

JUNE
2022

TIME FOR TRANSITION

HIGHLIGHTS - INSIGHTS - SHARING ON THE ECOLOGICAL TRANSITION

ECOLOGICAL TRANSITION: ACCELERATING SOLUTIONS DEPLOYEMENT

EDITORIAL

LIONEL LE MAUX

PRESIDENT OF TRANSITION FORUM ASSOCIATION

INTERVIEW

KADRI SIMSON

EUROPEAN COMMISSIONER FOR ENERGY

HERE & NOW

OUR MEMBERS ARE MOBILIZING TO DEPLOY SOLUTIONS, TO FINANCE PROJECTS AND TO ROLL-OUT OPERATING METHODS TO ACHIEVE CARBON NEUTRALITY

WINNERS OF THE 2022 CEI

BOIS BOCAGE ENERGIE, BOUCL, ECO IN PACK, H2OPE, VERTUO, DRM DE POLYNÉSIE FRANÇAISE

WHAT'S NEXT?

THE CARNOT IFPEN TRANSPORTS ENERGIE WORKS ON ALL THE PATHS OF DECARBONISED MOBILITY

SOLUTIONS

THE WINNERS OF THE CEI TRANSITION FORUM 2021... ONE YEAR LATER

3 QUESTIONS TO

SYLVIE JÉHANNO

PRESIDENT AND CEO OF DALKIA AND CO-PRESIDENT OF THE CSF NSE

INITIATIVES

FRÉDÉRIC DE DINECHIN

CO-FOUNDER OF ALUMNI FOR THE PLANET

PUBLICATIONS

RECENT PUBLICATIONS

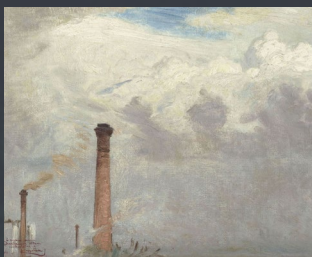
ASSOCIATION

THE TRANSITION FORUM WILL WELCOME YOU ON SEPTEMBER 29TH & 30TH 2022 AT THE PALAIS DE LA MÉDITERRANÉE IN NICE

TRANSITION
FORUM

ECOLOGICAL TRANSITION : ACCELERATING SOLUTIONS DEPLOYEMENT

COVER



Chimneys

Frantisek Kupka

Date: 1906

Medium: Oil on canvas

TRANSITION-FORUM.ORG

TIME FOR TRANSITION

HIGHLIGHTS - INSIGHTS - SHARING ON THE ECOLOGICAL TRANSITION**JUNE
2022**

THE TRANSITION FORUM ASSOCIATION BRINGS TOGETHER AN INTERNATIONAL COMMUNITY OF PRIVATE AND PUBLIC DECISION MAKERS WHO ACT TOGETHER TO DEPLOY AMBITIOUS ECOLOGICAL TRANSITION PROJECTS.

SUMMARY

EDITORIAL	5
INTERVIEW	6-7
HERE & NOW	8-9
WINNERS OF THE 2022 CEI	10-11
WHAT'S NEXT?	12-13
SOLUTIONS	14-15
3 QUESTIONS TO	16-18
INITIATIVES	19
PUBLICATIONS	20
ASSOCIATION	21

AN EVENT BY

MÉTROPOLE
NICE CÔTE D'AZUR**LA TRIBUNE**
PARTAGEONS L'ÉCONOMIE**TRANSITION**
FORUM

5th EDITION



TRANSITION FORUM

COMMITTED TO AN ECOLOGICAL TRANSITION

Time to accelerate

29th AND 30th SEPTEMBER 2022**Palais de la méditerranée - Nice****>> JOIN THE ASSOCIATION**

Join an international community of players committed to accelerating the ecological transition.

www.transition-forum.org

*Join us*

EDITORIAL

TIME TO ACCELERATE

The current events in Ukraine continues to have an impact on the entire world. In terms of energy, a redistribution of the geopolitics of the global energy-sector is looming, with many consequences, some of which are still not very visible. Two certainties seem clear.

First, this redistribution will be sustainable because it has highlighted the many weaknesses of the economic and energy systems of different countries or on the contrary strengthened the positions of some others. This will remain prominent in future decision-making and will be part of the definition of future energy policies in different countries. The other certainty is that this rise and, more importantly, the very high volatility in energy prices is a factor in accelerating decisions to invest in renewable energy productive assets: investing in non-fossil energy sources for which we expect a cost of use over 10 or 20 years has never been more relevant.

Beyond helping to reduce the carbon footprint (which is at the heart of our concerns), these investments will henceforth ensure an energy independence that has (re) become a major priority of our economies with a view to sovereignty. Basically, this increase is the price factor that was probably necessary for public and private decision-makers to accelerate their commitment to finance the ecological transition.



