Congresso Annuale della CIPRA
Nuovi Equilibri tra Natura e Società
I servizi ecosistemici nel rapporto città-montagna
Biella – Italia, 1-3 Luglio 2021

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Le opportunità dei servizi ecosistemici attraverso la certificazione: il caso delle foreste

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Outline

The opportunities of ecosystem services certification: the case of forests

1. Introduction
2. Certification: basic concepts
3. Certification of forest ES
4. A best practice: FSC certification of ES
5. To conclude: potential and challenges

Source: Pixabay

Let’s visit Alpine forests…

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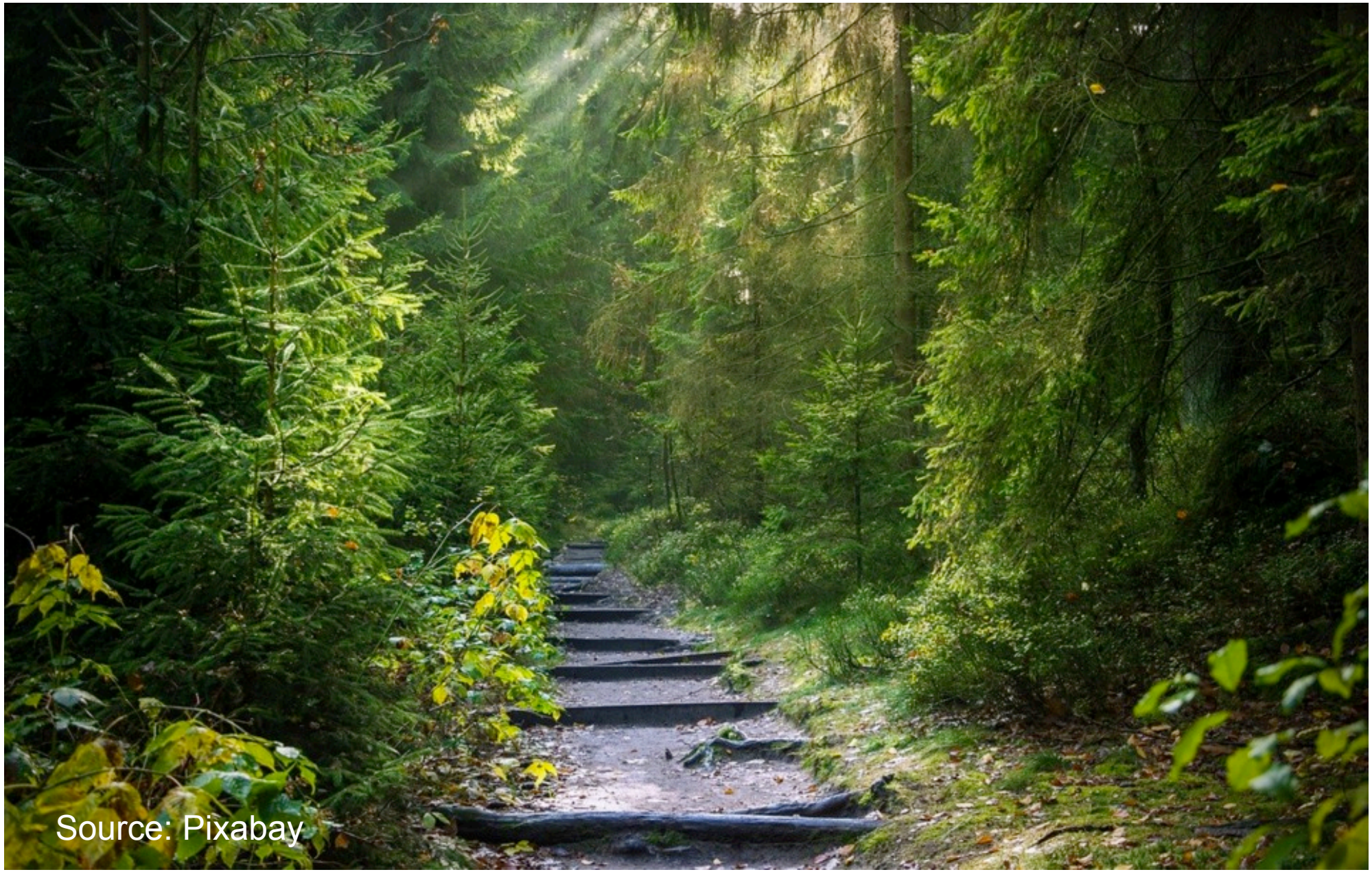
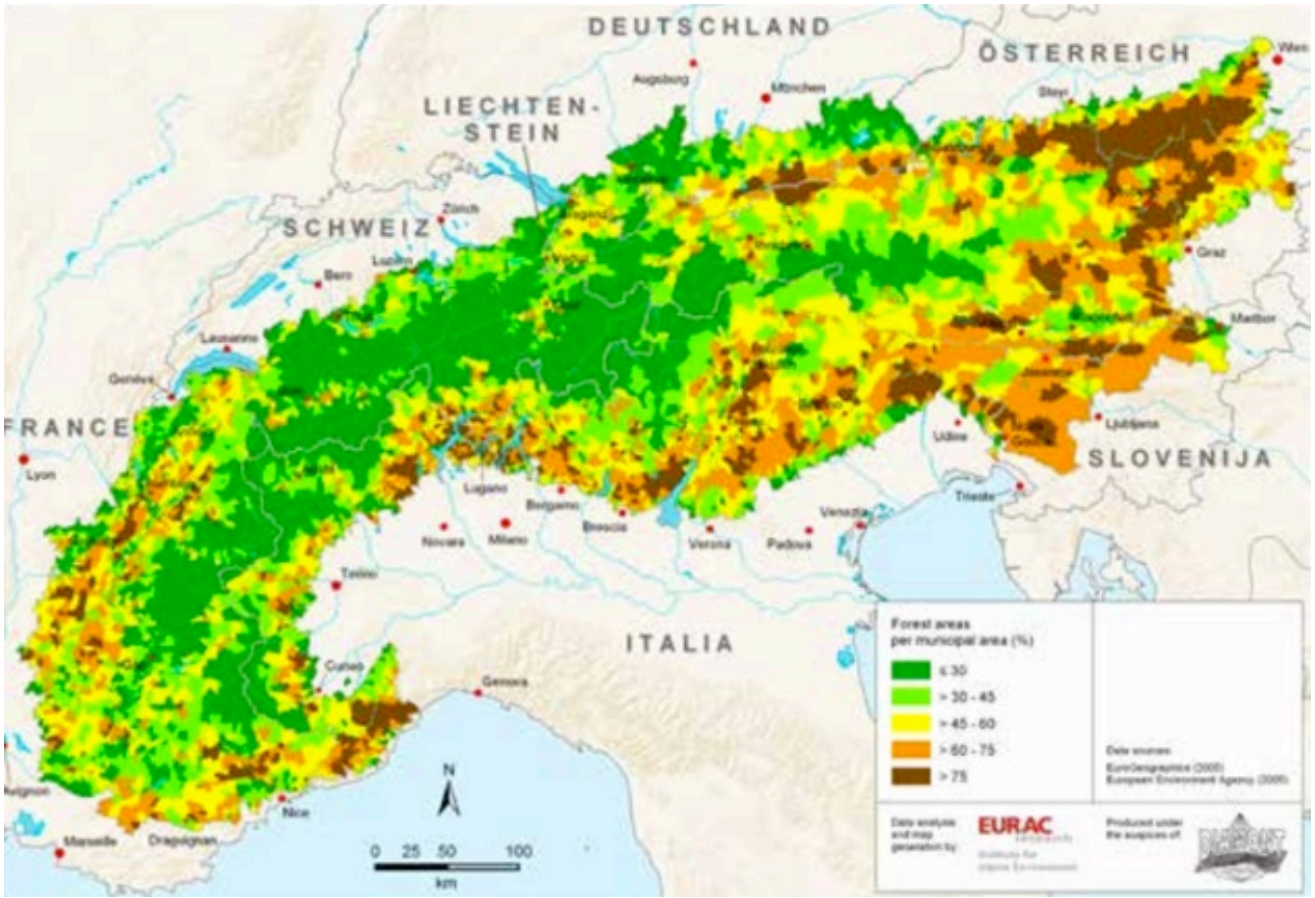


