

Permacultura, un approccio olistico ed ecologico alle attività umane



A cura di Elena Parmiggiani e Anna Bartoli
www.permaculturaincorso.it

Permacultura, un approccio olistico ed ecologico alle attività umane

 Segni vitali del **planeta Terra**

Permacultura,
approccio **olistico**  ed **ecologico** 

 **Agricoltura permanente,**
cambiamento a partire da noi stessi



Segni vitali del pianeta Terra



GLOBAL CLIMATE CHANGE
Vital Signs of the Planet

FACTS ARTICLES SOLUTIONS EXPLORE NASA SCIENCE MORE



Understanding our planet to benefit humankind

Carbon Dioxide

↑ **419** parts per million (current)

+

Global Temperature

↑ **1.01** °C since 1880

+

Arctic Sea Ice Minimum Extent

↓ **12.6** percent per decade since 1979

+

Ice Sheets

↓ **427** billion metric tons per year

+

Sea Level

↑ **4** inches since January 1993

+

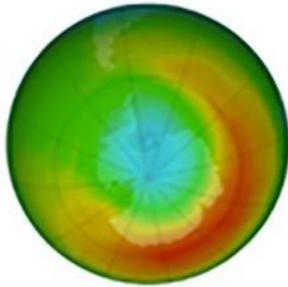
Ocean Warming

↑ **337** zettajoules since 1955

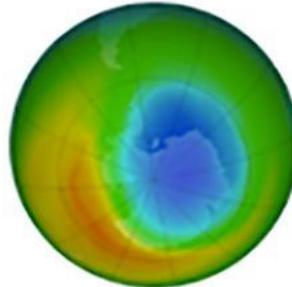
+



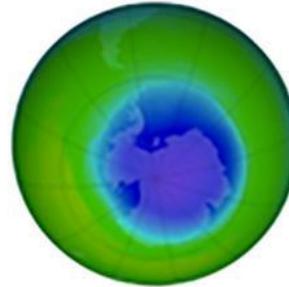
Ozono



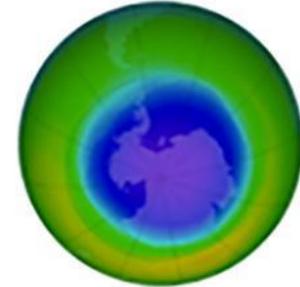
1971



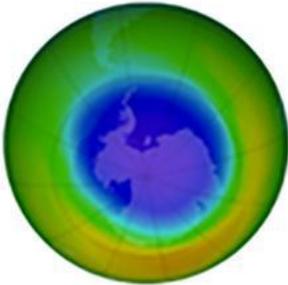
1982



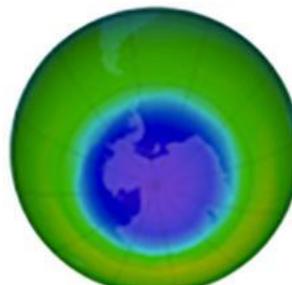
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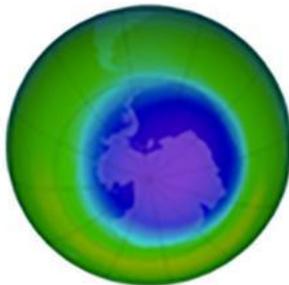
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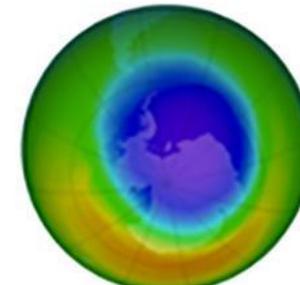
1989



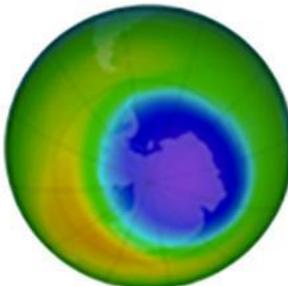
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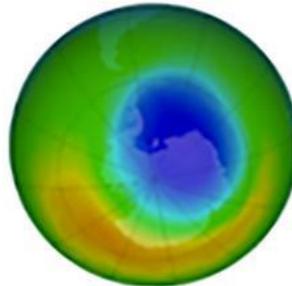
1998



