORES is upgrading its network so that it is able to manage spikes in production, while at the same time maintaining the balance of the distribution system and providing quality supply for everyone. But at a time when the share of renewable energies is growing steadily and needs to accelerate further to enable the Walloon Region to achieve its decarbonisation targets, it is not always appropriate to respond with investment alone. Investment can be a lengthy process - and this comes at a time when the pace of energy transition is accelerating and customer demands are multiplying. Being flexible should enable us to save time through faster implementation. In some cases, it could also help to reduce the level of investment required and therefore make the cost of transition more acceptable to the community. Which means that flexibility is an essential lever for guaranteeing the capacity of the network in the face of increasingly intense variations in the supply and demand of electricity.

In 2024, ORES carried out an analysis of flexibility in its various different forms and the way they are integrated within its network, identifying specific needs. In the same way as the coordination

mechanisms in place at high-voltage substations shared with the transmission system operator – which make it possible, in particular, to modulate wind power injections to ensure system stability – in view of the growth in photovoltaic installations, local flexibility solutions are becoming essential in areas supplied with low-voltage power.

Solutions also need to be found to meet the challenges presented by new drawdowns of electricity on high-voltage networks (particularly with the arrival of battery farms, see elsewhere) and low-voltage (in connection with the development of mobility and electric heating).

## CONSULTATION ON THE INTRODUCTION OF INCENTIVE TARIFFS

The initial avenues explored in 2024 include: the introduction of incentive tariffs to enable customers to benefit from reduced charges for distribution, no longer just during night-time hours, but also at times of the day when there is plenty of renewable energy available.

In doing so, ORES played an active part this year in the discussions conducted with the CWaPE aimed at offering those customers who wish to do so the ability to opt for tariffs that offer greater incentives from 2026 onwards.

#### INFORMATION FROM **CUSTOMERS AND** IMPLEMENTATION OF A SPECIFIC PROCEDURE FOR REPORTING **INVERTERS THAT HAVE DROPPED OUT**

As a result of analysing the status of its low-voltage network (p. 18), ORES offers its customers, using a mapping tool published on its website, the ability to pinpoint areas that are more prone to voltage issues, as well as where investments are planned within the infrastructure. This transparency provides an overall view of short and medium-term action carried out by ORES. It also makes it easier to understand what is going on and to track the efforts made to upgrade the network, while enabling customers to find out what is happening in their local area at the time they invest in the production of renewable energy.

Still with the issue of inverter dropouts, in 2024 ORES implemented communication programmes and a specific customer procedure. This procedure has a number of aims: to make it easier for customers to contact ORES and to report any problems they may encounter, plus to reduce dropouts by installing smart meters and analysing the data they provide, ORES as well as by announcing deadlines for putting

solutions in place.

#### CONTINUING THE PROCESS OF DIGITALISING **INTERACTIONS WITH CUSTOMERS**

At the beginning of the year, ORES launched a new website, which has since become the cornerstone of the company's digital offering and has served to enhance the general information provided for customers. After designing power simulators for electrical connections and recharging stations, the company has rethought the presentation of its power offering by introducing different, clearly itemised formulas. These new tools enable customers to better evaluate their energy needs so that they can ensure the sizing of their installations is appropriate.

The intention for the coming years will be to continue the process of digitalising information and customer transactions, in particular by developing the features and functionalities of the myORES portal and rolling out virtual assistants.

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## BOOSTING GUIDANCE AND ADVICE

In 2024, ORES delivered on its commitment to offer industrial customers a 'fast track' to simplify and speed up the processing of their applications. This commitment has resulted in the strengthening of the account managers unit and the adoption of a more proactive and forward-thinking approach, inviting industrial customers to tell ORES about their needs as early as possible in the process. This strategy enables ORES to plan better for future demand and to incorporate the needs of big companies into its long-term plans - and by doing so to maximise the effectiveness of the investments made in energy infrastructure. Although SMEs do not yet have any specific guidance procedure, measures will be taken on a progressive basis over the coming years to meet their needs.

In 2024, ORES also created an advice unit for domestic customers, which again was the result of taking a proactive approach. The aim of this new service is to provide residential customers with information before they make their choices relating to energy transition – that way, they can take informed decisions, particularly in terms of the network and the market. For example, tools are made available to customers to help them in their choice of the type of home recharging terminal, based on their mobility needs and to check whether there is sufficient connection power in place to supply such a recharger. And then, if not, to look at the alternatives or the cost of boosting the power supply, where appropriate.

