

C A S E S T U D Y

SOUTH EUROPE ATLANTIC HIGH SPEED LINE: CARBON AND BIODIVERSITY FOUNDATIONS



■ **ESG INITIATIVE:** ENVIRONMENTAL IMPACT

DURATION: 9 YEARS (2012-2020)

TOTAL ENDOWMENT: €10M

IMPACTING POSITIVELY, FOR LOCAL ENVIRONMENTS

LISEA - the project company behind the new high speed rail line between Tours and Bordeaux, in France - has taken action to bring about a lasting legacy of positive environmental impact on the regions the line crosses. Two charitable Foundations set up by LISEA are coordinating and contributing funds totalling €10m, towards more than 200 projects, reducing carbon emissions and protecting biodiversity.

In western France, a select group of farms are being supported in their efforts to develop sustainable cultivation of Alfalfa – a hardy and more environmentally friendly alternative to imported soy for animal feed. Nearby, 55 historic public buildings have been renovated, with thermal insulation, roofing and solar panels, to improve their energy performance; while work continues to restore and protect the

area's population of the endangered European Mink.

These are separate projects and just a few examples in a long list of initiatives supported by **two charitable foundations established by LISEA**, the project company of the South Europe Atlantic (SEA) high speed rail line. The LISEA Carbon Foundation and its sister organisation for Biodiversity have each been endowed with €5m. So far they have supported **more than 200 different environmental projects**.

There are multi-layered reasons behind the LISEA Foundations, which were proposed by the organisation before it was awarded the 50-year concession to design, build, finance, operate and maintain the SEA line. "It was of great importance to us, to become a real **partner to the territories** crossed by the SEA infrastructure, both on a local and a regional scale," says LISEA's Sustainable Development Director, Thierry Charlemagne.

High speed trains on the SEA line pass through the regions of Centre-Val de Loire and Nouvelle-Aquitaine, plus six different departments and 113 municipalities along the 302km route between Tours and Bordeaux. When the line opened in the summer of 2017, it instantly took a whole hour and 15 minutes off journey times between Paris and the south west of France. Its construction stands for more than just faster travel, however. It

is about **economic development and connectivity via sustainable, low carbon transportation**. "The local projects supported by our Foundations are not directly related to the SEA infrastructure itself, but it is crucial for us that they acknowledge and embrace major issues in terms of integration within the territories crossed by the line, such as preservation of natural environments and clean transportation. The more than 200 projects supported by the Foundations all work towards this end," Thierry says.

LISEA CARBON

The Alfalfa project is working with 11 farms in the Centre-Val de Loire and Nouvelle-Aquitaine regions. With a €560,000 donation from the **LISEA Carbon Foundation**, the project is helping farmers to gain autonomy in cultivation and marketing of Alfalfa, which, as a legume, can 'fix' its own nitrogen levels regardless of soil type, so does not require additional nitrous additives.

The project is being overseen by the French Environment and Energy Management Agency (ADEME). In similar fashion, other initiatives supported by the LISEA Foundations are being conducted in partnership with national, regional and municipal agencies – such as the departments





(local authorities) using €1.7m from the Carbon Foundation to improve energy efficiency in public buildings.

“For meeting its aims, the Carbon Foundation selected three main environmental issues to focus on,” says LISEA Foundations Manager, Lise Dauchet. Projects supported are aiming to **‘reduce the energy consumption of built heritage’, to ‘develop more responsible mobility’ and to aid the ‘energy transition of agriculture’.**



“Regarding mobility, the aims are mostly about reducing the emissions associated with the last few kilometres of journeys; looking for new solutions in low carbon, sustainable transport,” Lise says.

A total of 19 different urban mobility projects are being supported with €320,000 from the Carbon Foundation, in partnership with the Universities of Bordeaux and Poitiers and other research centres. Through the CRONE project, for example, Bordeaux University and another research laboratory are developing a new suspension system for electric bikes, with the aim of recovering the energy from the shock absorbers.

“The Foundation also launched a **competition for new mobility start-up ideas** in 2017, in partnership with the Nouvelle Aquitaine region and Bordeaux Metropole authority. We

received 120 applications, from which three were selected to share €45,000 from the Foundation to develop their ideas as pilot projects,” says Lise.

The three mobility start-ups are Haïku, a GPS connected device designed to direct pedestrians and bike hire customers to their destination (<http://www.haiku.bike/>); Tako, an app for calculating fare amounts for people wanting to share taxi journeys (<https://www.tak-o.com/>); and OuiHop’, an app that allows people to connect for short distance car-pooling in real time (<https://www.ouihop.com/>).

