Forest Climate Credits System of Catalonia

Forestry projects for mitigation and adaptation to climate change (PROMACC)

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57. - CAMPRODON (alt. 950 m.). - Hermita de Nra. Sra del Remei
L. Roisin, fot. Barcelona

FOREST TRANSITION IN CATALONIA 1940-1970

and CLIMATE CHANGE...over the last 25 years:

- the rate of CO_2 sequestration has decreased by 17%
- water flows in rivers has decreased by 30 %
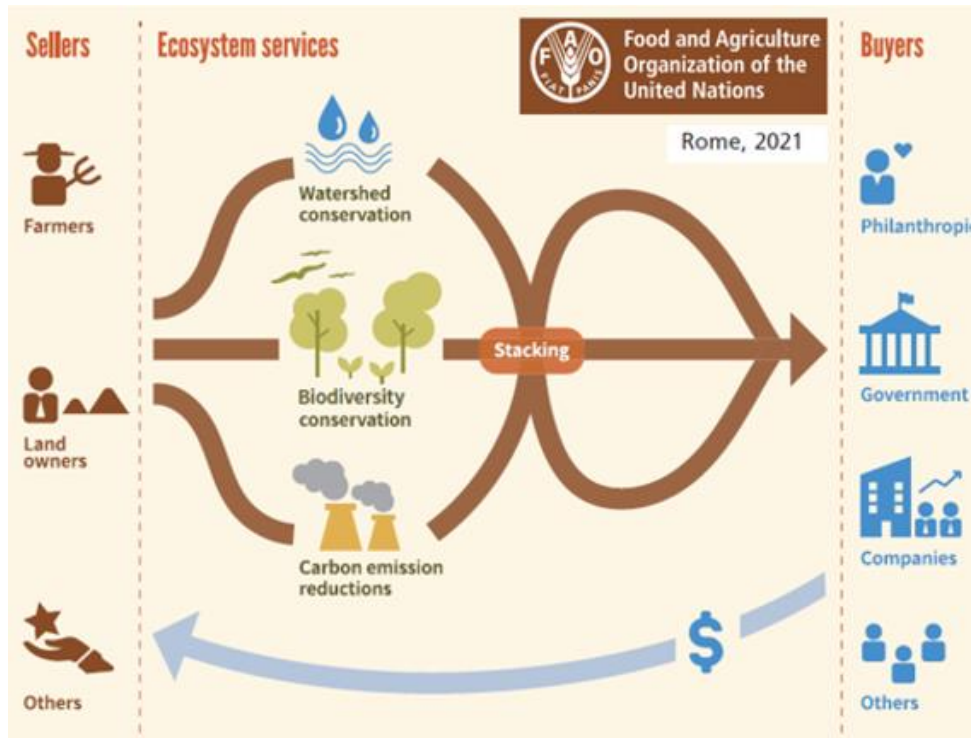- biodiversity linked to open areas has been affected by forest expansion