Finally, with the aim of improving the quality of the information provided to customers,

ORES has strengthened its
partnerships with other providers
in the energy sector, such as
the installers of photovoltaic
panels and car dealerships. In
order to make a wider audience aware
of the issues of energy transition, ORES
has also exhibited at trade shows focusing on
home improvements and renovation projects.



# STRONG GROWTH IN DEMAND FOR FAST-CHARGING STATIONS AND BATTERY FARMS

In recent months, a number of projects for fast-charging stations for electric vehicles have been submitted with a view to rolling them out along Wallonia's main roads. Partnerships have also been set up between fast-charging companies and major retailers and restaurant chains, to extend the fast-charging offering in city centres and high-traffic areas. ORES has actively supported these initiatives, working alongside developers and supplying the power needed to bring the projects to fruition, thereby contributing to the gradual and sustainable transformation of the vehicle fleet.

At the same time, ORES has also been approached regularly by local and international companies with requests to connect large battery farms to its distribution network. However, while these farms may play a key role in the future in the management and stability of the energy system, they require a significant level of available power in order to be installed. Specific legislation and regulations will also need to be put in place for projects of this kind to be handled.

## Continuing to modernise our business and our tools to meet the challenges of energy transition

The new tools - digital, telecoms and data, artificial intelligence - put in place by ORES are assets for operating our network at maximum capacity and optimising investments.



ORES intends to continue modernising its tools, organisation and processes to meet the challenges of energy transition efficiently.

Investing in networks of course means modernising and reinforcing infrastructures so that they can absorb new energy flows. But to invest in the right place at the right time in an increasingly complex and changing environment, the use of cuttingedge technologies is becoming essential.

## TARGETED INVESTMENTS

As we have said, to optimise network performance while controlling investment costs, ORES must constantly anticipate, target, size and carry out a cost-benefit analysis of each project. This is why knowledge of the infrastructure, its age, its current condition and its specific technical features is fundamental.

ORES uses a wealth of information provided by the databases and various sensors in place across the network to gain a better understanding of its infrastructure and analyse its development: data specific to cables, conduits, substations and cabinets, load data, voltage, frequency, faults, energy losses, etc.

This data makes it possible to identify the areas that are most constrained and to plan the development of the network to ensure that it can meet long-term needs.

# INCORPORATING RENEWABLE ENERGY INTO OUR NETWORKS IN THE BEST POSSIBLE WAY

Artificial intelligence (AI) also offers many benefits for the management of distribution networks, helping to make them more efficient, resilient and sustainable. In particular, AI can facilitate the integration of intermittent renewable energy sources, such as solar and wind power, by predicting energy production based on weather conditions and adjusting distribution accordingly. This is the purpose of the O-One algorithm, for example, which

ORES has developed with a spin-off from the University of Liège and which is now being rolled out to wind farms to maximise the amount of renewable energy that can be fed into the grid.

Al can sometimes also be used to identify transitional solutions while investments are being made: for example, it can be used to identify the phase rebalancing that needs to be carried out at customer sites, using data from smart meters. This type of action does not replace network upgrade and reinforcement work, but it does offer the possibility of postponing it and optimising it without jeopardising energy transition.

Lastly, ORES has been investing for years in digitalising its internal work processes and upgrading its range of applications, enabling it to act more quickly and efficiently in the field and as part of the services it provides to customers.

#### ORES is developing its own geographical database

To achieve energy transition, having high-quality data is essential. In 2023, ORES launched its geodatabase (its "GIS" tool) in order to document its networks exhaustively and accurately. Initially, this work on documentation will focus on the low-voltage electricity grid, i.e. the network that carries electricity to local neighbourhoods and which is currently being heavily impacted by new uses of electricity. In 2025, new tools linked to this geodatabase will be used to document the medium-voltage electricity grid and the gas supply network. This tool is crucial for prioritising investments and implementing preventative maintenance programmes. It also enables us to develop mapping tools to help our external partners target the most favourable locations for the installation of a wind farm, a photovoltaic field, a biomethane production centre or a fast-charging service station for electric vehicles.



# A MODERN AND EFFICIENT ORGANISATION AND PROCESSES

On 1st January 2022, ORES implemented a new organisational structure designed to enable it to

respond more efficiently and effectively to the challenges of energy transition and changing customer expectations. This modernisation of the organisation will be pursued wherever it makes sense, for example as part of the roll-out of smart meters. The processes underpinning this organisation are also affected by this ambition to modernise and improve efficiency – and will be improved wherever possible and relevant.

