ENABLING NATURE-BASED HEALTH
AND SOCIAL CARE THROUGH
KNOWLEDGE ALLIANCES

Wed 01.12.2021 | ONLINE INTERNATIONAL EVENT | 15:00 - 18:00 CET

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G4C and role of forest sector

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Outline

- Global trends and strategic options
- The 3 dominant policies
  - One Health
  - New Green Deal
  - Ecosystem Services protection
- Concluding remarks

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- **Global trends and strategic options**
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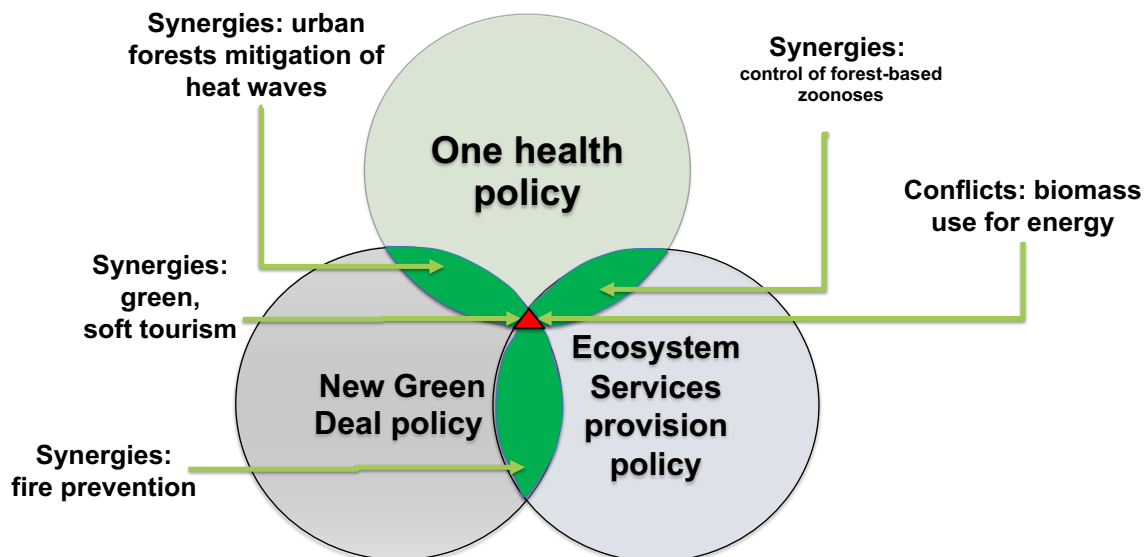## 1. Ensuring sustainable and resilient health and food systems

The EU's healthcare systems are among the most advanced in the world[36], but their sustainability and resilience need to increase. This includes investments in innovative care models (e.g. integrated care, telemedicine), strengthening the healthcare workforce, focusing on preventive measures and addressing comorbidity. To ensure healthier ageing, healthier lifestyles and physical activity will have to be combined with smart alternatives to long-term care, such as remote medicine solutions and home-based care robotics. New technologies matched with social and health policies might mitigate the additional costs associated with an ageing population, while enabling older people and persons with disabilities to live more autonomously. Online interaction, monitoring, and appropriate patient self-care could generate annual savings of up to EUR 120 billion in public healthcare spending across the EU[37]. A common European data space for health could support the rapid development and deployment of personalised medicine through data-driven decisions, thereby improving the effectiveness and accessibility of healthcare.

Which policies for this strategy?

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The 3 dominant policies

Synergies: urban forests mitigation of heat waves

Synergies: control of forest-based zoonoses

One health policy

Conflicts: biomass use for energy

Synergies: green, soft tourism

New Green Deal policy

Ecosystem Services provision policy

Synergies: fire prevention

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One Health

Human health and animal health are interdependent and bound to the health of the ecosystems → A collaborative global approach to **understanding and reducing risks for human, animal and ecosystem health**

World Health

- **60%** of pathogens that cause human diseases come from domectic animals or wildlife.
- **75%** of emerging human pathogens are of animal origin.
- **80%** of pathogens that are of concern for bioterrorism originate in animals

Food Security

- **More than 70%** [1] additional animal protein will be needed to feed the world by 2050.
- Meanwhile, **more than 20%** of animal production losses in the world are linked to animal diseases.