1. Introduction: forests in the Alps

- **Forests cover ca. 8.8 M ha (46% of the Alpine Convention total area), it is increasing in recent years, ca. +0.5%/y**



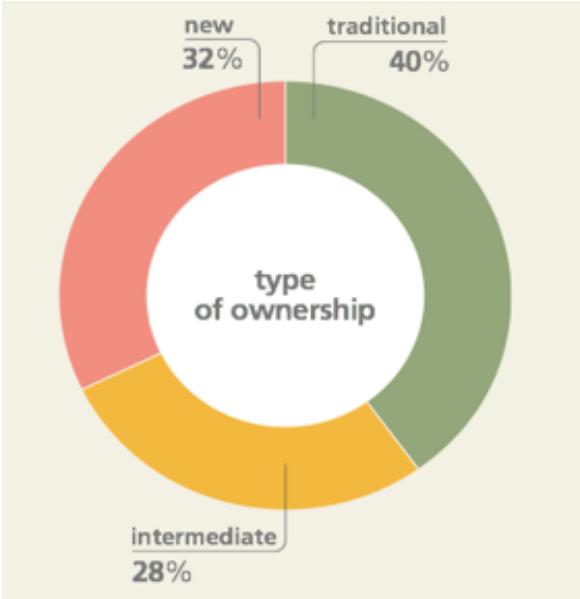
- Forests are areas covered **by tree canopies cover >10%** of the area and **trees higher than 5 m** (with some differences country by country) + shurb forest

- Marginal agricultural lands abandonment
- Reduction of economic profitability of forest management

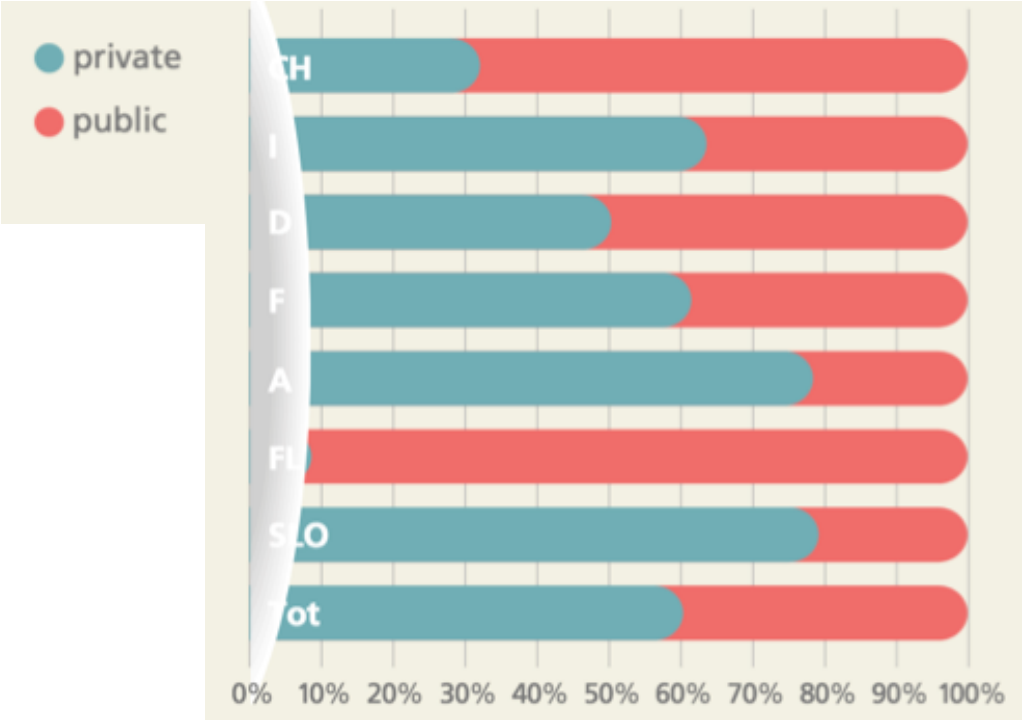
Source: Alpine Convention, 2015 – p. 13 https://www.alpconv.org/fileadmin/user_upload/Publications/Alpine_Forest_2015.pdf

