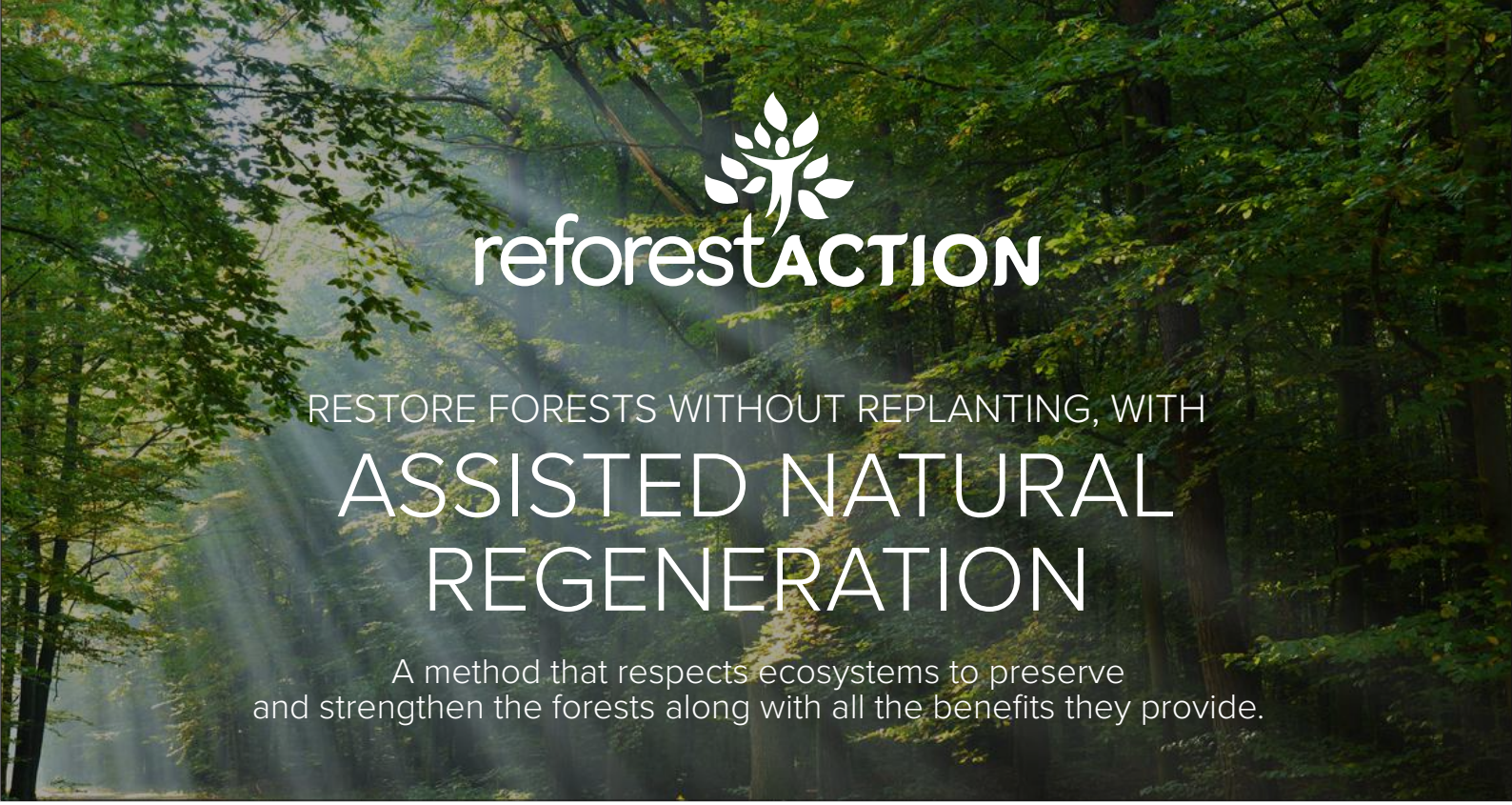

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RESTORE FORESTS WITHOUT REPLANTING, WITH

ASSISTED NATURAL REGENERATION

A method that respects ecosystems to preserve
and strengthen the forests along with all the benefits they provide.

WHAT IS **ANR?**

Assisted Natural Regeneration is a natural method that helps preserve and strengthen existing forests through management that combines the trees' natural reproduction cycle with silviculture work.

WHAT IS THE **OBJECTIVE?**

Regenerating an ageing or degraded forest to boost the quality of its ecosystem services and thus make it multifunctional, with timber production, carbon capture, biodiversity, water cycle regulation and so on.

> **TAKING CARE OF THE FORESTS TO PRESERVE AND INCREASE THEIR USEFULNESS.**

SOUND MANAGEMENT **FOR GREATER BENEFITS**

BIODIVERSITY

By helping the forest to regenerate gradually and avoiding clear cutting techniques, biodiversity is preserved and reinforced throughout the process.

CLIMATE

ANR does not usually require any tillage. That means that biological activity is maintained in the soil. Its chemical properties are also conserved, along with its carbon capture potential.

SOCIAL AND ECONOMIC BENEFITS

Support for the timber sector, a vital part of the economy with job creation and timber production, necessary to the sustainable energy transition.

RESISTANCE

Healthier forests that are more resilient to climate change and natural hazards (drought, diseases, storms, etc.).

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HOW DOES IT ACTUALLY **WORK?**

The foresters encourage the forest's natural regeneration over time. They use special silviculture techniques to maintain the forest, protecting the most promising young seedlings and preserving the diversity of species in the forest.