“These pilots have shown how difficult it can be to introduce such innovation politically, but depending on the results we’ll be deciding which of the start-ups to finance for further development,” Lise says.

LISEA BIODIVERSITY

“The Biodiversity Foundation supports projects with the aim of preserving the natural heritage of the regions crossed by the SEA line,” says Lise.

There are three main issues being addressed by the Biodiversity Foundation: **advancing scientific knowledge of biodiversity; taking action to restore natural habitats to protect endangered species; and raising awareness of threats to the environment.** So far the Biodiversity Foundation has donated around €4m, to support 105 different projects – 43 advancing scientific knowledge, 35

involving direct action and 27 focused on raising awareness.

“Amounts donated to these projects vary greatly; one of the largest has received €140,000, while numerous others have been funded with €10,000 to €20,000,” Lise says.

The European Mink project, led by the French naturalist association LPO, has received €140,000 from the Foundation. As well as working to reduce dangers to the Mink population, by reducing trapping, competition with the alien American Mink and restoring habitats, this project is also promoting the European Mink to highlight the importance of water quality and riverside habitats for biodiversity.

Other initiatives include a study of the importance of the Poppy flower to bees – led by the National Institute of Agronomy Research and supported with €25,000 from the Biodiversity Foundation, with the ultimate aim of adapting agricultural practices. A further €40,000 was provided to support an educational tour by the worldwide non-profit Surfrider Foundation, raising awareness of how waste and litter is ending up in rivers and then seas. Around 10,000 people, including school children and the general public, are estimated to have seen the Surfrider Foundation’s shows over two consecutive summers in the Gironde department.

“The list of projects supported is a long one and we’re now collecting data to assess their impact,” Lise says. “Since 2013, **more than 300 separate**



SOUTH EUROPE ATLANTIC

Construction of the South Europe Atlantic High Speed Line represents a €7.7bn investment, over the 50-year duration of the public private partnership established to build, maintain and operate the line. Half of the finance is provided by LISEA via shareholders loans, private equity and commercial and European Investment Bank loans, with the rest coming from public subsidies.

Meridiam's contribution, as a partner in the project concessionaire LISEA, amounts to €170m, including €168.3m in shareholder loans and €1.7m in share capital. The other partners in LISEA are Vinci, CDC Infrastructure and Ardian. Revenue for LISEA comes from track access charges paid by the train operators – primarily SNCF and from 2020, other rail operators with implementation of the European "open access" policy. Construction of the SEA high speed line started in 2012, carried out by contracting consortium COSEA (led by Vinci) and was completed at the beginning of 2017. After extensive testing, the line opened to the first commercial rail services a month early on 2 July 2017.

Operation and maintenance of the SEA is performed by MESEA, a joint venture between Vinci and Systra, on behalf of LISEA. The train operations, however, are provided by SNCF and future other rail operators. Around 40 trains are now operating in each direction between Tours and Bordeaux every day, travelling at speeds up to 320km/h. ■



events have been held promoting awareness of biodiversity issues, attended by around 30,000 people. Companies and associations managing projects supported by the Foundation have reported 2,450 staff involved, 240 professional trainees taken on and over 1,600 people attended training courses, so the impact is real. We also intend to analyse the effects on biodiversity scientifically, which we're discussing with the National Museum of Natural History."

There are numerous other positive results to have come from the LISEA Foundations to date. For instance, projects funded by the Carbon Foundation have reportedly contributed to a reduction in greenhouse gas emissions equivalent to 10,800 tonnes of CO₂ per year (the equivalent of the emissions generated by the lightning needs of a city of 250,000).

Website of the two foundations:

www.lisea.fr/partenaire-des-territoires/nos-fondations/

Annual activity report:

https://www.slideshare.net/LISEA_LGVSEA/rapport-dactivit-2016-2017-des-fondations-lisea

Both foundations are administered as **separate legal entities**, with their own boards of directors and scientific committees, which are composed of representatives of LISEA and qualified individuals from various regional and technical agencies. The committee of the Biodiversity Foundation, for example, consists of two sustainability directors, a director from the French National Museum of Natural History, an agronomist and one ecologist. It is these committees, drawing from expertise in their respective fields, that have decided which projects to support.

Initially intended to exist as initiatives lasting six years, from 2012 to 2017, the LISEA Foundations have been extended in duration to last until 2020, "to follow as many of our supported projects as possible to their conclusion", Lise says. ■

