

Start-up Portfolio 2022

EDF PULSE incubation

EDF PULSE INCUBATION is the EDF Group's intrapreneurship programme.

It was created to develop new businesses and accelerate the energy transition, and has enabled the launch of new subsidiaries within the EDF Group.

With EDF Pulse Incubation, the Group invests in those who have the courage to commit themselves to shaping the world of tomorrow.

EDF PULSE ventures

EDF PULSE VENTURES is the EDF Group's corporate venture capital arm.

As a financial and strategic partner of start-ups, its mission is to identify new activities and innovative solutions developed by start-ups, to invest in them and work together to build a carbon neutral future.

With EDF Pulse Ventures, the Group is linking up with the innovation ecosystem to step up the pace in the race against climate change.



Decarbonisation solutions and services accessible to all

Z zenpark

ZENPARK is a leader in "**Parking as a Service**". Its platform offers motorists and motorcyclists a practical and economical hourly and monthly parking service, allowing them to park in private parking spaces left vacant (hotels, office buildings, etc.).

Zenpark enables:

- Reservation of a parking space,
- Secure access to car parks,
- Deployment of new services in parking spaces (e.g. recharging of electric vehicles).







URBANOMY is a strategic and techno-economic consulting company in the field of carbon neutrality for the real estate sector. It supports upstream and comprehensive thinking on responsible, low-carbon urban planning for the construction or renovation of neighbourhoods and towns and cities.

It makes 3 promises:

- MATCH: to align climate ambitions with real estate development actions,
- SHIFT: transition to low-carbon assets (heating, transport, etc.),
- UPGRADE: increase the value of real estate assets.

It is based on 5 areas of expertise that are relevant to the real estate sector: carbon, energy, value, climate change, and positive externalities.

Status Markets EDF subsidiary A product of EDF Pulse Local authorities, land promoters, Incubation property developers and investors Founded: 2020 Employees: < 10 Locations **Customers who** Europe, UAE trust them Caisse des dépôts, Vivatech, Offices in Paris, London and Syndicat Mixte Orge-Yvette-Seine, Berlin Oxfordshire County Council...



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ITK is a publisher of decision support software for the agricultural sector. It designs and develops **agronomic modelling and artificial intelligence solutions for more efficient agriculture that emits less greenhouse gases.** Its technology simplifies the management of the profitability of agricultural production, its impact on the environment, and animal health and welfare.

It offers 3 products:

- Decision-making tools for crop and livestock farming,
- · Forecasting and management of climatic risks,
- Farm and livestock management.



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PERSEFONI offers a platform that allows companies and institutional investors to **measure**, **analyse**, **plan**, **anticipate and make public their carbon footprint**, managing their emissions with the same rigour as their financial transactions.

Its solution complies with the methods of the Greenhouse Gas Protocol and the Low Carbon Financial Accounting Partnership.

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PERFESCO offers a solution that enables industrial companies to reduce their carbon footprint and energy consumption. To this end, the start-up finances the energy efficiency projects of its customers, who thus do not have to finance anything. PERFESCO is then reimbursed from the energy savings achieved and measured.

PERFESCO carries out an audit of the sites and identifies the energy saving areas. The company then finances and carries out the work involved.

PERFESCO works on several areas of expertise: lighting, electric motors and furnace heating. In addition, the start-up finances specific projects in some cases.









MONKEY FACTORY is a **provider of MaaS (Mobility As A Service) solutions**. It designed **MyBus**, France's leading mobile application (in terms of territorial coverage) providing easy access to public transport, soft mobility (bicycles, scooters, etc.) and/or shared transport. This platform is also distributed on a white label basis to local authorities via the **MaaSify**application.

The two platforms provide:

- Real-time passenger information,
- Route calculation,
- Purchase, validation and reservation of multimodal journeys.





NEOT develops **financing solutions** via two investment platforms:

- **NEoT Off Grid Africa** for the financing of decentralised (offgrid) energy in Africa,
- **NEoT Green Mobility** for financing zero-emission mobility solutions for clean and quiet towns and cities.

The offering includes:

- Asset-based financing,
- Project finance,
- Pilot financing,
- Financing of an international deployment.

Status Investment by EDF Pulse Ventures 2016 Founded: 2016 Employees: < 20

Locations Europe, Africa, Latin America

Offices in Paris

Markets

Local authorities, industrial companies, transport operators and start-ups

Customers who trust them RedBus, RATP Dev, FirstBus, Transdev, Izivia, Chronopost...



Performance, construction and conversion of energy production and storage facilities

CedF



Manage & extend batteries life

PowerUp designs and markets **management and optimisation solutions for Lithium-Ion batteries** in order to extend their service life.

Its offer enables:

- Monitoring and prediction of the state of health of a battery,
- Optimisation of recharging to increase battery life,
- Supervision of a fleet of batteries and carrying out predictive maintenance..





