

TRENDS SHAKER

Newsletter #50

The monthly newsletter for socio-cultural trends

INTERNATIONAL - page 2

ENVIRONMENT - page 3

START-UP OF THE MONTH - page 4

TECH / INNOVATIONS - page 4

BRANDS - page 5

HR x EDUCATION - page 6

HEALTHCARE - page 7

SOCIETY - page 8

DID YOU KNOW? - page 10

IN THE SPOTLIGHT

Industrial start-ups and SMEs: the new driving force of French industry

After the digital wave of the 2010s, now is the **time for industrial start-ups and SMEs**. Or the coming together of technology and manufacturing. **The French government has launched a 5-year support plan with a budget of €2.3 billion** in support of these **innovative companies** that develop “**deeptech**” and “**greentech**” projects with a significant industrial component. As part of the **France 2030**, investment plan announced in 2021 to transform the key sectors of our economy in the long term, the **goal of this support plan for industrial start-ups and SMEs is to create 100 new industrial sites per year until 2025**. Set up by **Bpifrance**, “**the objective of this plan is to revitalise industry all over the country**”, explains Paul-François Fournier, Executive Director of Innovation at Bpifrance.

In concrete terms, **industrial start-ups and SMEs will receive funding for their industrialisation and support to overcome any obstacles to their development**. In addition to the **New Industry Loans** and the **Innovation Loans**, the plan also includes the **call for “First Factory” projects**. “This call for projects will be an opportunity to select innovative projects in the regions: either for a company’s very first factory, or for new production plants for existing SMEs with projects that constitute a breakaway from their existing activity,” explains Paul-François Fournier.

Industrial start-ups and SMEs can also call on the **SPI2 fund**, the successor of the SPI (Sociétés de Projets Industriels), which gave birth to many new production plants, and on the **National Industrial Venture Fund (FNVI)**, which aims to support the creation of private funds.

This push for re-industrialisation will generate new synergies between technology and manufacturing.

“This movement will take numerous forms: tech companies will build factories and start manufacturing, while manufacturing companies will build highly innovative tech factories [...]. **There are real ties between technology and manufacturing, and the goal is to close the rifts that existed between them and to demonstrate how they complement one another**”, concludes Paul-François Fournier.

Sources:

<https://www.bpifrance.fr/nos-actualites/etude-startups-industrielles-un-relai-de-croissance-pour-lindustrie-francaise>
<https://bigmedia.bpifrance.fr/news/plan-startups-et-pme-industrielles-ou-comment-reveler-les-champions-de-demain>

© www.admagazine.fr

South Korea is to build the first sustainable floating town

Source

<https://www.courrierinternational.com>

Faced with the threat of the rising sea level due to climate change, **the port of Busan in South Korea plans to build a floating town capable of housing 12,000 inhabitants by 2025.** Called **"Oceanix Busan"**, the floating town will be built on three enormous concrete platforms, each measuring 20,000 square metres, that will be anchored to the seabed and be capable of supporting multi-storey buildings. **All waste, including the wastewater, will be recycled on the spot.** With the support of the United Nations programme for human establishments (UN-Habitat) and the Massachusetts Institute of Technology Center for Ocean Engineering, **the project aims to test technologies that could help coastal communities to adapt to climate change.** A project that is bound to be useful, given that **40% of the world's population lives less than 100 kilometres from a coast threatened by rising sea levels.**

Since 1 June, **94% of the demand for electricity at Delhi's Indira Gandhi (IGI) international airport has been met by a hydroelectric plant, while the remaining 6% has been met by solar plants.**

Consequently, IGI has become the first airport in India to operate exclusively with a combination of these forms of green energy. The solar plants are located by the runways and on the roofs of the freight terminals. For the hydroelectricity, Delhi International Airport Limited (DIAL) signed a long-term electricity supply contract with a hydroelectricity production company based in Himachal Pradesh. **This switch to renewables should help the airport to reduce its energy emissions by 200,000 tonnes of carbon per year, and to achieve its target of becoming a net zero carbon emissions airport by 2030.**

