

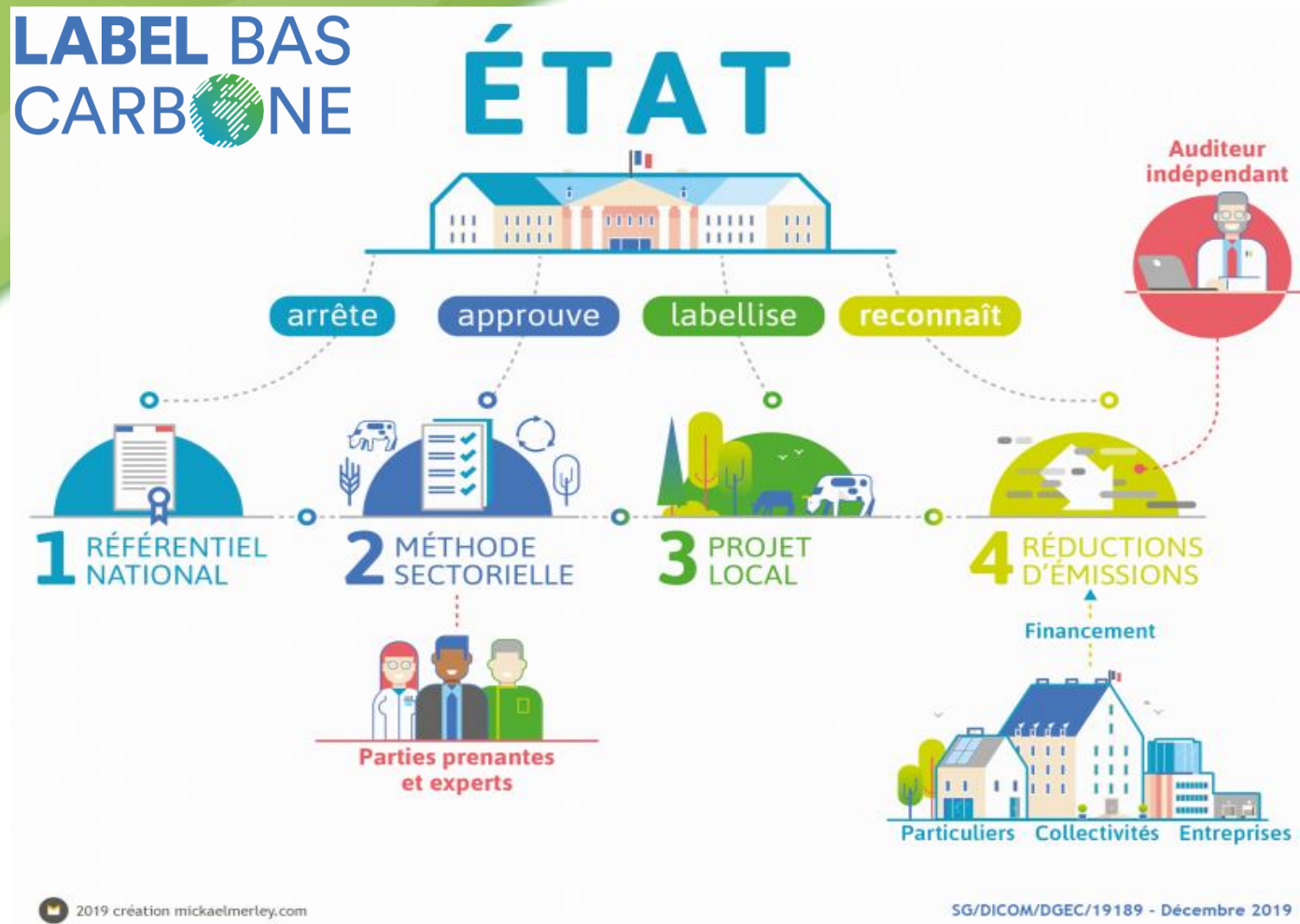
The label Bas-Carbone, the french standard for carbon offset projects certification

31/03/2022

Centre national de la propriété forestière



The label Bas-Carbone (*low-carbon standard*)



→ Certify the CO₂ sequestration of forest projects. For all entities which are willing to offset their CO₂ emissions: private firms, administrations, public bodies, citizens...