For an intelligent use of energy

ERNERBRAIN is developing a **digital solution for optimising energy efficiency and indoor air quality** in commercial buildings. Using wireless sensors (IoT), it measures energy consumption in real time and remotely controls the heating, ventilation and air conditioning systems. The solution can also control temperature, humidity and CO2 levels. The information collected is processed by a "learning" algorithm (AI) developed by Enerbrain to optimise consumption in real time.

ENERBRAIN's offering includes:

- Temperature, humidity and CO2 measurement,
- Remote control of installations,
- Optimization through AI.





metrosc^epe

METROSCOPE provides **SaaS software capable of reliably and automatically diagnosing anomalies on an industrial process.** This enables it to optimise the maintenance of installations, improve the operational performance of the business and its environmental footprint.

Its offering is based on:

- The creation of a digital model of the thermodynamic process to reveal anomalies in installations in real time,
- The use of artificial intelligence (AI) to diagnose the causes of anomalies and rank them in order of importance.









SECLAB offers a **cyber security hardware solution for critical infrastructures** based on the unique *Electronic AirGap* technology that provides security by physically isolating communications between OT & IT networks.

It was voted Cool Vendor 2021 by Gartner.

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TEEPTRAK offers a solution for **monitoring industrial performance in real time**, enabling the acquisition of data relating to the performance of production resources (rate of production, operating time and downtime, TRS) and to analyse them in order to improve their productivity and output. Its highly competitive plug&play solution is compatible with all types of machines.

Its service includes:

- Data capture module,
- Control tablet,
- Web supervision and monitoring platform (sold as an Saas subscription).





Decarbonised production and storage solutions of tomorrow



HYNAMICS produces and markets low-carbon hydrogen produced from water electrolysis, a technology that does not emit CO2 when the electricity is itself generated by decarbonised production methods.

As part of a partnership approach, HYNAMICS supports the customer throughout the value chain with a turnkey solution:

- Project design,
- Financing/investment in infrastructure,
- Construction,
- Operation & maintenance.







MCPHY is a **designer**, **manufacturer** and **installer** of equipment for hydrogen production (electrolysers) and distribution (stations).

Its activities:

- Supply of industrial materials,
- Recharging of fuel cell electric vehicles,
- Storage and recovery of surplus electricity from renewable sources.





Decentralised

energy **systems**





DREEV develops and markets bidirectional **smart charging solutions**: Vehicle-to-Grid (V2G) technology. V2G allows electric vehicles to be used as a means of energy storage and to feed electricity back into the grid at peak times.

It offers 3 products:

- Consulting,
- Sale of V2G charging stations,
- Operation of V2G terminals.









ENERGY2MARKET is one of the largest **aggregators and traders of renewable energy in Germany.** Through its own virtual power plant (VPP), e2m aggregates several thousand decentralised renewable energy production, electricity storage and flexibility assets which it monitors, controls and connects to the electricity markets.

E2M services include:

- Enhancing the market value of renewable energy production,
- Marketing and management of flexibility.



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AGREGIO is an **energy aggregator.** Its connected virtual power plant manages its clients' energy production, consumption and storage facilities in real time to optimise them and react to changes in market prices, changes in availability and weather forecasts.

It thus provides renewable electricity producers customised solutions to optimise and sell their production on the markets, while securing their income over the long term.

The subsidiary's offering also targets industrial and tertiary consumers who are willing to reduce or switch their consumption in return for payment, depending on the needs of the electricity system.



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EDF STORE & FORECAST develops and markets intelligent solutions for renewable energies in order to optimise a local electricity system through energy forecasting and storage.

It offers 4 products:

- EMS (Energy Management System) for intelligent control of local electricity networks,
- Storage solution (Storbox),
- Solution for forecasting renewable energy production and electricity consumption,
- Technical and economic analysis of storage systems.









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SECURKEYS offers two types of service:

- Securkeys: a secure and anonymous service for the safekeeping and delivery of duplicate keys anywhere in France within an hour,
- Securclés: a secure digital service for reproducing keys and badges from a photo, for a fee of between €10 and €40 per key depending on the model.







EXAION is a specialist in **blockchain and 3D cloud.** It is a provider of 100% secure, sovereign and low-carbon Web3 infrastructures and solutions.

It has 3 offerings:

- ExaNode: setting up and deployment of Blockchain use cases on a range of protocols,
- ExaStudio: hosting of work environments for a wide range of businesses (creative, industry, etc.),
- ExaDC: creation of decentralised data centres, close to the users.







ALGAR (formerly Permettez moi de construire) offers an online service to **facilitate obtaining planning permission** for individuals and businesses who have renovation, construction or development projects requiring planning permission.

The offering includes:

- Analysis of planning regulations,
- Preparation of the application,
- Printing and sending the application to the local authorities,
- Monitoring the progress of the application via a dedicated dashboard.





CArchipels

ARCHIPELS certifies documents, data and information about individuals or companies on the **blockchain** to verify their authenticity. It is developing the standard for decentralised, secure and verified identity in compliance with European standards.

It offers 3 services:

- Document verification,
- Document security,
- Document certification.