Delhi airport switches to hydroelectric and solar energy

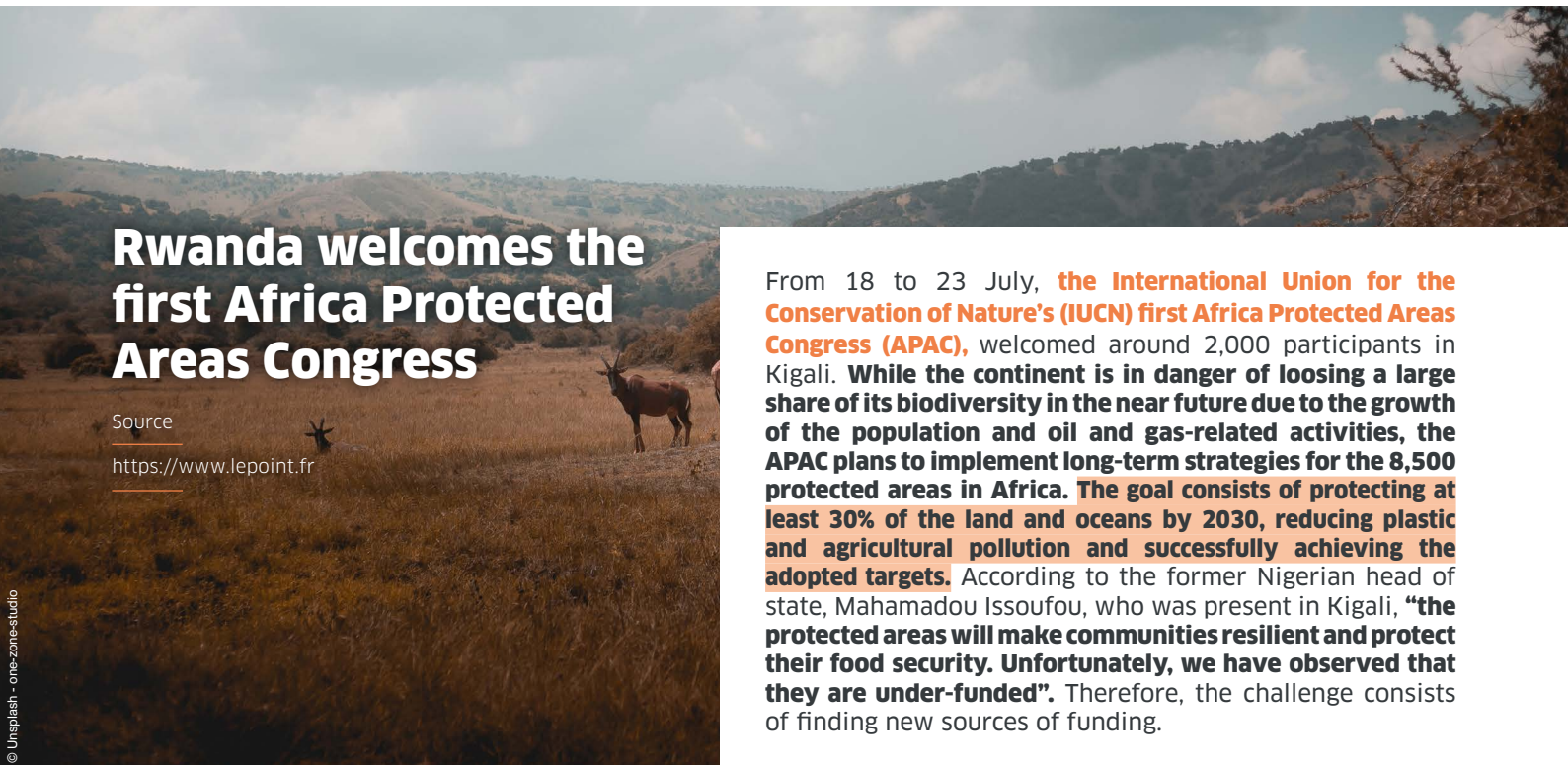
Source

<https://www.hindustantimes.com>

© pixels-marmahinc

Rwanda welcomes the first Africa Protected Areas Congress

Source

<https://www.lepoint.fr>

From 18 to 23 July, **the International Union for the Conservation of Nature's (IUCN) first Africa Protected Areas Congress (APAC),** welcomed around 2,000 participants in Kigali. **While the continent is in danger of losing a large share of its biodiversity in the near future due to the growth of the population and oil and gas-related activities, the APAC plans to implement long-term strategies for the 8,500 protected areas in Africa.** **The goal consists of protecting at least 30% of the land and oceans by 2030, reducing plastic and agricultural pollution and successfully achieving the adopted targets.** According to the former Nigerian head of state, Mahamadou Issoufou, who was present in Kigali, **"the protected areas will make communities resilient and protect their food security. Unfortunately, we have observed that they are under-funded"**. Therefore, the challenge consists of finding new sources of funding.

© Unsplash - one-zone-studio



In its latest bulletin on air quality and the climate, the World Meteorological Organization (WMO) came to an alarming conclusion. **Climate change is making heat waves and forest fires more frequent, more intense and longer, thereby reducing air quality to the detriment of human health and ecosystems.** In 2021, heat and droughts exacerbated the spread of forest fires in western North America and Siberia, and significantly increased the quantity of fine particles that are harmful to health. In 2022, this phenomenon was also observed in Europe and China, where heat waves resulted in high levels of pollution. According to the WMO, a further increase in the frequency, intensity and duration of heat waves is to be feared. This trend could further worsen air quality due to a phenomenon known as the **“climate penalty”, which refers to the amplification by climate change of the production of ozone at ground level, to the detriment of the air we breathe.**