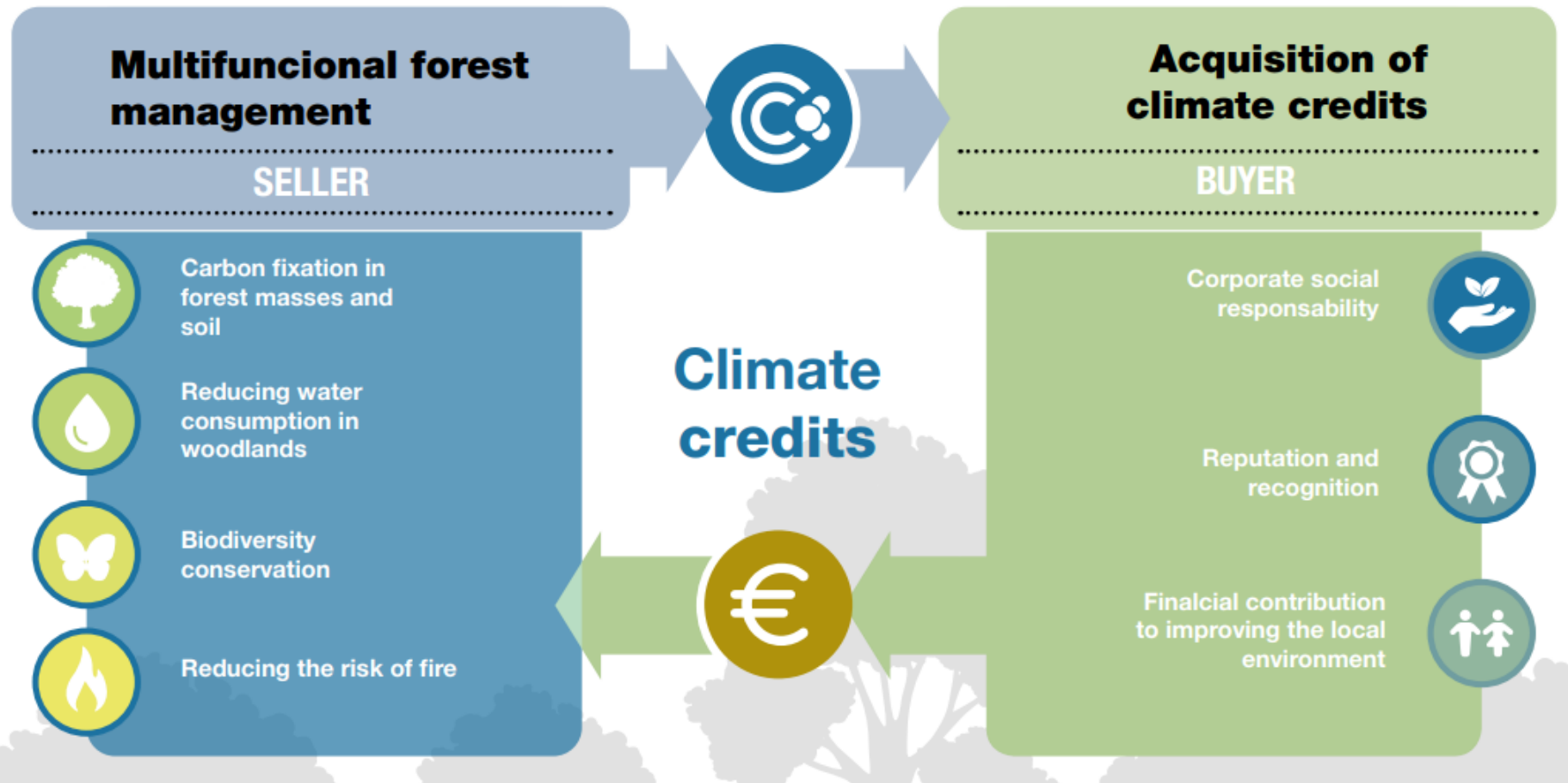# Multifunctional forest management, beyond carbon

" We defend the role of forest management in achieving landscapes that are more resilient to climate change. "

Forest Climate Credits System of Catalonia

Multifuncional forest management

SELLER

- Carbon fixation in forest masses and soil
- Reducing water consumption in woodlands
- Biodiversity conservation
- Reducing the risk of fire

Climate credits

Acquisition of climate credits

BUYER

- Corporate social responsability
- Reputation and recognition
- Finalcial contribution to improving the local environment

CARBON
Forestry fixation in forest stands and soil

WATER
Reducing water consumption in woodlands

BIODIVERSITY
Biodiversity conservation

Strategic vision

Joint forestry management

Identification of the main Forest Ecosystem Services (ES) to be provided

Resilient landscapes

Forestry operational project
PROMACC

(Forestry projects for mitigation and adaptation to climate change)

Climate Smart Forestry (CSF) "should enable both forests and society to transform, adapt to and mitigate climate induced changes"