### Remote control of the grid is evolving to better integrate variable renewable generation

With the increase in renewable energy production, ORES must maintain a balance on its network to avoid situations of congestion and risks of breakdown or safety and security. This is why our teams have implemented an Advanced Distribution Management System (ADMS), which will be fully operational in 2025. This new remote network supervision and control system is based on an algorithm that captures and interprets information from the electricity network in great detail, even in places where the cabins are not equipped with telecommunications systems. In doing so, it ensures a balance between renewable energy production sites and consumption sites. In the event of a power cut, the tool will also improve the quality of diagnostics and propose solutions to restore power to as many customers as quickly as possible, thereby keeping power outage times under control in a more complex environment than in the past.



## 2024 State of play

Line 3 of the ORES strategic plan supports the first two. In 2024, this mainly took the form of implementing advanced network infrastructure analysis technology to prioritise investment and optimisation measures.



#### **IMPLEMENTATION** OF A METHODOLOGY TO TARGET PRIORITY **INVESTMENTS**

In 2024, analysis of the low-voltage electricity distribution network (see p. 18) saw the launch of a series of targeted actions aimed at resolving the problems of inverter dropout. ORES implemented an innovative method based on algorithms and artificial intelligence. This approach draws on

a number of key data sources: smart meters, customer reports, the technical characteristics of the network and the history of interventions in the field. This method, which will continue to be developed in the future to incorporate available resources and propose tailor-made technical solutions, has enabled ORES to identify the lowvoltage network circuits requiring priority investment.

In parallel to this, ORES conducted a general study of energy potential in Wallonia in 2024, incorporating the prospects for electrification, the development of low-carbon gases and heat networks. The conclusions of this analysis are still being finalised.



# IMPLEMENTATION OF ADMS AND THE BEGINNING OF THE VECTORISATION OF ELECTRICITY NETWORK PLANS

In recent months, ORES has taken a number of important steps towards implementing the new 'smart' management of its electricity distribution network. The implementation of ADMS (Advanced Distribution Management System) has made significant progress and will be completed by early 2025 before being rolled out at an operational level. This tool will enhance the ability of ORES to manage energy flows on the network in real-time.

At the same time, the process of vectorising electricity network plans has been launched. This represents a key step forward in improving the precision and efficiency of operations.

These two initiatives are part of a more overall process of transformation for the ORES

network into a smart grid that is better suited to the challenges posed by flexibility, the incorporation of renewable energy and the general optimisation of infrastructures.

## PARTICIPATION IN INNOVATIVE PROJECTS

In 2024, ORES made an active contribution to a number of innovation projects aimed at optimising the integration of renewable energies. Inspired on occasion by the practices of network operators in neighbouring countries, most of these projects are still underway and are being carried out in collaboration with other parties in the market, as well as with companies that specialise in data management. They provide ORES with the opportunity to test various flexibility solutions for both high-voltage and low-voltage electricity networks.

With the aim of strengthening its collaboration with industry, the universities and start-ups, ORES is now showcasing its innovation initiatives on its website, making it easier to establish contacts with interested companies.

# ACTING TODAY, WHILE KEEPING ANEYEON THE FUTURE



# To meet the challenge of energy transition, ORES maintains a close watch on technology. This involves identifying emerging technologies that could have an effect on network operations and accelerate the decarbonisation of the economy.

When preparing this strategic plan, ORES also discussed with its stakeholders the new strategic areas of activity that could potentially be integrated into energy transition and fall within the scope of the network operator's activities.

The development of the green hydrogen sector, the construction of heating networks and the transport of  $\mathrm{CO}_2$  from industrial processes are all avenues that could enable different types of consumer, particularly industrial consumers, to considerably reduce their carbon footprint in the medium or longer term.

At this stage, these areas of activity are not the subject of an actual ORES strategy. However, our teams remain available to work in collaboration with the main players involved in setting up these sectors, such as the gas transmission network operator Fluxys in the case of hydrogen.

ORES also plays an active part in a number of thinktanks that bring together academics, innovative start-ups and specialists from the world of energy. The aim is to assess the technological opportunities that arise and test them under real conditions through pilot projects carried out on distribution networks. This will enable us to assess their effectiveness and applicability on a large scale, as well as their value to the community.

# AN **AMBITIOUS** STRATEGY REQUIRING UNPRECE-DENTED RESOURCES

The strategy implemented by ORES is one involving great ambition: to be part of energy transition in the Walloon Region, to make possible this fundamental change in our societies and to stand by its customers in the face of the complexity of the issues linked to this transition.