Oceans capture 30% of anthropogenic CO₂ and emit one half of the oxygen we breathe, thanks to phytoplanktons. The oceans regulate the climate and are essential to our survival. But corporations often have difficulty assessing the impact of their activities on the oceans. To help them, **the “Fondation de la Mer” and Bureau Veritas have created “Ocean approved”, the first international label dedicated to the conservation of the seas.** It is open to all companies, irrespective of their field of activity, country and size. This new tool **enables them to identify 10 types of impacts and 44 levers they can use to reduce their footprint.** The list of impacts is quite comprehensive. It includes physical pollution (plastics, waste, etc.), chemical pollution, emissions of greenhouse gases into the atmosphere, the maritime exploitation of halieutic or physical resources, the disruption of ecosystems by noise, the temperature and light, as well as corporate governance and strategy.



The pongame: a super-tree that could help to feed the world and combat climate change

Source : <https://www.canarymedia.com>

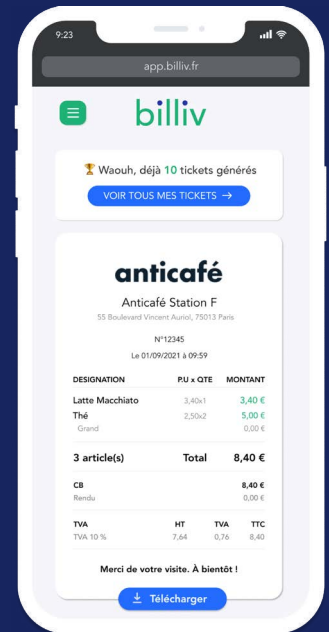
The pongame is found all over the world, but remains relatively unknown. Often used as an ornamental tree, the pongame offers numerous benefits. **It produces beans that are rich in proteins and oil, rather like soy, but with a yield that is four to ten times higher, while also containing more nutrients. It grows everywhere quickly, can withstand drought and does not need any pesticides. It restores the soil, sequesters 5 tonnes of carbon per acre per year, and fixes the nitrogen in the air, which means that it does not need any fertilisers.** Aware of the potential of this super-tree, Naveen Sikka set up **Terviva, a company based in Oakland, California that grows pongames in partnership with farmers and transforms the oil and protein from this precious tree for use in the food processing industry.** After raising more than \$100 million, **Terviva has entered a partnership with Danone to make new products from this regenerative form of agriculture.**