Three methodologies redacted by the CNPF

Methodology « afforestation »

- Agricultural land (whatever the land: grassland, croplands, orchards, vineyards...)
- Abandoned overrun lands in the process of natural colonisation

Methodology « reforestation of destroyed or impacted forests »

- Destroyed by storms
- Destroyed by forest fires
- Impacted by intensive diebacks

Methodology « conversion of coppice to high stands »

Criteria of the label Bas-Carbone

- **Additionality:** demonstrate that the project wouldn't have been achieved without the carbon encouragement
- **Monitoring of the CO₂ sequestration**
- **Verification (audit)** by an independent third party in order to generate carbon credits
- **Traceability** of carbon
- **Permanence** of emission sequestrations: how does the standard guarantee the permanence of the carbon stored? Eventual storms, fires, diebacks, other risks...
- **Social and environmental co-benefits:** take into account biodiversity, water preservation, soils protection, social aspects (local employment...)

Methodologies characteristics

Item	Afforestation	Reforestation	Conversion of coppice to high stands
Duration	30 years	30 years	30 years
Carbon credit	<i>Ex ante</i>	<i>Ex ante</i>	<i>Ex ante</i>
Credit generation	Year 5	Year 5	Year 0
Verification (audit)	Documentary + field audit (density verification of living plants per hectare)	Documentary + field audit (density verification of living plants per hectare)	Documentary
Carbon discount (= buffer)	Lack of economical analysis: - 20 % General and unverifiable risks (storms, diebacks, health attacks): - 10 % Fire risk: 0%, - 5 %, - 10 % o - 15 % Non demonstration of fertility class: - 10 %		