While it was already chosen at the end of 2021, the theme Time to accelerate! of our event this year (next 28 and 29 September in Nice) is only strengthened and the idea of reconciliation of value and price, at the very heart of reducing the carbon footprint, now seems possible. To be convinced, you can only note the strong and recent commitment of the European Parliament - on 22 June in Brussels - in favor of the proposed carbon tax at its borders.

In this regard, and for the Ecological Transition, there will no doubt be a before and an after this first half of 2022: Time to accelerate!

LIONEL LE MAUX

President of Transition Forum Association
and President of Aqua Asset Management



INTERVIEW



Kadri SIMSON

European Commissioner for Energy

THE GREEN TRANSITION IS FULLY ALIGNED WITH OUR ENERGY SECURITY GOALS

HOW DO YOU SEE THE ENERGY TRANSITION IN THE CURRENT GEOPOLITICAL AND ECONOMIC CONTEXT?

The European Green Deal and the ambition to become climate-neutral by 2050 has been a central priority since this Commission took office in December 2019. And this has not changed.

Last year, we tabled proposals to reduce our greenhouse gas emissions by 55% by the end of the decade.

As well as raising our 2030 targets for renewable energy and energy efficiency, these initiatives took a very broad approach, including setting up a carbon border adjustment mechanism, looking at energy taxation and extending the EU emissions trading system. This priority was not affected by Covid.

On the contrary, in response to the Covid pandemic and the impact that the restrictions had on the economy, the Commission established the Recovery and Resilience Facility to boost our recovery.

This includes providing finance for the Member States to invest in areas such as renewable energy and building renovation. In response to the surge in energy prices – first driven by the acceleration of demand for gas in the global economy – the Commission published a toolbox of measures which Member States could use in order to

limit the impact of higher prices – in particular for the most vulnerable.

This also underlined the role of renewables and energy efficiency. Renewables are by now in many places the cheapest source of energy and being more efficient and saving helps to significantly cut energy bills for both people and businesses.

And now, in response to the Russian aggression in Ukraine, our REPowerEU initiative will raise the ambition we have for producing renewable energy and frontloading investment in energy efficiency even further – as well as diversifying our energy away from Russian imports.

THE COMMISSION PRESENTED NEW PLANS TO ACCELERATE THE GREEN TRANSITION IN MID-MAY. CAN YOU TELL US MORE?

The REPowerEU initiative that the Commission published on 18 May is our response to the Russian invasion of Ukraine, and our commitment to reduce our energy dependence on fossil fuel imports from Russia.

The green transition is at the heart of this plan, as we envisage most of this energy to be replaced by renewables and energy efficiency and savings.

In 2021, the EU imported more than 40% of its total gas consumption, 27% of oil imports and 46% of coal imports from Russia.

For oil and coal, the EU has

already introduced sanctions which will severely limit imports by the end of the year. For gas, which is the most difficult to replace, the deliveries from Russia have also considerably decreased. They are currently under 20% of the EU gas consumption.

That said, some of the fossil fuel that we have used to import from Russia will temporarily need to be substituted by supplies from other sources and work to diversify our supplies is progressing at full speed.

Most recently, last week, we signed a trilateral agreement with Israel and Egypt that would increase the delivery of gas from Israel and the rest of the region to the EU, using Egypt's LNG infrastructure.

Ultimately, our aim is to reduce not only our dependence on Russian fossil fuels, but fossil fuels in general. Renewable energy is home-grown and therefore comes with much fewer security of supply risks.

The green transition is therefore fully aligned with our energy security goals.

IN ADDITION TO THE DIVERSIFICATION OF GAS SUPPLY (E.G., BIOMETHANE, HYDROGEN), THE REPOWEREU ACTION PLAN IS BASED ON AN ACCELERATED REDUCTION OF FOSSIL FUEL USE WHICH MAINLY RELIES ON AN INCREASE IN ENERGY EFFICIENCY, RENEWABLES AND ELECTRIFICATION. DO THE TARGETS GO EVEN

FURTHER THAN THE FITFOR55 ONES? WHICH IMPACTS DO YOU EXPECT, ESPECIALLY IN TERMS OF INDUSTRY DECARBONISATION?

The Commission is proposing to increase the share of renewable energy in our energy mix to 45% by 2030, instead of 40% tabled under the Fit for 55 proposals.

The current target, agreed in 2018, is 32%. To help to achieve this proposed target, we presented several initiatives in the REPowerEU package – a specific strategy to boost solar energy deployment, moves to accelerate the production and facilitate imports of renewable hydrogen, and an ambition to double the production of biomethane by 2030.

A central element to accelerating renewables deployment is to speed up the permitting procedures. Right now we are looking at almost a decade for some offshore wind projects to get off the ground.

With our new proposal, renewable energy projects are considered as being in the overriding public interest. In addition, Member States can designate 'go-to' areas. These are places most suited for developing renewable installations and where the environmental risks are known to be lower. There, permitting can be done much faster than today.