Billiv has replaced receipts with a QR code

It all started back in 2016, when Lena Crolot bought a key ring in a large shopping centre and the check-out clerk gave her a very long receipt. "At that moment, I suddenly realised that I had to do something about this," she explains. **At the age of 22, she set up Billiv with Ruben Kahloun, 23, and David El Malih, 26.** Their solution to **dematerialise check-out receipts** is quite simple. **The customer scans a QR Code to pay for their goods, then the receipt appears on their smartphone, without even downloading the application.** Billiv could put an end to receipts, which are rarely recycled. **Since the start-up was created less than 3 months ago, it has already attracted 150 stores and saved 2,878 metres of paper and 446 of water, thereby avoiding 28,786 grammes of CO₂.** It has also succeeded in raising €1.3 million from some fifty investors. **The solution has arrived at just the right time, because on 1 January 2023, the anti-waste law in France will outlaw the systematic printing of check-out receipts.**

Source : <https://start.lesechos.fr>



TECH / INNOVATIONS

In an effort to reduce **the carbon footprint of sea transport, which accounts for 3% to 4% of worldwide greenhouse gas emissions, the company Twot, based in Brittany, France, has designed a cargo sailing ship capable of carrying 1,100 tonnes and of making fuel-savings of almost 92%.** Several similar projects launched in recent years have experienced difficulties in finding the necessary funding. But this trend is now changing. Companies are now showing increased interest in carbon-free transport, especially because the price of traditional freight is now tending to exceed that of sail freight. **Windcoop, the first sail sea transport cooperative, which is riding the wave of this new trend, enables every stakeholder – companies, public authorities and individuals – to invest in its first sailing container ship that will cost €22 million euros. Starting in 2025, this vessel will sail between Marseilles and Madagascar, carrying 1,400 tonnes of freight and saving 90% of fuel, or 724 tonnes of CO₂, per trip.**



Lightyear, the first solar car, will soon be on the road

Sources

<https://planete.lesechos.fr/solutions>
<https://datanews.levif.be>



Founded in 2016 in Helmond in the Netherlands by **five students from Eindhoven University, Lightyear will launch the first solar car in the world onto the market this autumn.** Its first model, called Lightyear 0, is equipped with **5 square metres of solar panels** that cover the entire roof and bonnet. These photovoltaic cells charge **the battery that powers the four electric motors** built into the car's wheels, a design that prevents any electricity from being lost along the drive shaft. But this model, **which boasts a range of 1,000 kilometres,** will have a price tag of about €149,000. After raising €93 million of funds in 2021, and €81 million in 2022, **Lightyear now intends to speed up the production of its first car and to prepare the development of Lightyear 2, which will be a mass produced model costing around €30,000.**



Dikwe: the dyke that produces electricity from waves

This summer, BTP Legendre, Geps Techno and Ifremer installed a **prototype dyke in Brest harbour that protects the coastline, while producing electricity at the same time**. Measuring 4.5 metres in height and width, and with a depth of 6 metres, this 1/4 scale prototype is equipped with an oscillating flap that **converts the power of the waves and swell into electricity**. In 2020, a 1/15 scale prototype was tested in Ifremer's wave tank in Brest, where it **captured 60% of the energy of the waves**. In 2024, full-scale tests will take place of a dyke with a production capacity of approximately 1 megawatt.

Source

<https://www.huffingtonpost.fr>

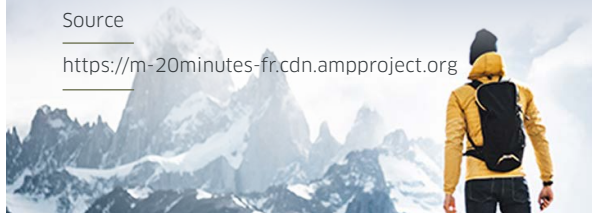
BRANDS

© Unsplash - malik-skydegaard

The founder of Patagonia gives his company to an NGO

Source

<https://m-20minutes-fr.cdn.ampproject.org>



Yvon Chouinard drives an old Subaru, does not have a PC or a smartphone and never wanted to become a billionaire. **At the age of 83, the eccentric founder of the Patagonia sportswear brand, valued at \$3 billion, has given away his empire to a trust and an NGO tasked with spending all the company's annual profits of \$100 million on the planet, and on the protection of endangered habitats in particular.** With the support of his children, he preferred to support the combat against climate change, rather than selling or floating his company on the stock exchange – “which would have been a disaster”, claims the man who aspires to “reinvent capitalism”. An experienced mountaineer, **Yvon Chouinard promised to spend 1% of his company's revenues on the environment in 1985.** He carefully chose his raw materials. At the start of the 1990s, Patagonia adopted organic cotton, produced without any pesticides, and recycled polyester.