Integrative forest Management (IFM), valuing at the same level the co-benefits of SFM and integrate biodiversity conservation criteria

Nabuurs G-J *et al* (2018)
Kauppi P *et al* (2018)
Verkerk PJ *et al* (2020)
Bowditch *et al* (2020)

Mitigation	**Adaptation**	**Social dimension of forestry**
from the forests to the whole value chain (**bioeconomy**)	Linked to **biodiversity** (composition, genetic, functional,...) and to **CC - induced disturbances**	Involvement of stakeholders from local communities to global forest **Governance** . Provision of **Ecosystem Services** at various scales and for changing demands

Forest Bioeconomy and Climate Change — Lauri Hetemäki, Jyrki Kangas, Heli Peltola *Editors*

1 Climate Credit = 1 ha Resilient Landscape

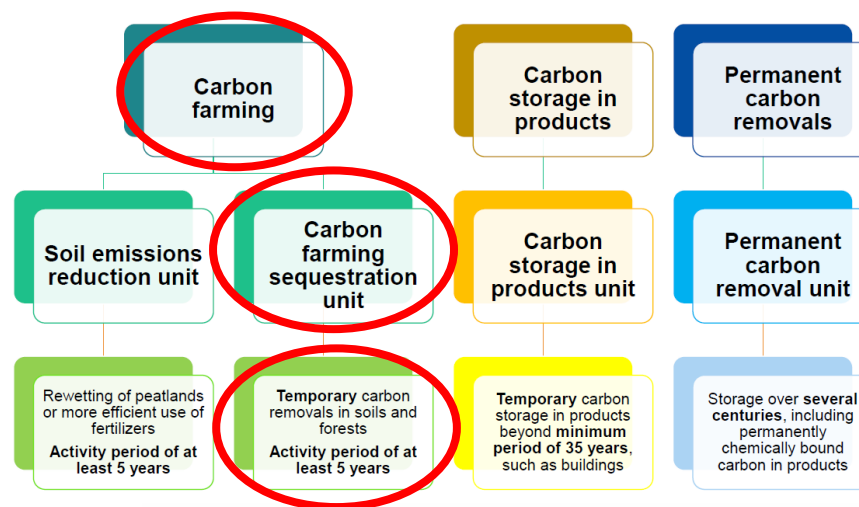**Generalitat de Catalunya**

Centre de la Propietat Forestal

FCC System of Catalonia: QU.A.L.ITY criteria

Regional regulation
Government Agreement 2023

Scope of certification
Article 1 and 2 CRCF Regulation

Carbon farming

| Soil emissions reduction unit | Carbon farming sequestration unit | Carbon storage in products unit | Permanent carbon removal unit |

Carbon storage in products

Permanent carbon removals

Rewetting of peatlands or more efficient use of fertilizers
Activity period of at least 5 years

Temporary carbon removals in soils and forests
Activity period of at least 5 years

Temporary carbon storage in products beyond **minimum period of 35 years**, such as buildings

Storage over **several centuries**, including permanently chemically bound carbon in products

CRITERIA FOR A ROBUST EU CERTIFICATION SYSTEM

The EU certification framework can **only be used to certify carbon removals that meet the following** **QU.A.L.ITY criteria:**