On energy efficiency, we are also looking to raise the targets. Instead of achieving consumption figures in 2030

that are 9% lower than the amounts projected, as set out in the Fit for 55 proposals, the new proposal is aiming for 13%. We also adopted the EU Save Energy Communication to encourage quick energy savings to reduce the consumption of oil and gas.

These proposals will now be discussed by the Member States and the European Parliament.

MORE BROADLY, WHAT MESSAGE WOULD YOU LIKE TO SEND TO THE MEMBERS OF THE TRANSITION FORUM COMMUNITY (DECISION-MAKERS, ENTREPRENEURS, INVESTORS, ETC.)?

As I mentioned above, recent developments – the Russian invasion of Ukraine, volatile energy prices and the impact of Covid – have made the clean energy transition more important than ever. It is going to happen.

There are enormous opportunities out there for investors and entrepreneurs. You will be on the frontlines of these changes and able to push for and benefit from the transformation. I wish you best of luck with this!

TRANSITION FORUM

HERE & NOW

Our members are **mobilizing** to deploy **solutions**, to finance projects and to roll-out operating methods to achieve **carbon neutrality**.



PRODUCTION & CONSUMPTION

RENEWABLE HYDROGEN FOR ENERGY TRANSITION

pHYnix

The development of the hydrogen industry is a key issue in the energy transition. However, nowadays, 95% of the world's hydrogen is still produced from fossil resources (natural gas, oil, coal). The European Commission has included the development of renewable or low carbon hydrogen as a priority for achieving its decarbonation objectives.



© PHYNIX

The young European company pHYnix, a subsidiary of the French company EverWatt, develops, builds and operates renewable hydrogen production plants.

It also assists its clients in their energy transition and the decarbonisation of their activities through the migration to green hydrogen, mostly in the mobility and logistics sectors.

As the first independent producer, pHYnix is helping to accelerate the adoption of green hydrogen in

Europe, with sites in France, Spain, Portugal, or Germany, among others.

Its project VITALE consists in the construction of a production plant at Alcázar de San Juan site in Spain.

With a capacity of 10 MW, Vitale is one of the largest electrolysis projects in Europe under construction.

The plant is expected to produce 1450 tonnes per year and will supply the emission-free energy carrier from the end of 2023.



DECARBONISING TRANSPORTS VIA HYDROGEN

SAFRA

Hydrogen represents an alternative and complementary solution to electric mobility. According to the Ministry of Ecological Transition, more than 900,000 tonnes of hydrogen are produced each year in France.



© SAFRA

Specialising in passenger transport equipment, Safra, as a company, is committed to the energy transition and to the decarbonisation of public transport.

In particular, it is the national leader in hydrogen solutions for heavy mobility: it marketed the first hydrogen bus manufactured in France, and produced the first hydrogen retrofit kits for diesel buses.

In 2022, Safra launched a new hydrogen bus called Hycity. This low-carbon vehicle is part of the company's mission to support transport authorities in their efforts to move away from fossil fuels.

The Hycity benefits from the experience feedback of its predecessor, the Businova, launched in 2018 and already deployed in several French urban areas. It integrates shared components and serialised equipment and has benefited from a complete overhaul of its interior and exterior design.

VOLTALIS

OPTIMISING ELECTRICITY CONSUMPTION FOR THE CONSTRUCTION INDUSTRY



© VOLTALIS



According to the Ministry of Energy Transition, the construction industry represents 44% of the energy consumed in France.

Each year, this sector emits more than 123 million tons of CO₂, which places it at the heart of the ecological and energy transition.

Voltalis, a Meridiam group company, is Europe's leading operator in management of electric flexibility, and a pioneer in load shedding.

It offers an innovative energy efficiency solution to optimise the electricity consumption of residential and commercial buildings.

The system is based on individual smart boxes which dynamically control the actual demand of users, and reduce their electricity consumption, for the benefit of the optimisation of the electrical system

and the ecological transition. Voltalis' technology thus contributes to the balancing of the energy network, and helps to support the development of renewable energies. It also generates savings on users' electricity bills.

This energy-saving solution, which is entirely free of charge for users, has already been deployed in more than 100,000 homes in France.

Voltalis' ambition is to equip one million homes in Europe by 2024, half of them in France.

TRANSITION FORUM

WINNERS OF THE 2022 CEI

Launched in January 2021 by the association Transition Forum, this CEI aims to identify innovative ecological transition projects, resulting from public-private cooperation, and to promote them to a community of decision-makers and investors in France and abroad. This 2022 edition of the AMI was supported by the Banque de Territoires, La Tribune and Aqua Asset Management. Here are the six winning projects