JCDecaux

tests food waste collection in Paris

Source

<https://www.thegood.fr>



Starting on 1 January 2024, the French law on the fight against waste and in favour of the circular economy (AGEC) will require every citizen to have a sorting solution for their food waste. In May 2021, JCDecaux, Les Alchimistes, SPHERE-ALFAPAC et Paris&Co installed five innovative collection skips in the 13th and 14th arrondissements in Paris and on the Île Saint-Denis to collect organic waste and transform it into compost. Every inhabitant could register on the Les Alchimistes web site free of charge using the QR code on the skip. They then receive a member's card, an organic bucket and SPHERE-ALFAPAC compostable bags to deposit their organic waste in the skips, which are equipped with onboard intelligence capable of measuring the content of their two bins and automatically opening the bin that is less full. **Between June 2021 and January 2022, the volume collected as part of this experiment increased from 200 kilos to 1.5 tonnes per month.** In the wake of this successful test, in May 2022, JCDecaux installed a new generation of skips in the 13th to encourage everyone to transform their food waste into compost.

Konbini, the benchmark social network for 15-34 year-olds and Goodeed, the socially responsible alternative for advertising, **have created the first socially responsible Brand Content offer to promote socially engaged brands.** Their offer enables brands to publish content using three long video concepts and two short video concepts in the form of stories. **In concrete terms, for every viewed advert, part of the invested budget is donated to NGO projects.** By wagering on socially responsible Brand Content, **Konbini and Goodeed meet the needs of both advertisers who want to keep their CSR promises, and the expectations of young people who prefer socially responsible brands.**

For brands, **Brand Content** is a strategy that consists of producing and publishing promotional content.

Konbini and Goodeed join forces to promote committed brands

Source

<https://jai-un-pote-dans-la.com>



HR x EDUCATION



The option to work from home has become necessary to attract young graduates

Source

<https://www.lemonde.fr/campus>

Since the COVID-19 pandemic, home working has become a norm for young graduates, who now turn down job offers that do not offer them this possibility. **“Young candidates turn down job offers that propose fewer than two days of home working. And if this option does not appear in the job description, then some of them don’t even bother to apply”,** observes Audrey Richard, president of the French national association of HR directors (ANDRH). **For these young applicants who value their freedom, flexibility and independence have become important criteria.** To the extent that some of them choose to become freelance workers. According to a survey of 588 HR managers, **home working is a cause for concern, mainly due to the “reduction of social interaction”, “reduced cohesion between employees” and the “erosion of the sense of belonging to the company”.** In the opinion of Vincent Meyer, professor of human resources at EM Normandie university, **we must remember that home working can cause harm to young people. “Because, if some people need supervision, support and coaching, it is still them,”** he claims.

The Frida Kahlo school in Bruges: setting the standard in energy sobriety

Source

<https://objectifaquitaine.latribune.fr>

The Frida Kahlo primary school in the northern suburbs of Bruges, which is made of wood covered with solar panels and has enhanced insulation to reduce energy consumption, has been awarded the highly demanding E4C2 label.

- **E4** is the highest possible score (on a scale of 1 to 4) for energy savings and corresponds to the qualification of an energy-plus building.
- **C2** is the highest possible score for environmental protection. Funded mainly by Bruges city council, which invested €10 million, the school can accommodate 16 new classes for 200 pupils, plus a school canteen, a leisure centre, roof terraces, a greenhouse and an educational garden.