1. Introduction: forests in the Alps

Source: CM Cadore-Longaronese-Zoldano, 2001



Forest ownership



Source: Alpine Convention, 2015 – p. 13

Source: Sekot, 2014 – cit. in Alpine Convention, 2015 – p. 38
https://www.alpconv.org/fileadmin/user_upload/Publications/Alpine_Forest_2015.pdf

1. Introduction: what forest ES are?

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Provisioning services

Wood

Non Wood Products

Water

Regulating services

Soil protection

Biodiversity

Carbon sequestration

Cultural services

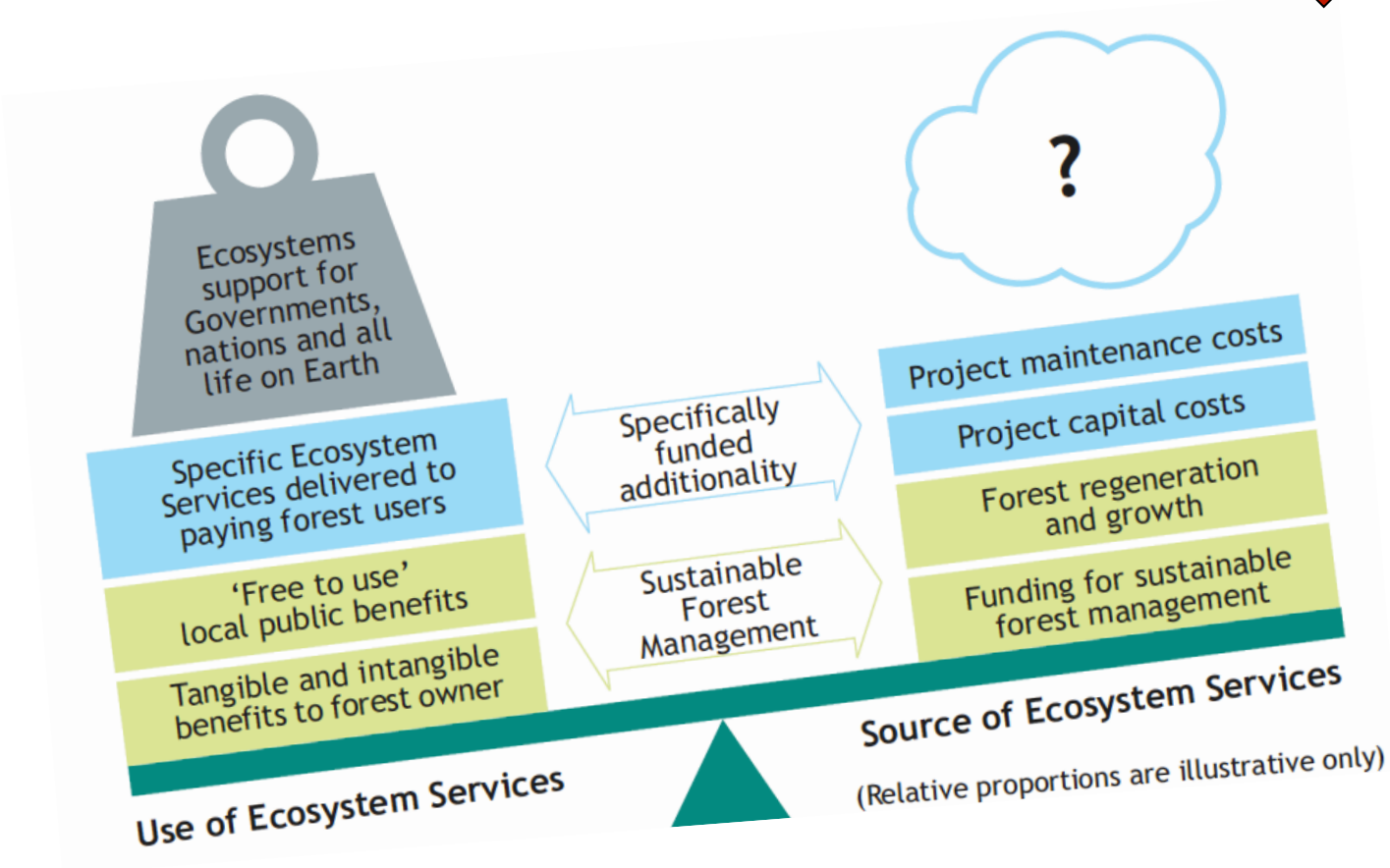
Recreation,Culture, Sport

Health, wellbeing

Landscape

1. Introduction: what the problem is?

- **Total value of regulating and recreational ES**
- **Commercial value** of (**traditional) provisioning ES from mountain forests**