Environment

- Understanding the **connections** between biodiversity, ecosystems and infectious diseases is crucial.

Economy

- Animal diseases pose a direct threat to the **incomes** of rural communities that depend on livestock production.
- **More than 75%** [2] of the billion people in the world who live on less than $2 per day depend on subsistence farming and raising livestock to survive.

Source: https://www.oie.int/

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A similar approach: Planetary Health

United Nations Climate Change				Q EN ▼	🐦 f in 🔘 ●○ 📺
Home	COP 26	Process and meetings	Topics	Calendar	Climate action ▾	Documents and decisions ▾	About us ▾

Climate action ··· UN Global Climate Action Awards
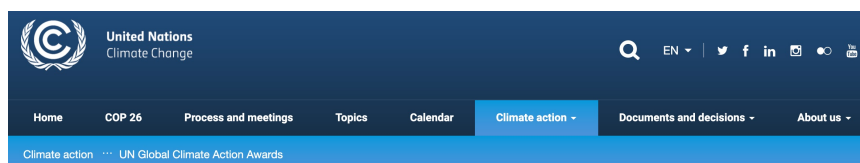
Planetary Health

… human health and the health of our planet are inextricably linked, and that our civilization depends on human health, flourishing natural systems, and the wise stewardship of natural resources.

Source: https://unfccc.int/climate-action/un-global-climate-action-awards/planetary-health

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**An impressive
plan of reforms**
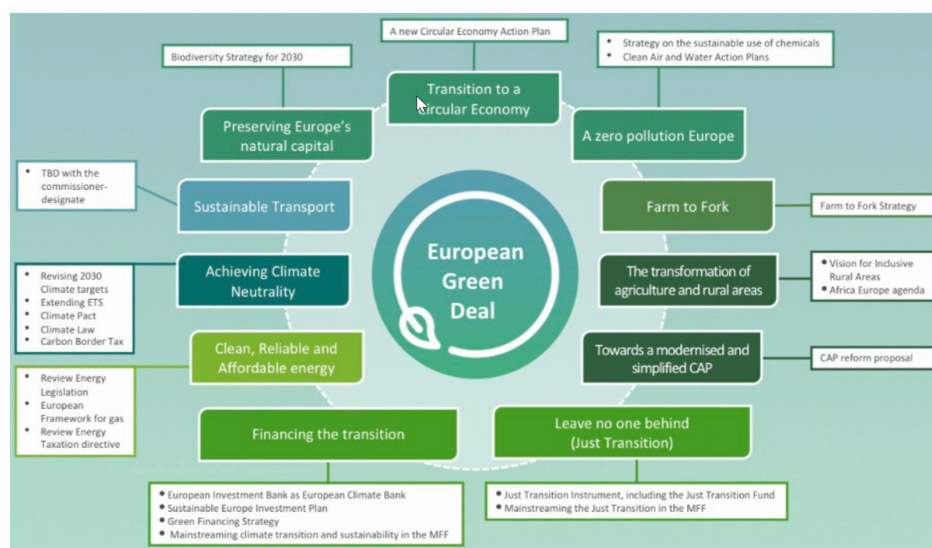
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EU Biodiversity Strategy for 2030
(p. 1)

*Nature is as important for **our mental and physical wellbeing** as it is for our society's ability to cope with global change, health threats and disasters. We need nature in our lives.*

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New EU Forest Strategy for the 2030
(p. 3)

Forests** and the forest-based sector provide multiple socio-economic functions and benefits, including additional jobs and growth opportunities in rural areas and recreational functions **contributing to citizens' physical and mental health.