STAGE 1: = 1 YEAR

Ageing forest cover and seedlings that have sprouted naturally. Clearing work is done around the seedlings to remove brambles and ferns that could stifle the young growth.

*Seedlings = tree shoots measuring less than 50 centimetres

STAGE 2: = 2 TO 7 YEARS

Ageing forest cover partially removed to provide light for the undergrowth. Ageing trees are gradually removed through regeneration thinning. This lets light reach the soil, which is good for young plant growth. At the same time, work is done to slow the growth of certain plants that could otherwise overshadow the others.

*Undergrowth = high-density stems up to 3 m high

STAGE 3: + 7 YEARS

Regeneration plot at the sapling stage*.
Most of the adult trees have been cleared. The stand is now mainly made up of young trees. Work is done to reduce the density of the young growth and let the plant stems become thicker as well as higher.

*Saplings = stems more than 3 metres high, diameter less than 7.5 cm

STAGE 4: + 12 YEARS

Regeneration plot at the pole stage*.
Crop-tree thinning work is done to select the most promising stems and remove those that are likely to hinder their growth. The remaining stems are now sustainable and will be able to grow and form large trees.

*Poles = stems more than 3 metres high, diameter over 7.5 cm

STAGE 5: + 15 YEARS

A young, sustainable, stable and more resistant stand.
The new, sustainably managed forest will render multiple ecosystem services over the long term.

BIODIVERSITY
TIMBER PRODUCTION
WATER CYCLE REGULATION
CARBON CAPTURE
SOIL AMENDMENT

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TWO APPLIED ANR METHODS

Assisted Natural Regeneration means removing trees from the plot. There are two possible methods, depending on the "initial health" and management of the plot.

THE "PERIODIC" METHOD which means gradually removing all the adult trees (approximately every five years) from the plot while young shoots continue to grow there. This is the preferred approach when forests are ageing.

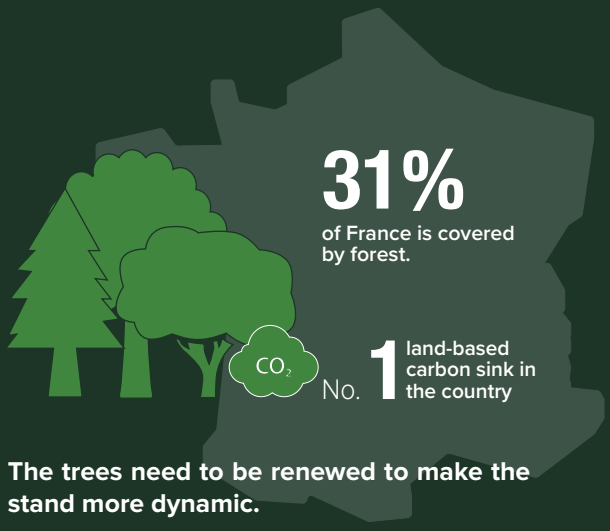
THE "SPORADIC" METHOD which means sporadically felling certain carefully selected mature trees to allow light through to the undergrowth. This approach is recommended if the forest cover is in good health.

THIS FELLING WORK IS BENEFICIAL FOR SEVERAL REASONS:

- The (necessary) timber harvest is managed sustainably, respecting natural ecosystems (no clear cutting which is disastrous for the environment, especially for biodiversity and carbon capture in the soil).
- Timber is harvested throughout the regeneration process and thus ensures regular income while renewing the forest stand.
- The trees that are removed continue to play a role (e.g. carbon capture) and contribute to the timber sector, a vital part of the social and economic landscape and crucial to a sustainable energy transition. This is what a sustainably managed forest is all about.

WHY IS ANR **IMPORTANT?**

In France (and Europe as a whole), there are plenty of forests but they are ageing. They are thus more vulnerable to climate change and more degraded and hence exposed to natural hazards. ANR is important because it helps make the French forests more resistant to hazards and reinforces their social, economic and environmental benefits.



The trees need to be renewed to make the stand more dynamic.

We describe a forest as ageing when it struggles to regenerate. If we do not renew an ageing forest, its trees become worn and gradually die off, so we need to boost regeneration. ANR avoids clear cutting, which has very harmful effects on the ecosystem as a whole.

PLANTING OR ANR?

Both approaches are useful and can complement one another.

- **ANR in a forest that has already started to regenerate naturally.** This is a more natural solution to let the forest gradually regenerate.
- **Planting when the forest is unable to regenerate naturally.** This occurs when ecosystems are too deteriorated.
- We can also combine **ANR and planting** in certain cases when we enhance a forest that is undergoing Assisted Natural Regeneration.

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WHY DOES **REFOREST'ACTION SUPPORT ANR?**

- For the method's environmental and ecological ambition.
- To encourage land owners and managers to adopt or step up their natural and sustainable forest management efforts.
- To protect and strengthen our forest resources over the long term as we face a climate emergency.

THE REFOREST'ACTION APPROACH

Our specifications list our priorities:

- **Species diversity**
- **Forest biodiversity**

WHEN YOU FUND AN ASSISTED NATURAL REGENERATION PROJECT, **YOU:**

- **Help fight climate change and biodiversity loss;**
- **Help recreate multifunctional forests** that acknowledge the vital social and economic aspect;
- **Encourage a virtuous forest management system** with a rational, sustainable method that draws on the forest's natural cycle.
- **Protect and develop carbon and biodiversity sinks for the future** by boosting our forest resources over the long term.

TO SUPPORT A LOW-CARBON PROJECT, GET IN TOUCH!

Certified B Corporation bcorporation.net

contact@reforestaction.com
+33 (0)1 86 22 04 80
www.reforestaction.com

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