



The Green Line would include 20,000 plants, trees, and shrubs | Photo source Vincent Callebaut

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## PLANS FOR A SUSTAINABLE GARDEN FOOTBRIDGE ABOVE THE SEINE

 ARCHITECTURE & DESIGN

### The plant-filled bridge would be used for growing food for restaurants and residents, as well as a base for solar and wind power

**Spotted:** French architect Vincent Callebaut was inspired by the concept of New York’s High Line to design a garden footbridge in Paris. The bridge, called the Green Line, would connect the 12th and 13th arrondissements between the areas of Bercy Village and the Massena district. The plant-filled bridge would be used for growing food for restaurants and residents, as well as for recreation and as a base for sustainable tech like solar power and wind power.

The main structure of the bridge would be made up of two double arches inspired by the shape of a fish skeleton — one double arch connecting the low quays over a span of 155 meters and a second double arch connecting the high quays over a span of 220 meters. The design creates an interior space that is free of load-bearing points, walls and ducts.

The bridge will also include fish gardens and a “clean air garden” with plant species that can capture harmful particulates from the air. There will also be a “carbo-absorbent” garden featuring woody plants that are efficient at sequestering carbon, and roughly 37,500 sq ft of “urban agriculture and participatory greenhouses” to grow native species of fruit and vegetables. Water for the plants will be provided by a rainwater recovery system.

The bridge design also includes solar panels, wind turbines and a biogas system, all of which would route surplus energy to nearby buildings. According to Callebaut: “The Green Line will have a social role for its users. It promotes exchanges because it is a place of relaxation, contemplation, and well-being. We wish to constitute a breeding ground for socially sustainable urbanity.”

Architects and designers are working to develop more sustainable ways to use urban spaces, including incorporating food production into unusual places. We have previously covered ideas for this such as converting [supermarket parking](#) lots into urban farms and turning unused [rooftop space](#) at a university into an organic farm. Someday, there may be a farm on top of almost every roof.

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## Takeaway:

The Green Line design was commissioned by real-estate developer Ceetrus for an architecture competition. While there are no plans to build the Green Line imminently, the design is an indication of what it is possible to achieve in an urban setting, if there is enough will for developing more sustainable green spaces. The Green Line is envisaged as not just a way to cross the Seine, but as a destination in itself, along with a space for learning more about sustainability. In fact, Callebaut envisions the bridge will contain educational space for learning about smart sustainable city design, as well as restaurants and other leisure opportunities.