1. Introduction: what the problem is?

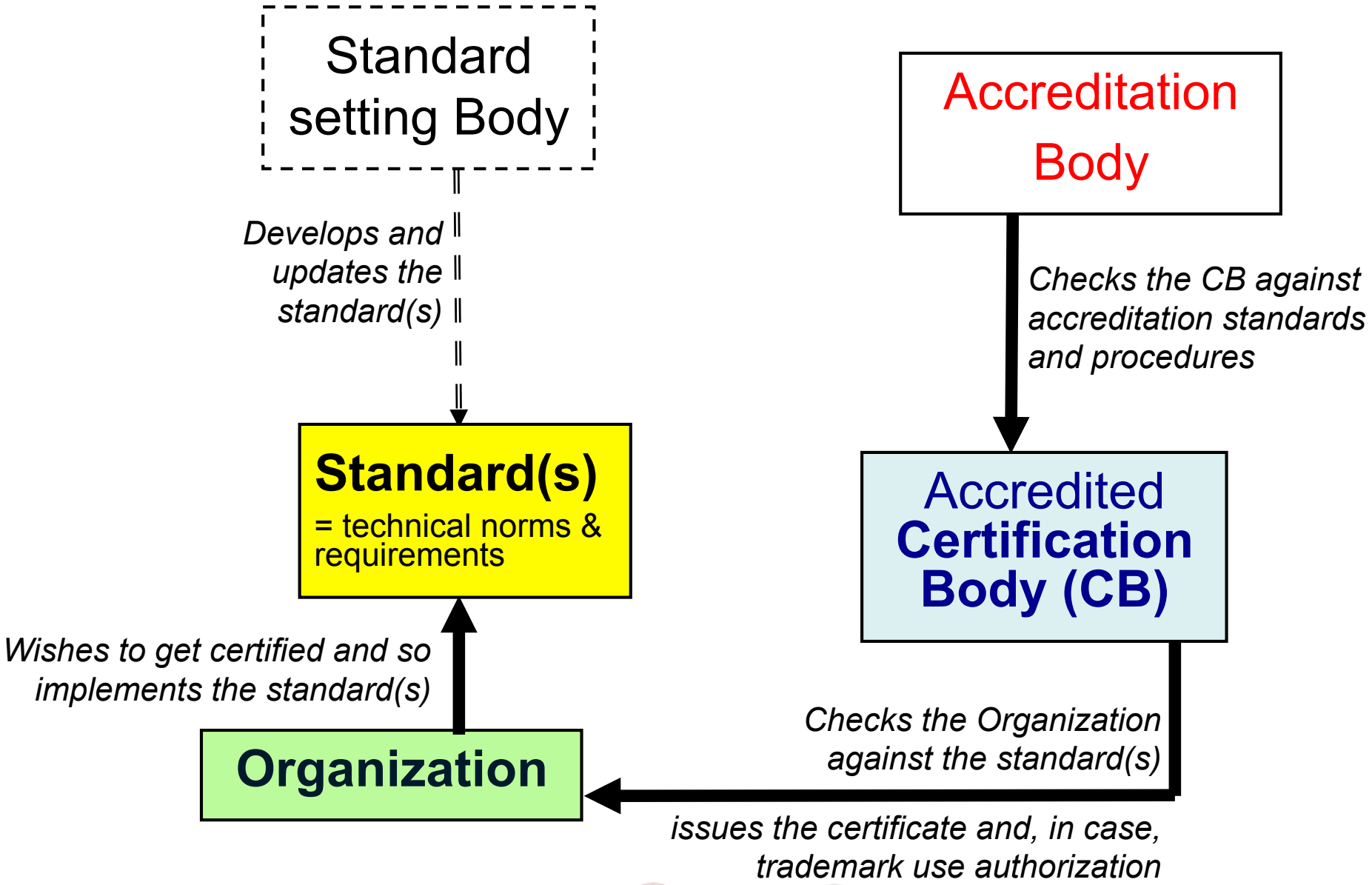
Forest buffet
for free

2. Certification: definition

"*The provision* ***by an independent body of written assurance*** *that the product, service or system in question* ***meets specific requirements***" (ISO, 2015)

- **Standards** (e.g. EU Regulation 2018/848 on organic production and labelling of organic products)
- **Management** (practices, tools, etc.)
- **Procedures** (auditing, certificate issuing, etc.)

2. Certification: how does it work?



3. Certification of forest ES: why?

Certification is a **market-based instrument that adds value** to a product/service **through labelling/marketing**

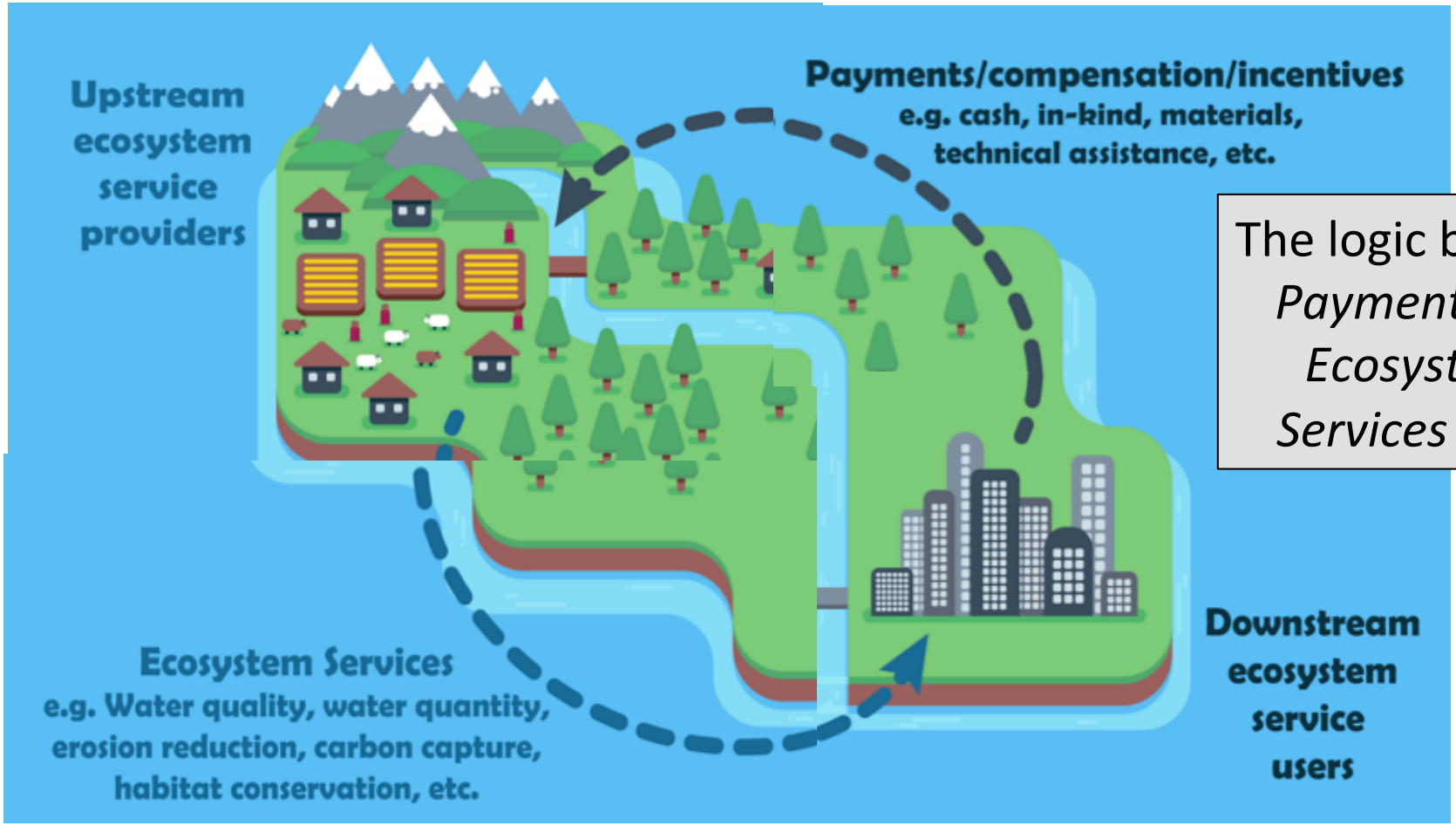
Certified products/services are bought by consumers at higher prices, or as preferred to non certified products