QUantification   **A**dditionality   **L**ong-term storage   Sustainabil-**ITY**

FCC System of Catalonia: QU.A.L.ITY criteria

Quantification
- Calculation of net benefit
- Monitoring
- Baseline

Additionality
- Additionality tests in case of activity-specific baseline

Liability
- Monitoring rules
- Liability mechanisms

Sustainability
- Minimum sustainability requirements
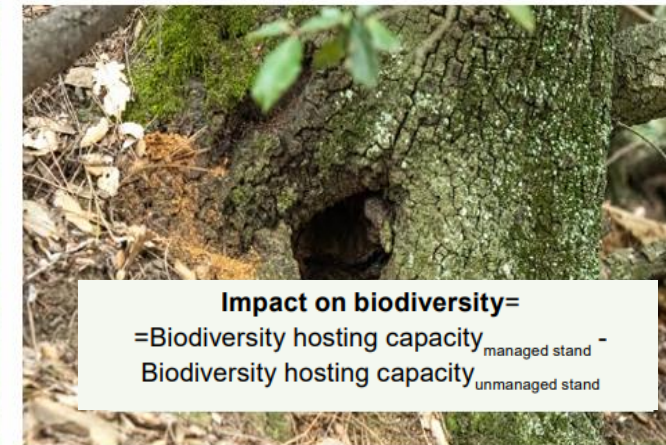- Monitoring and reporting of co-benefits

METHODOLOGY FOR CALCULATING THE
IMPACT OF FOREST MANAGEMENT ON
ECOSYSTEM SERVICES:
CARBON, WATER AND BIODIVERSITY

generate co-benefits

Impact of management on CO_2 balance=
$tCO_{2\ sequestered}$ - $tCO_{2\ emitted}$ + $tCO_{2\ avoided}$

Impact of management on H_2O exported =
($m^3\ H_2O_{post-thinnig}$ - $m^3\ H_2O_{initial}$) X n years/2

Impact on biodiversity=
=Biodiversity hosting capacity$_{managed\ stand}$ -
Biodiversity hosting capacity$_{unmanaged\ stand}$

Quantification & Liability & Addicionality & Sustainibility

SFM
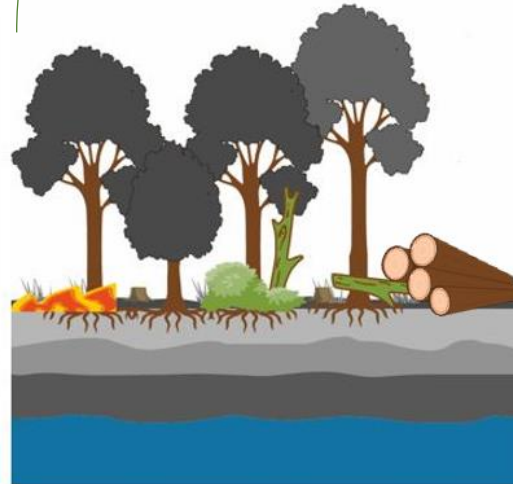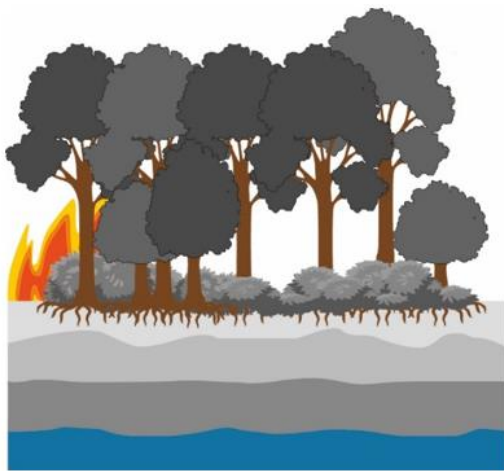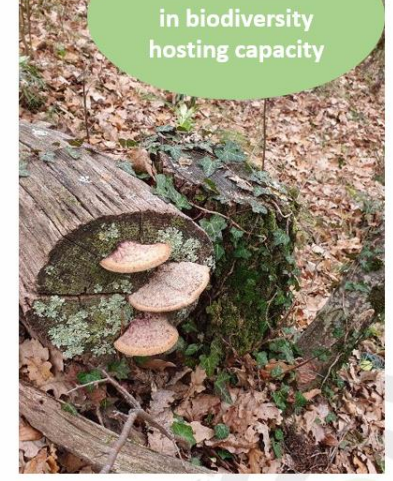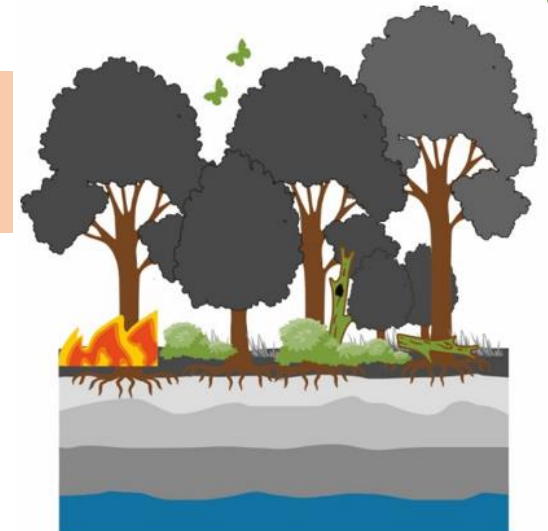We calculate the impact for the **15 years immediately** after treatment