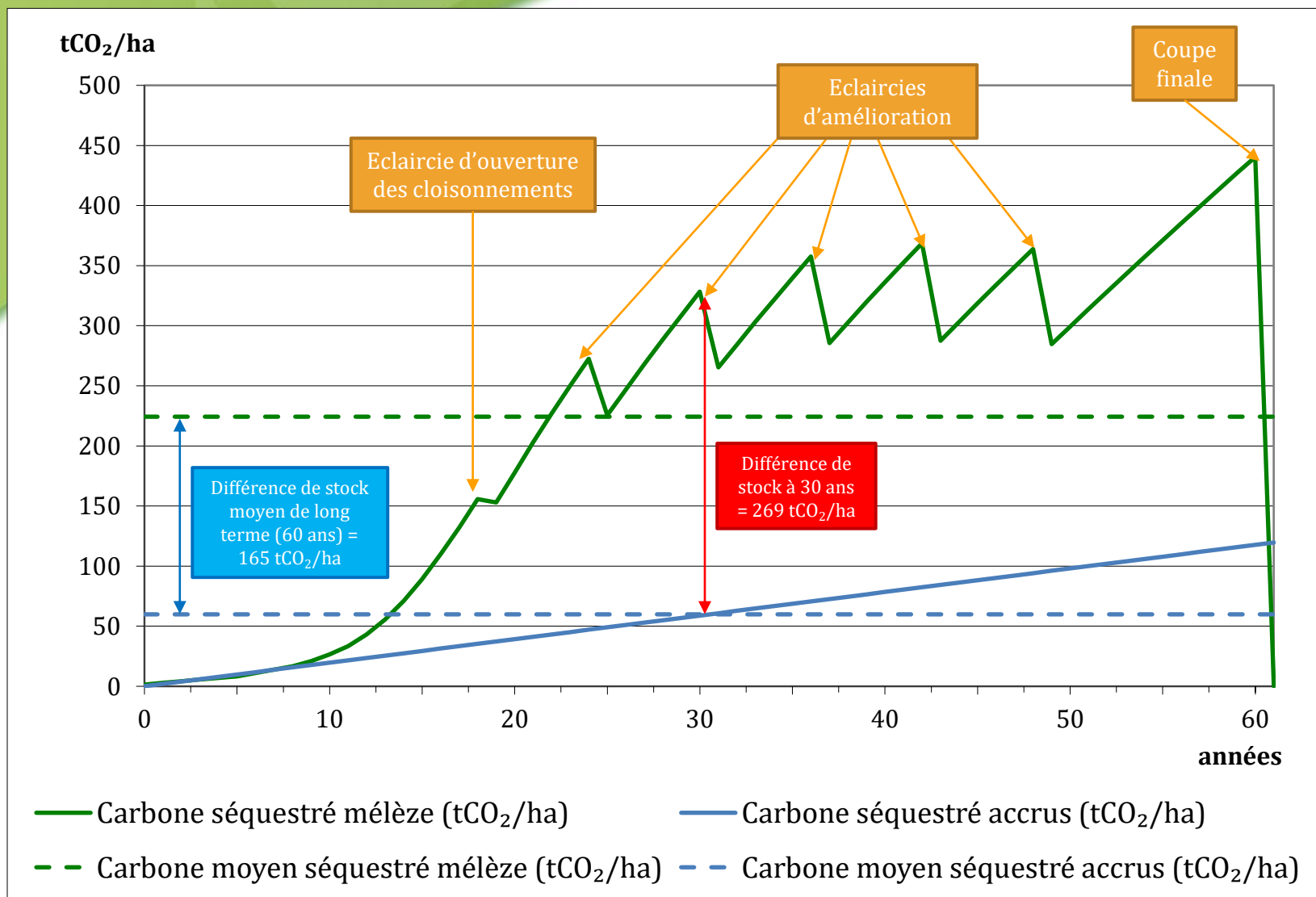




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A rigorous quantification of additional carbon





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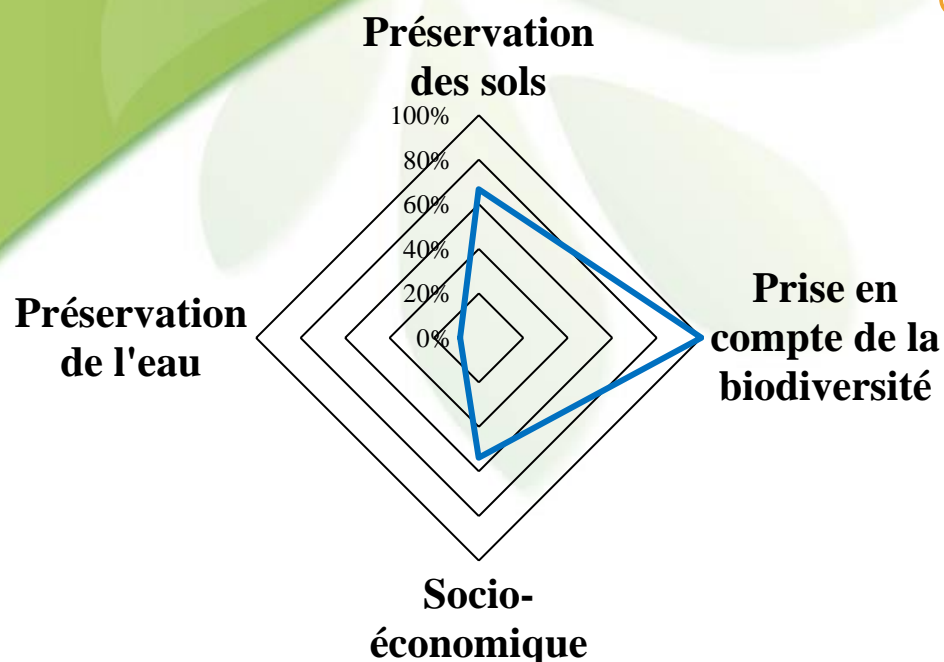
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LABEL BAS
CARBONE

Thinned chestnut coppice one year later (Haute-Vienne)



Estimation of the « co-benefits »



- Example of a certified project :
 - **Socio-economical (54 %)** : local employment, experimental project, PEFC certification
 - **Soils protection (67 %)** : soft soil preparation before plantation
 - **Biodiversity (100 %)** : mix of 10 species with 7 native species, preservation of edges with broadleaves
 - **Eau (8 %)** : reforestation with conifers set back from the edge of the river



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A fourth methodology... soon ! (1/2)



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Silviculture of Aleppo pines in Mediterranean forests (Hérault)



A fourth methodology... soon ! (2/2)