Certified products/services are provided by companies at higher costs, as a tool to differentiate with respect to the competitors

Buyers of ES (market demand)

Providers of ES (market supply)

3. Certification of ES: provision (& payment) of ES at the basis of the mountain-urban interface



The logic behind: *Payments for Ecosystem Services* (PES)

Source: Boscolliso, Wikipedia – mod. [Accessed 24.06.2021]

https://upload.wikimedia.org/wikipedia/commons/2/2f/Payments_for_Ecosystem_Services_%28PES%29.png

3. Certification of ES: who is interested?

3. Certification of forest ES: why?

1. Quantifying and valuing forest ES is important for taking more accurate and informed decisions:

➔ positive and negative externalities ➔ total value of a decision *(e.g. cutting down a protective forest or building a new alpine ski area*?)

2. Selling forest ES is important for collecting money to remunerate (& motivate) the ES provider(s):

➔(higher) management costs compensated

➔real value of ES (partially) recognised

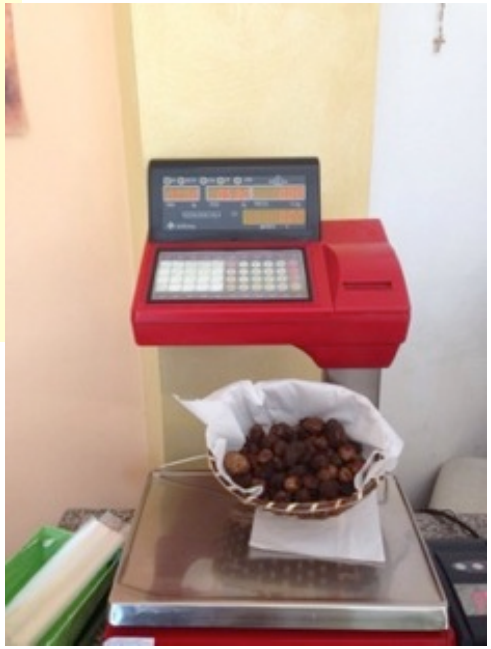
Certification can help in this, as it:

- **independently demonstrates impacts** of new/improved management practices on ES
- **communicates** commitments & results

3. Certification of forest ES

Several examples of certified marketable products/services!

- **timber/wood**
- **non wood forest products** (berries, chestnuts, truffles, mushrooms, herbs, honey, …)
- (CO_2 sequestration – **carbon credits**)



Examples:

As deriving from Sustainable Forest Management according to FSC PEFC

As wild collected FAIR WILD

As deriving from organic production

As originating in a certain territory

As guaranteeing fair prices and trade FAIRTRADE

3. Certification of forest ES

Several examples of certified marketable products/services!

- **timber/wood**
- **non wood forest products** (berries, chestnuts, truffles, mushrooms, herbs, honey, …)
- (CO_2 sequestration – **carbon credits**)

What about non-marketable services?

- **Biodiversity**
- **Soil erosion and hydrogeological protection**
- **Cultural/educational/ recreational services**
- **Landscape**
- **…**

4. A best practice:

The FSC® Ecosystem Services Procedure

FSC promotes environmentally appropriate, socially beneficial and economically viable management of the World's forests

- FSC is widely known and recognized: **demand oriented**
- FSC recognizes the **whole value** of the forest (*not only timber* → *Ecosystem Services Procedure*)
- FSC verifies **real impacts** (not speculations)
- One world, **one standard**
- FSC has **lower costs** (competitive and consolidated system)

4. A best practice:

The FSC® Ecosystem Services Procedure

The main goal is to give FSC-certified **forest managers/owners** the possibility to:

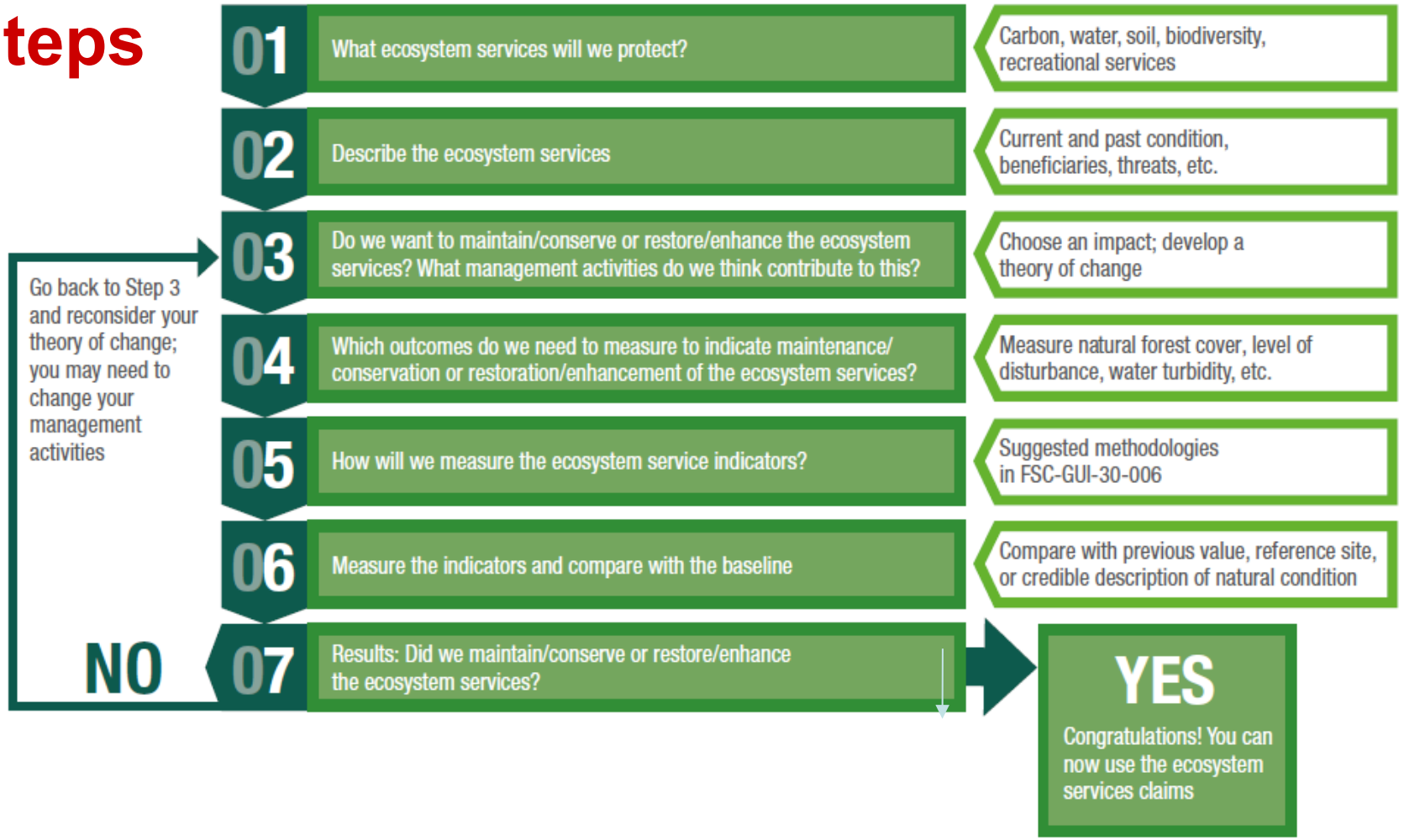
- Credibly **verify, demonstrate and communicate the positive impacts** of FSC-certified management activities on ES
- Improve access to emerging ES markets and finance

https://ic.fsc.org/en/document-center/id/328

https://www.youtube.com/embed/k-0j6oyt1Us?autoplay=1&enablejsapi=1&origin=https%3A%2F%2Fic.fsc.org