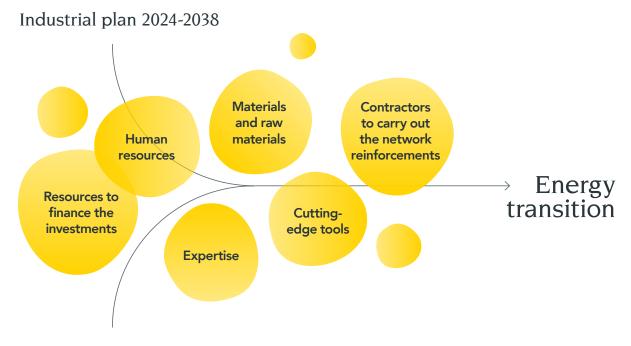


To support and implement its new strategic plan, ORES has drawn up an industrial plan for 2024-2038 which identifies and quantifies the investments to be made in the network, in human resources and in IT solutions in order to fully meet the challenges of energy transition and achieve the objectives set at global and regional level to combat climate change.

In other words, ORES aims to invest massively and intelligently in the Walloon Region to support the acceleration of energy transition and guarantee a high-quality supply and service in an increasingly complex and challenging environment. In recent years, ORES has undergone a major transformation. It has modernised itself and invested a great deal of energy in considering the consequences of energy transition and analysing what is expected of a distribution network operator and a public service company, in a context of accelerating energy transition and following major health and energy price crises.

Today, ORES is ready and determined, on the basis of the lessons and achievements of the last few years, to proceed with the investments that the Walloon Region, its citizens and businesses expect of it.

ORES has chosen to build this industrial plan on the basis of the decarbonisation targets set by the Walloon Region and what they mean in terms of technological and behavioural changes in relation to the distribution network: the large-scale rollout of renewable production capacities, such as wind power and photovoltaics, the boom in electric vehicles and the charging requirements associated with it, changes in heating methods through the installation of heat pumps or the deployment of heating networks, the need to better match electricity production and consumption periods through new and accessible flexibility solutions, the electrification of industrial processes, the injection of biomethane into our natural gas networks and the introduction of energy sharing and community mechanisms, etc.



Strategic plan

This industrial plan and strategic plan are the direction that ORES has taken, as well as its ultimate ambition to be an essential and positive cog in energy transition in the Walloon Region. To make a success of this complex, long-term project, resources on an unprecedented scale are needed: resources to finance the investments, human resources, materials and raw materials, contractors to carry out the network reinforcements, and so on. Expertise and cutting-edge tools will also be needed to make the most of data, optimise network capacity and support new market models.

At a time when our societies have just gone through a health crisis and a major economic crisis, competition for these resources is intense, particularly for those linked to energy transition, which concerns all the countries of the world.

ORES will have to demonstrate ingenuity and efficiency, act collectively and forge partnerships to obtain and secure the resources needed to achieve its industrial plan. This plan will be rolled out at a pace that takes account of available resources, as well as the regulator's decisions on tariffs and changes in the legal and regulatory framework applicable to ORES.



Faced with these uncertainties, which can turn into constraints or opportunities, ORES has set itself a dual objective and a dual responsibility. First, to do everything in its power to achieve this ambitious industrial plan, whatever the circumstances, and to show boldness and creativity in the face of the difficulties that are bound to arise. Second, to communicate regularly and transparently with stakeholders on the progress of this plan, highlighting the objectives achieved by ORES as well as any delays or difficulties. In the interests of transparency, and in order to identify together the solutions to be implemented to overcome these obstacles, for the benefit of energy transition and the community.

Energy transition is a collective challenge that involves all the driving forces in the Walloon Region, and one that ORES will not be able to meet alone. We are already facing difficulties in recruiting the talent we need to successfully implement our industrial plan and in finding trainers to update our employees' knowledge and expertise. Public tenders to obtain the contractors we need to achieve our ambitions and

the equipment we need to deploy on the network are increasingly complicated, and we don't always succeed in obtaining the quantities or prices we want, even when we join forces with all the Belgian distribution network operators. Added to this, we are dealing with a regulatory framework that can be highly unstable, forcing us to backtrack on certain projects or, on the other hand, to deploy complex mechanisms too quickly. And this can sometimes lead to misunderstandings or frustrations among our customers or with market player.

The stakes are too high to be fatalistic in the face of these constraints and difficulties. But we can neither ignore them nor pass them over in silence. The quality of the collaboration between all the players involved in energy transition, first and foremost the political authorities and the Walloon energy regulator, must be commensurate with what is at stake. Listening, transparency, trust, mutual support, a clear framework and shared objectives will be needed if we are to succeed in this challenge of energy transition, which is at least as exciting as it is complex.

#### www.ores.be

Customer service 078 15 78 01
Breakdown service 078 78 78 00
Smell of gas 0800 87 087

#### **ORES Assets**

Limited Liability Municipal Cooperative Associaton

Avenue Jean Mermoz, 14 6041 Gosselies VAT BE 0543.696.579 RLE Charleroi