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Themes related to green areas in the NRRPs

	Circular bioeconomy	Green revolution / ecological transition	Green jobs	Rural Development	Climate Adaptation/ natural hazard prevention	Climate Mitigation	Biodiversity	Sustainable Forestry	FES provision/ enhancement	Urban Nature-Based solution	Gender Balance and women inclusion	Innovation
Austria												
Belgium			x		x		x		x	x		
Bulgaria			x	x	x	x	x		x			
Croatia			x				x					
Cyprus					x	x	x					
Czechia		x		x	x	x	x	x	x			
Denmark						x	x			x		
Estonia	x	x					x					x
Finland	x				x	x	x	x	x			x
France	x			x	x	x	x	x	x			x
Germany	x		x				x		x			x
Greece			x	x	x		x		x			
Hungary				x	x		x					
Ireland												
Italy				x			x		x	x		x
Latvia		x			x							x
Lithuania	x											x
Luxembourg							x			x		
Malta												
Poland				x					x			
Portugal	x		x	x	x	x	x	x	x			x
Romania					x		x	x		x		
Slovakia	x	x	x		x	x	x	x	x	x		x
Slovenia	x	x	x		x	x	x	x				x
Spain				x	x		x	x	x		x	
Sweden		x					x		x		x	

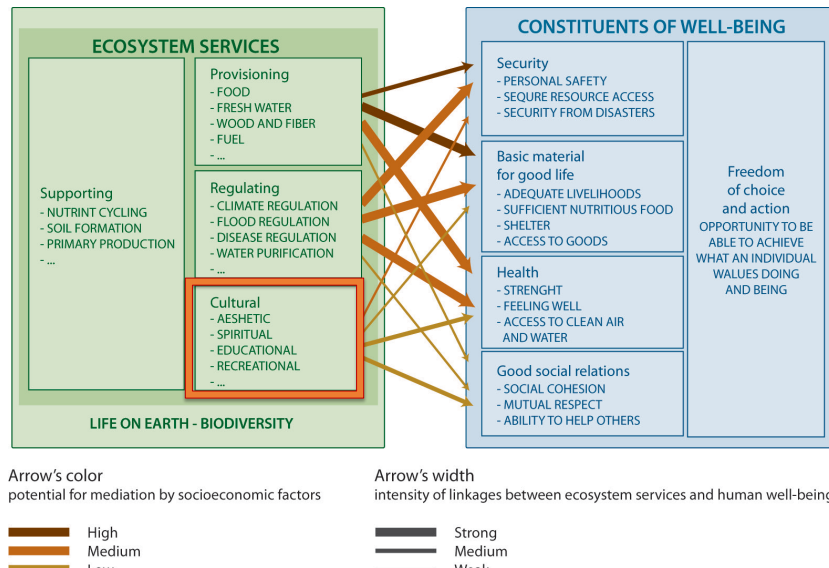Source: Bottaro, Liagre, Pettenella (in press)

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• Concluding remarks

Biodiversity, Climate change, Renewable energy policies

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Ecosystem Services (ES) classification (MA, 2005)

ECOSYSTEM SERVICES

Provisioning
- FOOD
- FRESH WATER
- WOOD AND FIBER
- FUEL
- ...

Supporting
- NUTRINT CYCLING
- SOIL FORMATION
- PRIMARY PRODUCTION
- ...

Regulating
- CLIMATE REGULATION
- FLOOD REGULATION
- DISEASE REGULATION
- WATER PURIFICATION
- ...

Cultural
- AESHETIC
- SPIRITUAL
- EDUCATIONAL
- RECREATIONAL
- ...

LIFE ON EARTH - BIODIVERSITY

CONSTITUENTS OF WELL-BEING

Security
- PERSONAL SAFETY
- SEQURE RESOURCE ACCESS
- SECURITY FROM DISASTERS

Basic material for good life
- ADEQUATE LIVELIHOODS
- SUFFICIENT NUTRITIOUS FOOD
- SHELTER
- ACCESS TO GOODS

Health
- STRENGHT
- FEELING WELL
- ACCESS TO CLEAN AIR AND WATER

Good social relations
- SOCIAL COHESION
- MUTUAL RESPECT
- ABILITY TO HELP OTHERS

Freedom of choice and action
OPPORTUNITY TO BE ABLE TO ACHIEVE WHAT AN INDIVIDUAL WALUES DOING AND BEING

Arrow's color
potential for mediation by socioeconomic factors

Arrow's width
intensity of linkages between ecosystem services and human well-being

High	Strong
Medium	Medium
Low	Weak

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"Cultural" ES (better "Socio-cultural" ES)

- **Cultural** services (art museums, concerts in the forest, theatre performances ...)