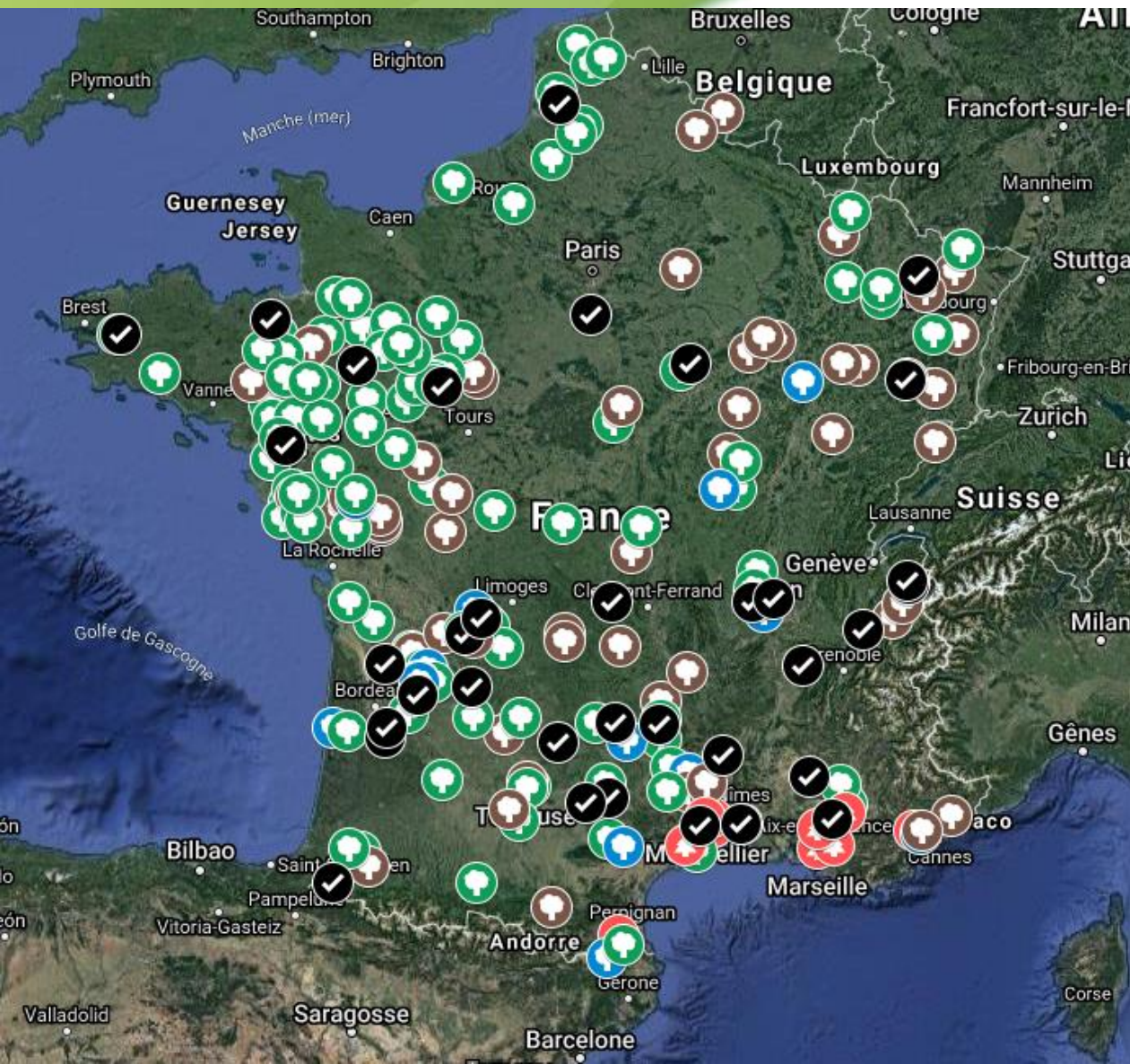
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Thinning of Aleppo pine forests in order to decrease the fire risk in the future (in 20 years)

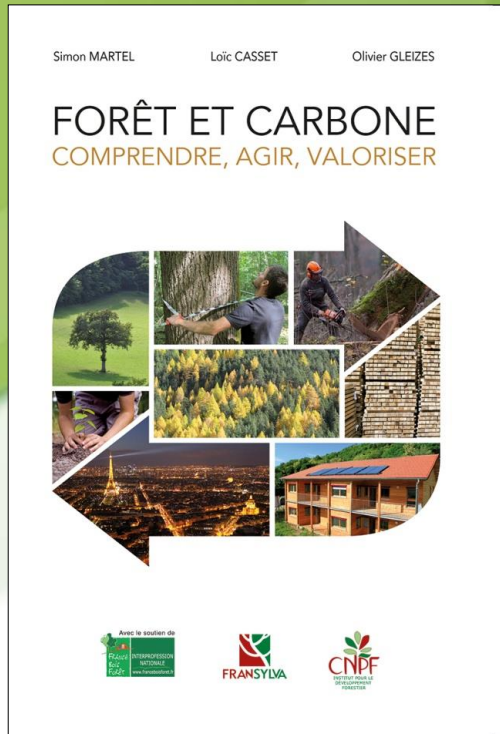


CNPF's potential carbon offset projects



4 main types of carbon offset projects:

- Green: afforestation
- Brown: Reforestation of impacted forests (storms, fires, intensive diebacks)
- Blue: conversion of coppice to high stands
- Red: silviculture of Aleppo pine forests
- Dark: yet completed, certified and financed project



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