© BOIS BOCAGE ENERGIE



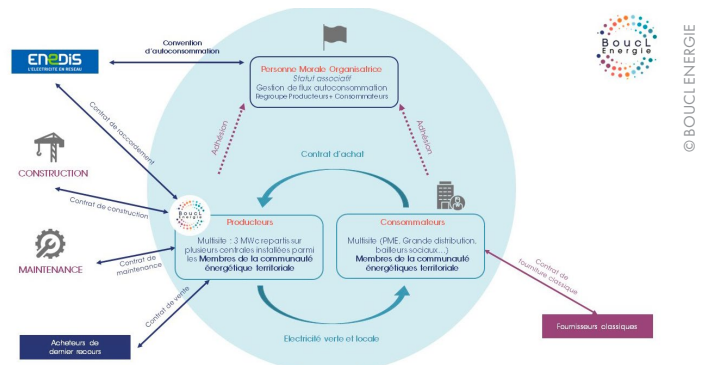
8

BOIS BOCAGE ENERGIE

Sustainable management of hedges

PRODUCTION & CONSUMPTION

Bois Bocage Energie is a cooperative society of collective interest that works to ensure the sustainable existence of an agricultural world covered by hedges. To this end, its activities are currently based on three pillars: technical and scientific support for hedge managers (intellectual and material services), trading and logistics of marketable products from hedges, and the development of societal uses for products from hedges.



8

BOUCL

Carbon-free electricity self-sufficient community

PRODUCTION & CONSUMPTION

Boucl Energie is developing territorial communities of shared energy on the scale of neighbourhoods or areas of economic activity, aimed at organising the self-consumption of photovoltaic electricity. It is currently developing the largest collective self-consumption project in France in the Grenoble Alpes Métropole area.



8 **ECO IN PACK**
The Clean Bottle

PRODUCTION & CONSUMPTION

Founded by two engineers, the startup Eco In Pack offers eco-design solutions for packaging with strong environmental benefits, particularly through the deployment of the circular economy. The Clean Bottle is a solution for the reuse of glass bottles, through the washing of bottles, whatever their shape. Eco In Pack is also developing an innovative bottle collection service that minimises transport and simplifies flows for customers and regions.



HOUSING
VERTUO
Economical and sustainable urban greening

The startup Vertuo offers a patented ecosystem of the same name, which reproduces the water table in the city and thus enables sustainable greening without watering (rainwater collection) and with 80% savings in maintenance. This low-tech solution thus makes it possible to bring nature back into the city without increasing the operating costs of the operators.



8 **H2OPE**
The River Whale

PRODUCTION & CONSUMPTION

Startup founded in 2019, H2OPE offers an innovative solution to capture river waste: the River Whale, a collector specifically designed for rivers. H2OPE takes care of the deployment of the collectors, the collection of the waste, the sorting and weighing of the waste, and redirects it to the most suitable recycling and reuse channels.



PRESERVE
DRM DE POLYNÉSIE FRANÇAISE
Biomarine Zone project

The French Polynesia Marine Resources Directorate (DRM) manages marine resources, spaces and related exploitation activities in a sustainable manner. The Biomarine zone project is a project to develop aquaculture infrastructures on a 33-hectare area. The long-term objective is to develop solutions based on nature, relying among other things on bioremediation techniques, which are recent in the tropics.

TRANSITION FORUM

WHAT'S NEXT?

THE CARNOT IFPEN TRANSPORTS ENERGIE WORKS ON ALL THE PATHS OF DECARBONISED MOBILITY

IFPEN Transports Energy was labelled as a Carnot Institute in 2006. Its research works focuses on three main areas: electrified mobility, disconnected mobility and the transformation of thermal engines.

Thus, it is very involved in the strategy to accelerate the digitalisation and decarbonisation of mobility.

In the automotive sector, there is a process of moving from all thermal to all electric. At the same time, other mobility sectors are developing (bicycles, scooters...). "It is therefore the entire industry for individual mobility that is in the process of changing", underlines Gaëtan Monnier, director of the Carnot IFPEN Transports Energy.

However, alongside this, it is necessary to find solutions for transporting goods. Here, the electric solution has two constraints, depending on use: the charging time, and the cost and size of the battery.

An alternative is thus to improve traditional engines and fuels that are less and less carbonated within fossil fuels (NGV) or to

switch to other solutions such as biofuels or synthetic fuels.

DECARBONISING FUEL

Beyond electrification (small vehicles or short journeys), one of the paths currently being pushed is the decarbonisation of fuel rather than radically change the propulsion system.

However, biofuels and synthetic fuels should not raise issues regarding competition between uses. What is more, the hydrogen solution for mobility only makes sense if the hydrogen used is decarbonised.

Therefore, "for the automobile, we are converging towards a quasi-unique electric solution, supported by digital tools that

make it possible to reduce the environmental impact even further. But for road transportation, there is no unique solution: everything will depend on the uses”.

ADAPTING THE HEAVY-DUTY ENGINES TO HYDROGEN

In addition to the hydrogen fuel cell paired with an electric motor, IFPEN TE is working on the combustion engine with hydrogen used as fuel.

This has been made possible thanks to new turbocharged engine technologies and direct injection systems, but this means reducing the risks nitrogen oxides (NOx) emission linked to combustion.

By using excess air, IFPEN is able to reduce NOx emissions by a factor of 100, in comparison to diesel engines.