- **Educational** and pedagogic services (kindergarten or outdoor nursery forest schools, nature trails, bird watching, training in the forest, ...)

- **Sport** services (hunting, hiking, Nordic walking, mountain biking, orienteering, airsoft, archery, use of adventure parks,...)

- **Spiritual** and religious services (places for meditation and worship, ecological burial, funeral forests)

- **Tourism and recreation** (walking, visits to special landscapea, sites and natural monuments, wild forest products picking, camping, use of tree hotels, ...)

- Services for **social inclusio**n (activities for the elderly, the handicapped, prisoners, refugees-displaced persons, ...)

- Services for improving **wellness** and for **therapeutic treatments** (forest bathing-Shinrin-Yoku, forest therapy, pet therapy, ...)

«Green care»

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Green care

Green Care is an emerging concept referring to the "*range of activities that promotes physical and mental health and well-being through contact with nature*" (Sempik *et al.*, 2010, p.121).

Forest-based care · Urban green care · Social agriculture · Green care tourism

Join — Creating a strong research-enterprise alliance at EU level in order to develop, support and enhance knowledge and practice exchange and flow throughout the alliance and beyond in the field of Green Care

Learn — Fostering innovation and facilitating entrepreneurial opportunities, capacity and skills for students, researchers, professionals, as well as practitioners through new learning approaches and platforms in the field of Green Care.

Practice — Putting the knowledge and capacity of the alliance into practice to exploit the potential for marketable processes, methods and services that promote new sustainable businesses in the field Green Care.

https://www.greenforcare.eu/

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A <u>simplified</u> view of ES economy

Ecosystem Services	Institutions, drivers	Prevailing instruments
• *Provisioning*	• Market	• prices under the free market economy
• *Regulating*	• State	• compensations, incentives, (eco)taxes, …
• *Socio-Cultural*	• Community	• technical assistance, people engagement, local authorities' animation, entrepreneurial support, …

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A <u>simplified</u> view of forest-based ES economy

| Ecosystem Services	Institutions, drivers	Economic theory
• *Provisioning*	• Market	• neoclassical economics
• *Regulating*	• State	• environmental economics; neo-institutional economics
• *Socio-Cultural*	• Community	• social economics

Social economics is a branch of economics and
a social science that focuses on the relationship
between social behaviour and economics, covering such issues
as social capital, gender, ethics, and philanthropic behaviour.

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Among the other, a relevant changes in the management of natural resources: a **gender revolution** in the management of natural resources

"The first and foremost purpose of a forest growth is to supply us with wood material; it is the substance of the trees itself, not their fruits, their beauty, their shade, their shelter, that constitutes the primary object..."

B.E. Fernow, 1902.
Economics of Forestry (p. 86)
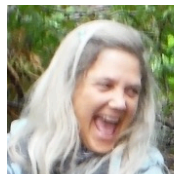
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Ta patemata matemata
Tragedies are teaching us
(Thucydides)

COVID-19 is helping us to give evidence to:

(i) The **need of the State** (= a regulative authority for an active welfare policy)

(ii) **different working conditions** are not only feasible but convenient for the health of employees