4. A best practice:
The FSC® Ecosystem Services Procedure

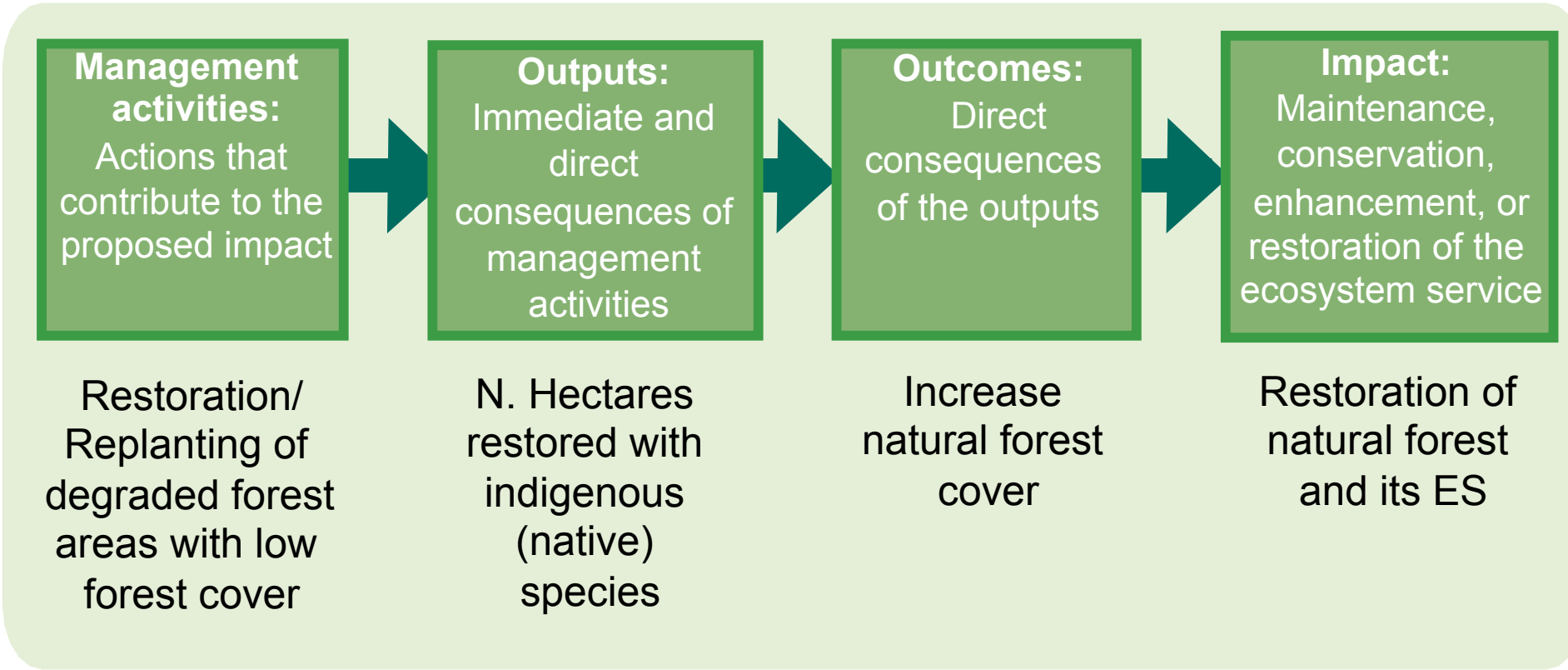
7 steps



4. A best practice:

The FSC® Ecosystem Services Procedure

Foundation: **Theory-of-Change** (cause-effect links)

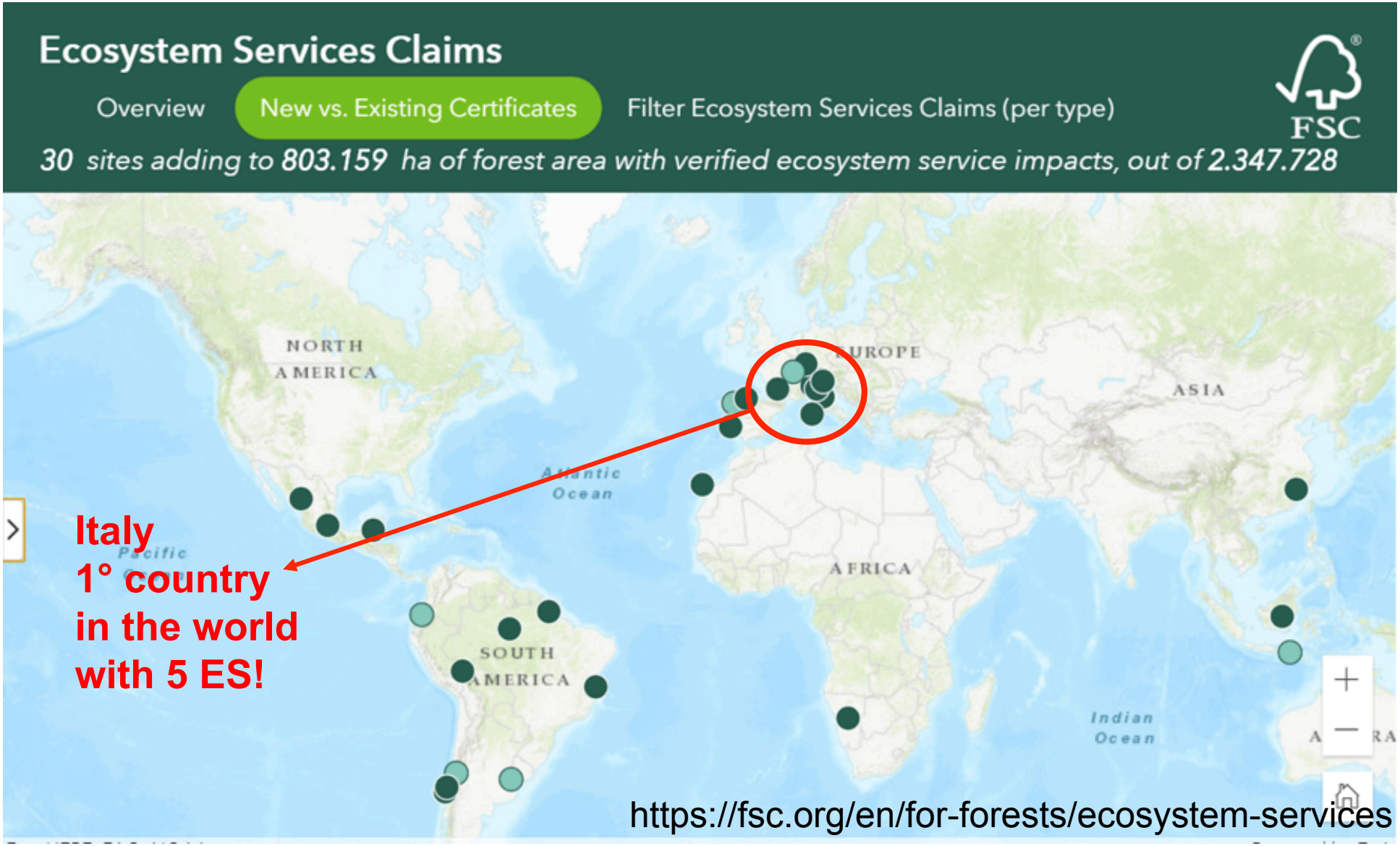


1. Biodiversity conservation
1.1 Restoration of natural forest cover
1.2 Conservation of intact forest landscapes
1.3 Maintenance of an ecologically sufficient conservation area network
1.4 Conservation of natural forest characteristics
1.5 Restoration of natural forest characteristics
1.6: Conservation of species diversity
1.7: Restoration of species diversity
2. Carbon sequestration and storage
2.1 Conservation of forest carbon stocks (or reduced emissions)
2.2 Restoration of forest carbon stocks
3. Watershed services
3.1 Maintenance of water quality
3.2 Enhancement of water quality
3.3 Maintenance of the capacity of watersheds to purify and regulate water flow
3.4 Restoration of the capacity of watersheds to purify and regulate water flow

4. Soil conservation
Maintenance of soil condition
Restoration/enhancement of soil condition
Reduction of soil erosion through reforestation/ restoration
5. Recreational services
5.1 Maintenance/conservation of areas of importance for recreation and/or tourism
5.2 Restoration or enhancement of areas of importance for recreation and/or tourism
5.3 Maintenance/conservation of populations of species of interest for nature-based tourism
5.4 Restoration or enhancement of populations of species of interest for nature-based tourism