A project (MH8) is being carried out on a heavy-duty vehicle with Renault Trucks: the engine is running on the test bench in Solaize, and will be fitted to a vehicle starting 2023.

Some parts are being adapted or changed because hydrogen tends to weaken certain metals.

Another project (HyMot), carried out with Bosch, concerns a utility vehicle: it aims to demonstrate that its decarbonisation is possible via the conversion of its thermic engine to hydrogen, as an alternative to an electrification paired with a hydrogen fuel cell.

WHAT IS THE OUTCOME OF THE CARNAUTO SECTOR ACTION?

IFPEN Transports Energy participated with eight other Carnot Institutes in the Carnauto sector action from 2015 to 2021.

The objective was to “develop research in the small structures

of the automotive sector (VSEs, SMEs, medium-sized businesses) which are undergoing a major upheaval”, specifies Gaëtan Monnier. In 2015, diesel accounted for 60% of sales, but today, for less than 20%.

The players needed help to get started or to transform and/or restructure. The eight Carnot made their skills and innovative resources available and grouped their offers on a single platform.

In the end, €50M of contractual research were generated, including 50% with SMEs. “We helped our co-contractors to develop and to move towards other markets”, adds M. Monnier.

Read the full article on our website transition-forum.org



TRANSITION FORUM

SOLUTIONS

The winners of the CEI Transition Forum 2021... one year later



HOUSING

SERENYSUN: ACCELERATING THE ENERGY TRANSITION**LAUNCH OF THE SERENYCALAS, AN ENERGY SUFFICIENT COMMUNITY**

According to the Ministry of Ecological Transition, renewable energies represented 19.1% of gross final energy consumption in France in 2020. The objective is to reach 33% of energy produced by renewable resources by 2030.

As a start-up company specialised in short energy circuits, SerenySun contributes to accelerate the energy transition, thanks to its renewable energy community concept. It has the ambition of developing more than 20 such communities by 2025; and it has just raised nearly 1 million euros to serve its ambitions.



© PETILLOT

The SerenyCalas located in Cabriès-Calas (PACA region), is an energy sufficient community that started in February 2022 which already numbers 50 participants. It will eventually be equipped with 4 photovoltaic power plants and will supply green energy to 2 school groups and more than 140 homes and businesses.



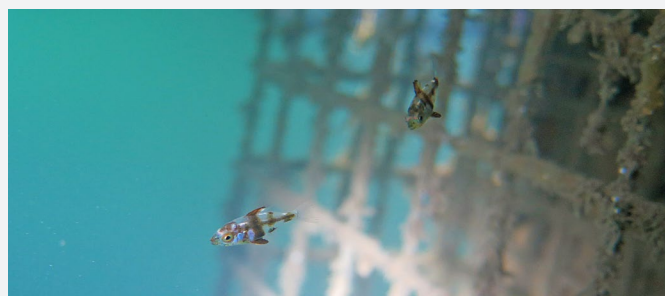
PRESERVE

ECOCEAN: ECOLOGICAL RESTORATION OF AQUATIC ENVIRONMENTS**ECOCEAN'S BIOHUTS IN FULL SWING**

Since the 1950s, the number of endangered marine species has been increasing, and the natural capital of coastal resources has been decreasing.

Specialising in the ecological restoration of aquatic environments, the company Ecocean fights against the reduction of coastal habitats.

Among other things, it is developing the Biohut range of artificial habitats which restore nursery functions to areas damaged during the construction of facilities, thus protecting post-larvae and young fishes from predation.



© A-FREZEL

Ecocean is growing at 10% per year and more than 4500 Biohuts are already installed in 50 European ports. These installations have enabled to identify nearly 300 animal species on the French Mediterranean coast, proof that the biodiversity is indeed present in the ports and that we must continue to protect it.



LE PRINTEMPS DES TERRES: PROMOTING ECOLOGICAL AND AGRICULTURAL TRANSITION OF TERRITORIES

FOOD

THE ACQUISITION OF THE MAGNIN WOOD BY LE PRINTEMPS DES TERRES

Agricultural and forestry areas are at the heart of the ecological transition, particularly regarding the preservation of biodiversity and the fight against global warming.

Le Printemps des Terres, a mission-driven company whose objective is to contribute to the ecological transition of agriculture and the territories, acquires land in France to finance and implement actions that promote this transition.



© LE PRINTEMPS DES TERRES

Thus, in September 2021, the company acquired the Magnin woods (in the Jura), a particularly degraded forest, in order to carry out a major renovation project. It should eventually adapt the forest to climate change and allow for the sustainable production of wood, the restoration of biodiversity and carbon sequestration.