(iii) **social relations** are important drivers of the life quality

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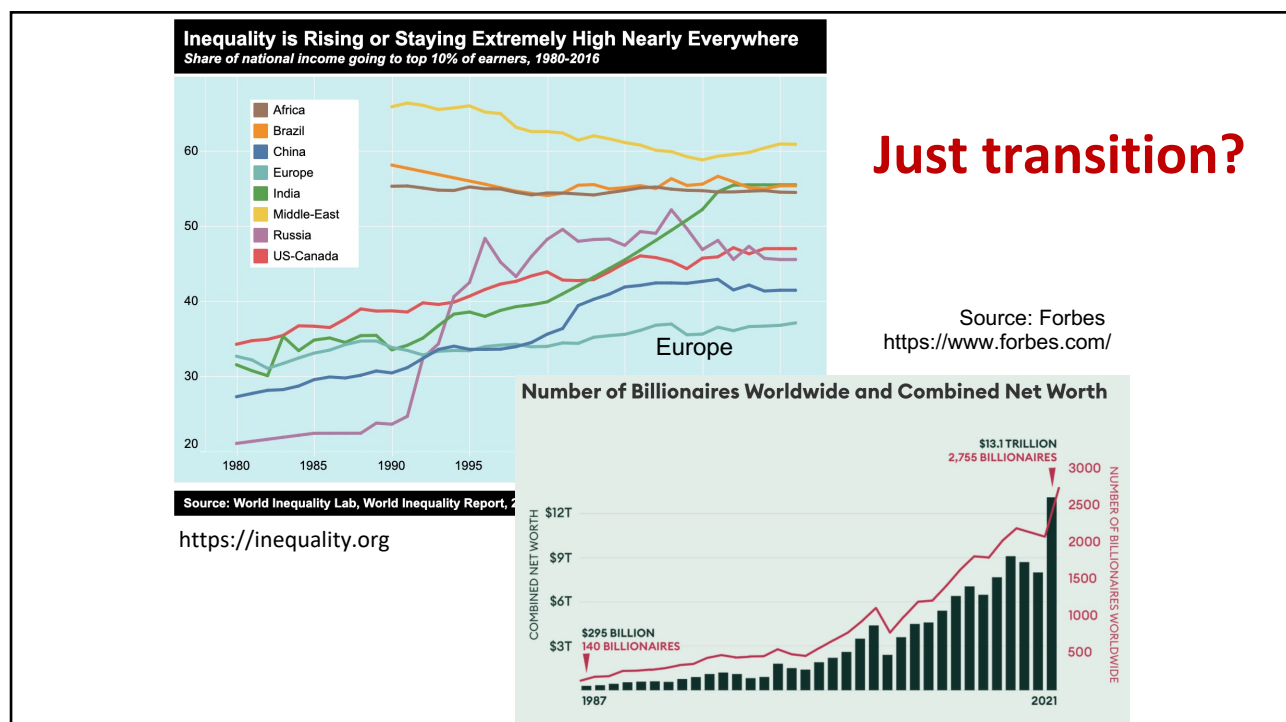Connecting Nature Enterprise Platform

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All these 3 new evidences are supporting Green Care increasing investment policies also because GC solutions are:

- relatively **low-cost solutions**, much based on small-scale activities, frequently connected to non-profit organizations ("social economy"), inspired by values of solidarity and social inclusion

- based on **natural resources** that, with an increasing use, become more recognized for their high social values, and turn out to be **more protected**

- **labour-intensive solutions** in a context where we are facing problems of un-employment and raising **social inequality**

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Inequality is Rising or Staying Extremely High Nearly Everywhere
Share of national income going to top 10% of earners, 1980-2016

- Africa
- Brazil
- China
- Europe
- India
- Middle-East
- Russia
- US-Canada

Europe

Source: World Inequality Lab, World Inequality Report, 2

https://inequality.org

Just transition?

Source: Forbes
https://www.forbes.com/

Number of Billionaires Worldwide and Combined Net Worth

$13.1 TRILLION
2,755 BILLIONAIRES

$12T

$9T

$6T

$295 BILLION
140 BILLIONAIRES

$3T

1987   2021

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"In the midst of every crisis, lies great opportunity''
Albert Einstein

Green Care: a useful tool for building the ecological transition, taking into consideration that most of our problems are due to an **excess of resources** and their **mis-allocation and unfair distribution**

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THANK YOU FOR YOUR ATTENTION

SPEAKER'S NAME, SURNAME AND ORGANISATION

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