ETRE: the ecological transition school

Source

<https://madame.lefigaro.fr/societe/actu>

Since 2017, the ecological transition school (ETRE) has been offering 16 to 25 year-olds, who have left school or are already qualified, free training in the trades related to the ecological transition.

"Every year in France, 100,000 young people finish school without any qualifications, and 3 years later, 70% of them are still out of work. At the same time, over the next 30 years, one million new jobs will be created as part of the ecological transition. This is the challenge our project addresses," explains Frédéric Mathis, who founded the school. **Today, some ten schools belong to ETRE, which trains almost 350 apprentices every year. Each school proposes practical and manual training that addresses local needs: carpentry near Toulouse, bike repairs in Paris, market gardening near Perpignan.** When they leave these schools, which offer made-to-measure curricula, **76% of the graduates return to work or further training, and 80 % become ecocitizens.**

The successful business woman, author and reporter for BFM Business, **Catherine Barba and her three associates have just opened a school for independent workers, called Envi.** The school targets both **employees who are interested in creating their own business and existing independent workers who find it difficult to turn a profit.** The curriculum include a few theoretical lessons, but mainly **regular meetings with experienced and knowledgeable business people** who have been successful, such as Frédéric Mazzella (BlablaCar) or Marc Simoncini (Meetic, Angell). In addition to **daily support and real-time practical applications**, the school also offers around fifteen two-week modules (I create a unique, useful and responsible offer - I sign a deal with my first customer - I create a successful newsletter, etc.) and **more comprehensive three-month training courses** (Getting started - Learning to sell - Boosting my business with digital technology). Each group is limited to 25 people in order to **nurture interactions and a sense of community.**

Envi: a school for independent workers

Source

<https://www.lefigaro.fr>



HEALTHCARE

58% of infectious diseases are made worse by global warming

Source

<https://www.science-et-vie.com>



For years, we have known that **global warming increases the spread of infectious diseases.** To precisely understand the scale of this phenomenon, researchers at the university of Hawaii in the United States conducted a study that found that **58% of infectious diseases (or 218 out of 375) that face mankind the world over have been made worse by climatic factors at a given point in time.** The researchers explained that **the rise in the global temperature has several consequences. It extends the zone of geographic distribution of certain insects and acarids** that can transmit malaria, plague and dengue. **It favours zoonoses** (diseases transmitted to humans by animals), such as salmonellosis, the Ebola virus or COVID-19. **It disrupts the natural habitat of numerous wild animals**, which then move closer to areas inhabited by humans and increase the risk of transmission of infectious diseases. **It produces flooding and spillages of wastewater** which reduce the quality of drinking water. Finally, the rise in the global temperature **could cause the permafrost to melt, which contains 1,500 billion tonnes of greenhouse gases and pathogenic agents that have been dormant for millions of years.**

The sight of the blind is restored by a cornea taken from pig's skin

Source: <https://www.futura-sciences.com/sante>



© Unsplash - collin-loyd

Researchers at Linköping university in Sweden have developed **an artificial cornea from collagen proteins taken from pig's skin**. **Thanks to this implant, 14 people suffering from keratoconus, a disease that gradually deforms the cornea and leads to blindness, had their sight restored.** Instead of replacing the cornea with a transplant, which is usually the case, the surgeons made an incision in the cornea of the patients in order to insert the implant. This method, which could be used **on 12.7 million people who are waiting for a cornea transplant**, is also less invasive than a transplant. In addition, the artificial cornea can be stored for 2 years before being implanted, compared with 2 weeks for cornea from donors.



The “Institut Curie” and Thales are ready to revolutionise cancer treatment with flash radiotherapy

Source

<https://www.lesechos-fr.cdn.ampproject.org>

In 2014, the “Institut Curie” discovered the **flash effect, which is very intense radiation that can destroy tumour cells in less than a second, while sparing healthy cells**. The “Institut Curie” teamed up with the defence **heavyweight Thales**, which is also an expert in particle accelerators, to develop the first flash radiotherapy machine capable of replacing tens of sessions that are currently necessary, with a single session lasting less than one second. They aim to define the specifications of the first experimental equipment by mid-2024. **Clinical tests on humans are planned for mid-2026, followed by deployment in hospitals in 2028.** According to professor Gilles Créhanche, head of oncology radiotherapy at the “Institut Curie”, **flash radiotherapy “is the first revolution for decades”**. The partners now face the challenge of finding the €90 million required to put the new machine into industrial production.