ELECTRIC 55 CHARGING: PROMOTING ELECTRIC MOBILITY

MOBILITY

DEPLOYMENT OF NETWORKS OF ELECTRIC 55 CHARGING STATIONS

The ACEA estimates that 6.8 million of public electric charging stations are needed by 2030 to meet the European target for reducing CO₂ emissions from this sector. However, at the beginning of 2022, only 330,000 are in service in Europe. As a private operator of charging stations for electric vehicles, Electric 55 Charging offers an alternative to existing systems: its interoperability guarantees a service accessible to all, and its operator-investor model makes it possible to offer a free service to local authorities. It contributes to the development of the network of charging stations



© COLASTUDIO

in France and in Europe: E55C is present in 35 French cities and supervises more than 2 000 charging points in Europe. Since 2021, E55C has also been working on the Murphy project, financed by BPI France and the South region, a supervision system which will optimize the management of the network.



LYSPACKAGING: FIGHTING AGAINST PLASTIC POLLUTION

PRODUCTION & CONSUMPTION

DEVELOPMENT OF LYSPACKAGING'S BIODEGRADABLE CONTAINERS

According to the OECD, only 9% of plastic waste produced worldwide is actually recycled.

Lyspackaging offers an innovative alternative to traditional plastic, made of organic materials (co-products of flax, hemp and reed) and produces biodegradable and compostable containers and products.

Founded in 2015, the company now has 21 employees and continues to grow. On a national level, Lyspackaging has



© LYSPACKAGING

designed a range to conquer the bulk market by offering containers adapted to this sector. Internationally, in order to limit its GHG emissions and to avoid shipping empty containers, it has set up a production unit in Mauritius at the end of 2021. A new unit is also due to open in August in Guadeloupe. The company achieved a turnover of €2.8 million in 2021.

3 QUESTIONS TO:

MADAME SYLVIE JÉHANNO,

PRESIDENT AND CEO OF DALKIA AND CO-PRESIDENT OF THE CSF NSE

"Nowadays, it is therefore a logic of economic performance that is orchestrated around decarbonisation"



Sylvie Jéhanno

PRESIDENT AND CEO OF DALKIA &
CO-PRESIDENT OF THE CSF NSE

LAST NOVEMBER, THE "NEW ENERGY SYSTEMS" STRATEGIC COMMITTEE (IN FRENCH, CSF NSE) SIGNED A NEW CONTRACT FOR THE PERIOD 2021-2023. COULD YOU GIVE US ITS OVERALL OBJECTIVE REGARDING THE CHALLENGES OF ENERGY TRANSITION, REINDUSTRIALISATION AND FIGHT AGAINST ENERGY DEPENDENCY?

The first contract was signed in 2019 by the sector's companies and the State, gathered in the Strategic Committee "New Energy Systems".

It focused on the priorities and means necessary to meet the various challenges (industrial, social, economic) of the energy transition.

The second contract, which we signed in November for 2021-2023, aims to accelerate the energy transition and to stimulate the industrialisation of France on these subjects, the idea being, for example, not to reproduce the counter-reference of PV panels manufactured mostly in China.

This new contract covers four main areas. The first one concerns renewable and decarbonised energies. We want to focus on innovation and new technologies, in particular in offshore wind, photovoltaics and hydrogen, as well as in biogas or other renewable heat energies in the territories.

The second axis focuses on the major subject of energy efficiency, through works on "consuming less in buildings" and on decarbonising industry. The renewable or recovered heat plays an important role here.

These first two areas (RE and energy efficiency) are the ones we are focusing on the most, because to decarbonise it is paramount to consume low carbon and to consume less.

As a matter of fact, we are currently working on a project for a decarbonisation platform that will bring together solution-providers and solution-seekers: this will be a concrete tool which will help to stimulate and facilitate the supply-demand meeting.

The third major area of the new NSE contract is to encourage the creation of companies and jobs in the energy transition field. To stimulate this reindustrialisation as close as possible in each territory, we are thinking about developing the local content of calls for tender.

This should enable us to increase the added value of our regional industrial network.

Last but not least, the fourth axis: we are also striving on transversal dynamics such as job creation based upon skills, with a strong emphasis on training and apprenticeship.

For example, via the University of Battery project, we want to bring out the skills in this new field.

Another major area that we support is the stimulation of innovation: numerous well-established technologies already exist, but for the ones not yet developed, it is necessary to scale up.

Furthermore, in addition to developing the whole range of low-carbon energies so that they become competitive, we will ensure that the energy transition is acceptable. In this area, the support of public authorities is also crucial.

FRANCE IS PARTICULARLY COMMITTED TO THE DECARBONATION OF INDUSTRY (NEW LOW-CARBON STRATEGY, FRANCE RELANCE, ACCELERATION STRATEGY WITH €610M IN ADDITION TO THE €5M OF FRANCE 2030, PIA4, FONDS CHALEUR...). HOW DOES DECARBONISATION CONSTITUTE A LEVER FOR COMPETITIVENESS AND INDUSTRIAL PERFORMANCE?

Until recently, some manufacturers saw decarbonisation only in terms of costs and constraints. But awareness is now growing. In industry, heat has a fundamental role: it contributes to producing steam (for processes), heating and hot water.