The FSC® Ecosystem Services covered by its specific certification procedure

4. A best practice:
The FSC® Ecosystem Services procedure



4. Italy as a pioneer country for the FSC® Ecosystem Services procedure

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Seguici su:

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BIODIVERSITÀ | CLIMA | ECONOMIA | ENERGIA | MOBILITÀ | SALUTE | CHI SIAMO

R CONTENUTO PER GLI ABBONATI

L'Italia è la prima al mondo a "certificare" i benefici delle foreste

27 FEBBRAIO 2019 — PUBBLICATO PIÙ DI UN ANNO FA — 2 MINUTI DI LETTUR

A&E · Natura

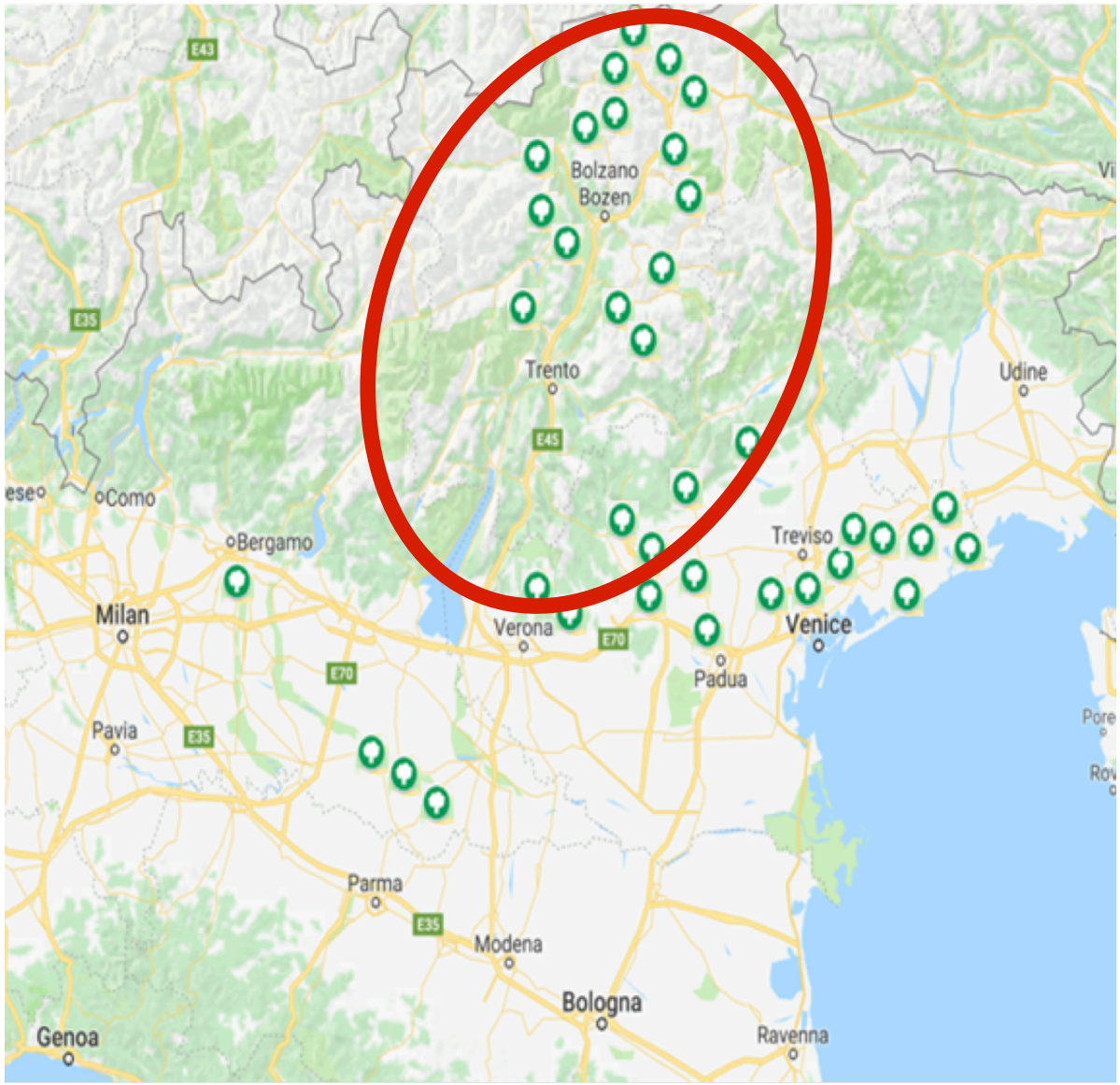
ANSA.it · Ambiente&Energia · Natura · Foreste 'certificate' che fanno bene, Italia prima al mondo

Foreste 'certificate' che fanno bene, Italia prima al mondo

Utili a salute e società,da 1.000 ettari -220mila tonnellate CO2

Redazione ANSA ROMA 26 febbraio 2019 15:04 — Scrivi alla redazione — Stampa

4. A best practice: FSC®-certified ES in the Alps



- More than 70 forests in Northern Italy
- **More than 2,000 hectares**
- Conservation forests & productive forests
- Public and private owners

2018: 1st certified in the world for the full set of 5 ES, several forest sites in the Alps

5. To conclude: potential and challenges

- **Challenges: costs for new forest get certified.** However, in any case, there are options for **new value to certified forests.**
- Certification as an opportunity to give value to green jobs, **motivate** active sustainable management of forest and landscape, **attract investments (sponsors) in mountain areas**
- Communications/claims, visibility ➔ **territorial marketing, but need inter-sectors coordination/collaboration (e.g. forest-tourism)**

- Certification as a tool to provide evidences of
  - **progresses towards UN Agenda 2030 SDGs**
  - **targets set by the new EU Policies/Strategies** (e.g. Biodiversity)

- **UN Decade on Forest and Land restoration** ➔not only timber…
- Some important and emerging ES **(health and human wellbeing) not fully explored yet** ➔ **need of pilot tests**

Thank you for attention!

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