SOCIETY



Imagining the wars of the future. This is the mission that the French Ministry of Defence gave to the Red Team Defence of science fiction writers, researchers and futurologists in 2019. This elite team has just revealed **two nightmarish scenarios of conflicts that mankind may be confronted with**. In the first scenario, called **“After the carbonic night”, the planet is plunged into a nuclear winter that results in food and social crises**. Armed forces are obliged to restrict their power consumption under international regulations and are faced with enemies that target their energy reserves in order to put them out of action. The second scenario imagines **an “ecosystemic war”, in which troops advance through nature that has been transformed into deadly landscapes by biogenetic manipulations**. These futuristic scenarios that are rooted in military reality, **are being scrutinised closely, not only by the military, but also by politicians and industry, in order to anticipate the risks of the future.**

What will the wars of the future be like?

Source

<https://www.bfmtv-com.cdn.ampproject.org>

IPBES rethinks the relations between human activities and nature

Source

<https://www.goodplanet.info>

“The manner in which political and economic decisions take nature into consideration is both a key factor of the worldwide biodiversity crisis and a vital opportunity to put and end to it”.

These are the words of the 82 scientists who wrote the latest report of the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), entitled “The diverse values and valuation of nature”. The authors explain **that we must stop seeing the living world only through the prism of economic rationality.** They observe that **indicators such as the GDP and growth do not take the over-exploitation of nature, ecosystems and biodiversity, or impacts on long-term sustainability into consideration.** The IPBES believes that economic and societal decisions must now be based on four factors: **“living from nature, with nature, in nature and like nature”.** The ultimate goal is to adopt new standards governing decisions that are based on sustainability.



Young workers are taking spiritual retreats

Source

<https://www.lemonde.fr/series-d-ete>

Initiation in sophrology, meditation, yoga classes, rehab retreats... **Spiritual retreats have been on the rise in recent years and are particularly popular with young professionals looking for an opportunity to disconnect.** “After every lockdown, our bookings exploded”, explains Bilel Hamza, who runs a yoga centre in south-east France. Even travel agents now offer all-inclusive holidays, heralding the return of the new age and personal development. **“These alternatives are a means of finding meaning in a world, where people are gradually turning away from traditional religious institutions”,** points out the religious historian Damien Karbovnik. **Faced with the growth in “premium retreats”, he emphasises the great paradox behind this trend, which is highly critical of a materialist society, where consumption is omnipresent.**

Did you know?

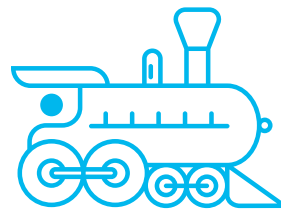
DID YOU KNOW?



Green aKademy teaches workers to take care of the plants in their offices

<https://www.thegood.fr>

aKagreen, a specialist in plants for workplaces, has launched **Green aKademy, a digital programme that invites employees to take care of the plants in their offices during their working hours.** Employees can use a mobile application, **to connect to the rhythm of nature – a factor of well-being – and make a concrete contribution to the company's eco-responsible initiatives.**



The Orient Express is back in Europe!

<https://www.pariszigzag.fr>

The most luxurious train in the world will be back in service by 2024. The return has been made possible by the Accor group and the SNCF, which own the SNCF trademark, but also by the researcher Arthur Mettetal who discovered 17 art deco carriages in perfect condition in Poland. **The carriages will be restored by French artists and unveiled on the occasion of the Paris Olympics.**



A 99 year-old Sicilian becomes a master of philosophy

<https://positiv-fr.cdn.ampproject.org>

You are never too old to make your dreams come true. Born in 1923, Giuseppe Paterno could never afford to study at university. **At the age of 99, he has just passed a master's degree in philosophy at Palermo university, becoming the oldest graduate in Italy.**