But for all these applications, only 6% is produced from renewable energy. Beyond the costs, manufacturers now see it as a way to increase their competitiveness and their own performance, and thus to meet the expectations of their customers and shareholders.

We can feel it in among our customers: they realise that decarbonisation has become a must. Everyone is aware that we need to accelerate. And the movement is creating value.

In concrete terms, in industry, decarbonisation means more energy efficiency, more electrification and the integration of more RE: biomass (wood energy and recycled wood or "B-wood"), biogas, connection to a heating network, but also boiler rooms supplied with solid recovered fuels (SRF), which, in my opinion, are not yet sufficiently taken into account in terms of avoided CO₂.

Decarbonising industry also involved recovering waste energy, heat that was previously lost and that can be reused on the same site or, through an urban heating network, on other sites (housing, swimming pools, municipal buildings...).

For example, one Dalkia's most recent project is the one which recovers heat from the Constellium site in Issoire, France, and supplies heat to numerous buildings in the city (barracks, municipal buildings, houses...) while providing real economic value to the manufacturer involved (aluminium smelter).

Nowadays, it is therefore a logic of economic performance that is orchestrated around decarbonisation. Calls for tender and the choice of materials and equipment are made locally or territorially.

All of this I also working because the public authorities are supporting the companies: there is a real will to accelerate.

This can be seen in the winners of the France Relance calls for project, both in low-carbon heat and in energy efficiency.

For the manufacturer, the project provides an economically viable solution: low-carbon energy, reduced CO₂ emissions.

And as it consumes less, it spends less, which is beneficial in terms of efficiency and sovereignty.

We will succeed in changing behaviours. And in this perspective, we are developing digital solutions, whether they be large connected installations or aids for change deployed in private homes.

AS A SPECIALIST IN ENERGY SERVICES, DALKIA IS AT THE HEART OF THE DECARBONISATION OFFER FOR LOCAL AUTHORITIES, HOUSING, THE SERVICE SECTOR AND INDUSTRY. APART FROM CONSTELLIUM, WHAT ARE YOUR MOST EMBLEMATIC RECENT PROJECTS WITH MANUFACTURERS?

At Dalkia, we work in two main areas: the development of local renewable energy, and energy savings.

To this day, we operate more than 330 heating and cooling networks, provide heat to 2

million collective housings, and serve more than 4,000 hospital facilities, 25,000 service sector sites and nearly 2,500 industrial production sites and workshops.

Let us take the example of our support for Arcelor Mittal in Dunkirk: the blast furnaces are used to heat the city hall, the Paul Asséman Olympic swimming pool, a university, health care institutions, shopping malls and thousands of houses.

At Dalkia, renewable and recovered energy sources account for 58% of the energy consumed in the networks.

Ademe even estimates that there is still 16 TWh of waste heat to be recovered near the networks.

All of this can structure the location of the industrialists who come to set up.

These approaches are based on the willingness of local players, which is particularly central here: it involves discussing with the industrialists and the elected representatives, and convincing all the buildings to connect.

Nowadays, we have many projects. We really want to focus on our customers who want to decarbonise buildings, industry or networks. And for us, one of the major challenges is employment.

The key is to encourage young people to enter these energy transition professions, which

are really going to be growth professions.

These are technical jobs which are unfortunately often avoided, but by developing apprenticeship, by working on feminisation and inclusion, in a nutshell by adapting these jobs, we will help making them more attractive.

In the end, with regard to the energy transition, we know that society is capable of accelerating, the technologies are there.

The complicated issue of climate change is that it is global. But everyone acts at their own level: major international agreements, national policies, territorial actions and the role of economic players.

It is each of us at our own level that contributes to an energy transition which creates value and jobs for the whole economy.

TRANSITION FORUM

INITIATIVES

Everywhere in the territories, initiatives and networks bringing together young people committed to the transition to a low-carbon future are being set up.

ALUMNI FOR THE PLANET: THE NETWORK SUPPORTING ACTION TOWARDS TRANSITION

How can we reach out to those in positions of responsibility who can act from within for the climate and the environment?

To answer this question, seven professionals from different backgrounds decided to create Alumni for the Planet at the beginning of 2020, in the middle of the Covid lockdown.

The apolitical and non-militant association constitutes a network of higher education graduates who are active in these fields.

By mid-2022, over 4000 alumni have been already registered on its website, currently supported by 130 alumni associations.

As Frédéric de Dinechin, one of the seven co-founders, explains, Alumni for the Planet offers three types of services: information on climate and environmental issues for organisations, validated by the experts of its scientific council; a connected service which enables people to get in touch with others from the same company or city because “when

you are no longer alone, you are more motivated and less afraid”.

Last but not least, the association organises various webinars.

The “*inspire to take action*” webinars, open to all, feature



FRÉDÉRIC DE DINECHIN

Co-founder of Alumni for the Planet

an expert on a specific climate/environment topic related to the Company, and a witness who is making things happen from within his or her company.

And the webinars “*supporting action over time*”, which are more specifically aimed at alumni, are led by coaches and change advisors.