tCO$_2$ sequestered & tCO$_2$ avoided

m³ of water exported

% increment in biodiversity hosting capacity

Monitoring period

5 yrs   10 yrs   15 yrs

DOSSIER DE PREMSA

PROMACC – Local forestry projects and impact on FES

Serra de Collserola.

AFG Les Arenes.

Conca Segre-Rialb.

Serres Miralles-Ancosa.

PROMACC CODE	NAME	PROMOTERS	CC n	IMPACT OF 1 CLIMATE CREDIT		
				t CO2	m3 water	%Bio
01_2022	Serra de Collserola	Forest4 SCCL; BOSCAT	40	36	2098	29
02_2022	AFG Les Arenes	AP de Castellar del Vallès, Gallifa i Sant Llorenç Savall	45	22	2035	44
03_2022	Vall de Lord	Associació Forestal de la Vall de Lord	107	34	2555	16
04_2022	Conca Segre-Rialb	Associació de la propietat forestal Segre-Rialb	80	26	1192	18
05_2022	Serres Miralles-Ancosa	AP forestals Serra Miralles-Orpinell	34	16	789	57
06_2022	Vall de la Muga	Fundació Pioneers of Our Time	58	88	2857	26
08_2022	Zona volcànica de la Garrotxa	Parc Natural de la Zona Volcànica de la Garrotxa	42	93	1384	6
01_2023	Gavarres	AP Boscos de Celrà i AG Forestal de les Gavarres	35	10	2448	6

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PROMACC		PRICE OF 1 CLIMATE CREDIT			
CODE	NAME	€	€/tCo2	€/m3H20	€/%Bio
01_2022	Serra de Collserola	3337	95,6	1,6	118,8
02_2022	AFG Les Arenes	2792	45,4	1,4	63,5
03_2022	Vall de Lord	4103	99,9	1,3	210,2
04_2022	Conca Segre-Rialb	3206	123,3	2,7	181,8
05_2022	Serres Miralles-Ancosa	3487	217,4	4,4	61,2
06_2022	Vall de la Muga	4429	50,5	1,6	170,4

PROMACC – Local forestry projects – Credits sold

Codi	Nom	Cclim generats	Pressupost €	CClim comprats	Finançament €
01_2022	Serra de Collserola	40	133475,49	32	106689,72
02_2022	AFG Les Arenes	45	126846,35	45	126846,35
05_2022	Serres Miralles-Ancosa	34	119264,96	6	20000,00
06_2022	Vall de la Muga	58	256003,23	7	31003,85
Total	**2021-2023**	**177**	**635590,03**	**90**	**284539,92**

The PROMACCs are prepared to enter **the environmental financing circuits**, facilitating companies and institutions to **invest in forest & nature-based solutions**, within the framework of **CO_2 voluntary compensation, ESG reporting & other corporate social responsibility initiatives.**

The System offers:

- **ISSUANCE OF A CERTIFICATE**
- **GENERAL AND SPECIFIC COMMUNICATION**
- **IDENTIFICATION IN THE OFFICIAL REGISTER**
- **CLOSE LINK WITH THE TERRITORY**

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