As of today, Alumni for the Planet is opening up internationally where, until now, nothing likely was offered.

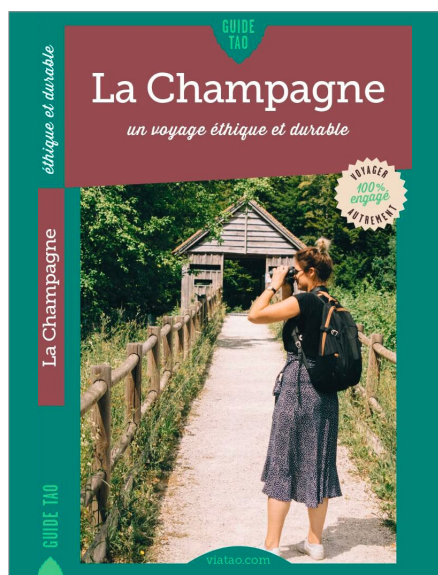
Links have been established with HEC Montréal Alumni, and a framework agreement was signed mid-May with the University Agency of the Francophonie.

For 2022, the association intends to massively deploy its model and to work on measuring its impact to target its actions even more.

At a time when student actions and declarations are multiplying (e.g., “*bifurcators*”, “*deserters*” ...), Alumni for the Planet, which is building partnership with numerous players, notably “*Pour un réveil écologique*” and “*Les Collectifs*”, is working towards an alliance rather than a rupture. “*We are convinced that we must go further, and faster, to reach sobriety*”.

TRANSITION FORUM

RECENT PUBLICATIONS



GUIDE TAO : LA CHAMPAGNE
MATHIEU MOUILLET, 2022,
VIATAO EDITIONS

Produced in collaboration with the Grand-Est Regional Tourism Agency, the Aube en Champagne Departmental Tourism Agency, the Marne Tourist Development Agency, the Departmental House Tourism of Haute-Marne, this tourist guide presents more than 300 places to travel ethically and responsibly in the Champagne region (activities, accommodation, restaurants...).

<https://www.guidestao.com/products/guide-de-voyage-la-champagne-guide-tao-pour-voyager-autrement>



PLATFORM FOR A VIRTUOUS
AGRIVOLTAICS
LA PLATEFORME VERTE, 2021

This best practice guide to agrivoltaics written by La Plateforme Verte presents 15 recommendations for agrivoltaic projects that preserve agricultural production conditions. It is the result of a consultation with the territories to determine the best way to produce solar energy on agricultural land without reducing the area used.

<https://www.laplateformeverte.org/files/ugd/b394e9d5031c3d43dc4329896304bddcfcd311.pdf>



OBSERVATOIRE DU VERDISSEMENT
DE L'ÉCONOMIE, 11 DIRIGEANTS
TÉMOIGNENT. METRON, 2022

How can we make digital technology a lever for decarbonising our economy and our energy? In this 2nd edition, several French and European leaders share their vision and their solutions to design together the answer to the great challenges of the future, and conciliate new technologies and the fight against climate change. These opinion leaders question the notion of the ecological balance of data and open the way to inspire economic players with the capacity to act.

<https://www.metron.energy/fr/observatoire-verdissement-economie-2022/>

ASSOCIATION

SAVE THE DATE

The TRANSITION FORUM will welcome you on **September 29 & 30 2022** at the Palais de la Méditerranée in Nice, on the theme: **TIME TO ACCELERATE**.



Launched in 2018 by **Aqua Asset management**, the TRANSITION FORUM brings together an international community of actors in the field ecological transition: public decision-makers, business leaders, investors, researchers and civil society representatives.

They engage in inspiring and high-level exchange and find unique opportunities for partnerships to accelerate the transition to economic models that reconcile profitability and respect for the environment.

The TRANSITION FORUM will welcome you on September 30 and October 1st, 2021 in the Palais de la Méditerranée in the city of Nice, France. This year, in times of recovery plans and the upcoming Green Deal, the 4th edition is organized in partnership with La Tribune and the city of Nice and will be placed under the theme of cooperation dedicated to the deployment of the ecological transition.

INFORMATIONS & REGISTRATIONS: <https://transition-forum.org>

Acknowledgments

Our sincere thanks to all the members and partners of the Transition Forum association, territories, companies, investors, R&D for their contributions to the animation of the community.

We would also like to thank the 55 entrepreneurs who responded to the call for expressions of interest in the first half of 2021.

Editorial committee:

Guillaume Ayné, Hélène Bouillon-Duparc,
Catherine Le Maux, Rodolphe Garcia, Fanny Bornarel
Graphic design: Christophe Bourgeois - LeBDC.fr

If you want to promote your ecological transition projects to international decision-makers and join an active community committed to a low-carbon future, write to us at: contact@transition-forum.org



TIME FOR TRANSITION

Transition Forum Association
6, square de l'Opéra Louis Jouvet
75009 Paris
contact@transition-forum.org