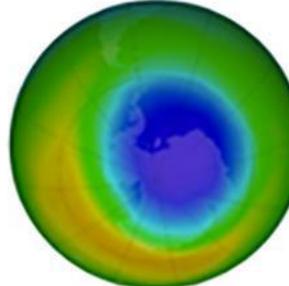
2000



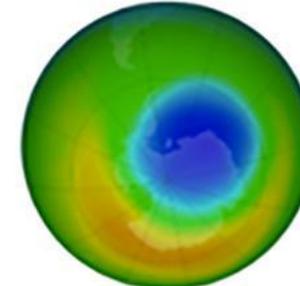
2009



2012

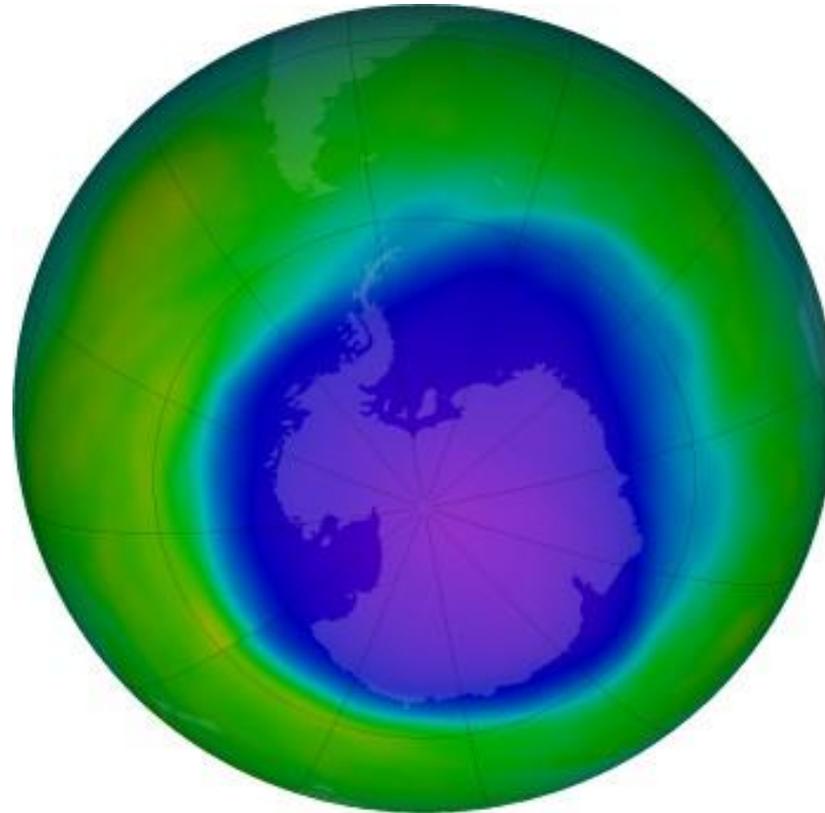


2017



2019

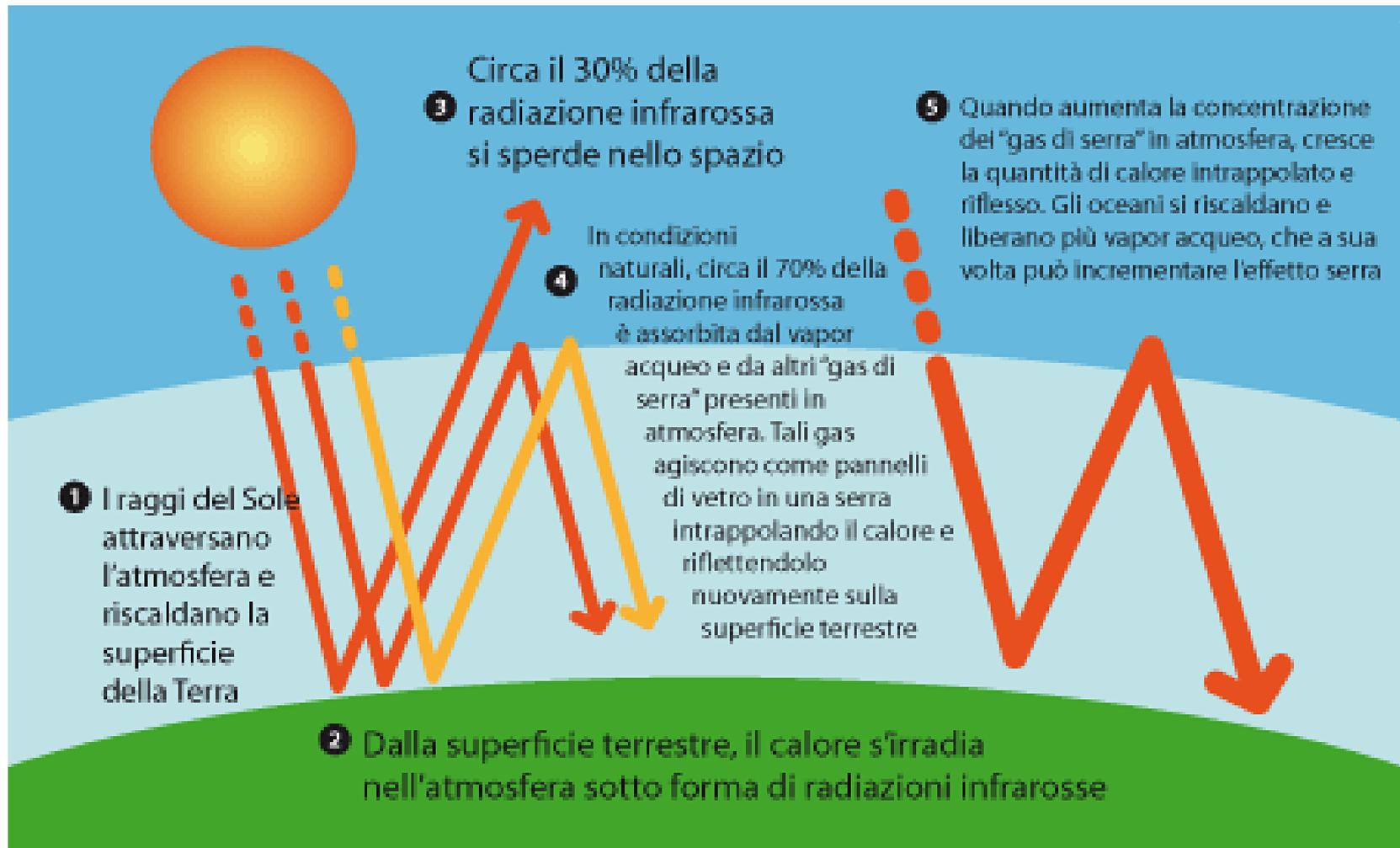
Ozono - Ottobre 2022



I GAS SERRA PIU' INQUINANTI: CO₂, N₂O, CH₄, SF₆, HFCs e PFC

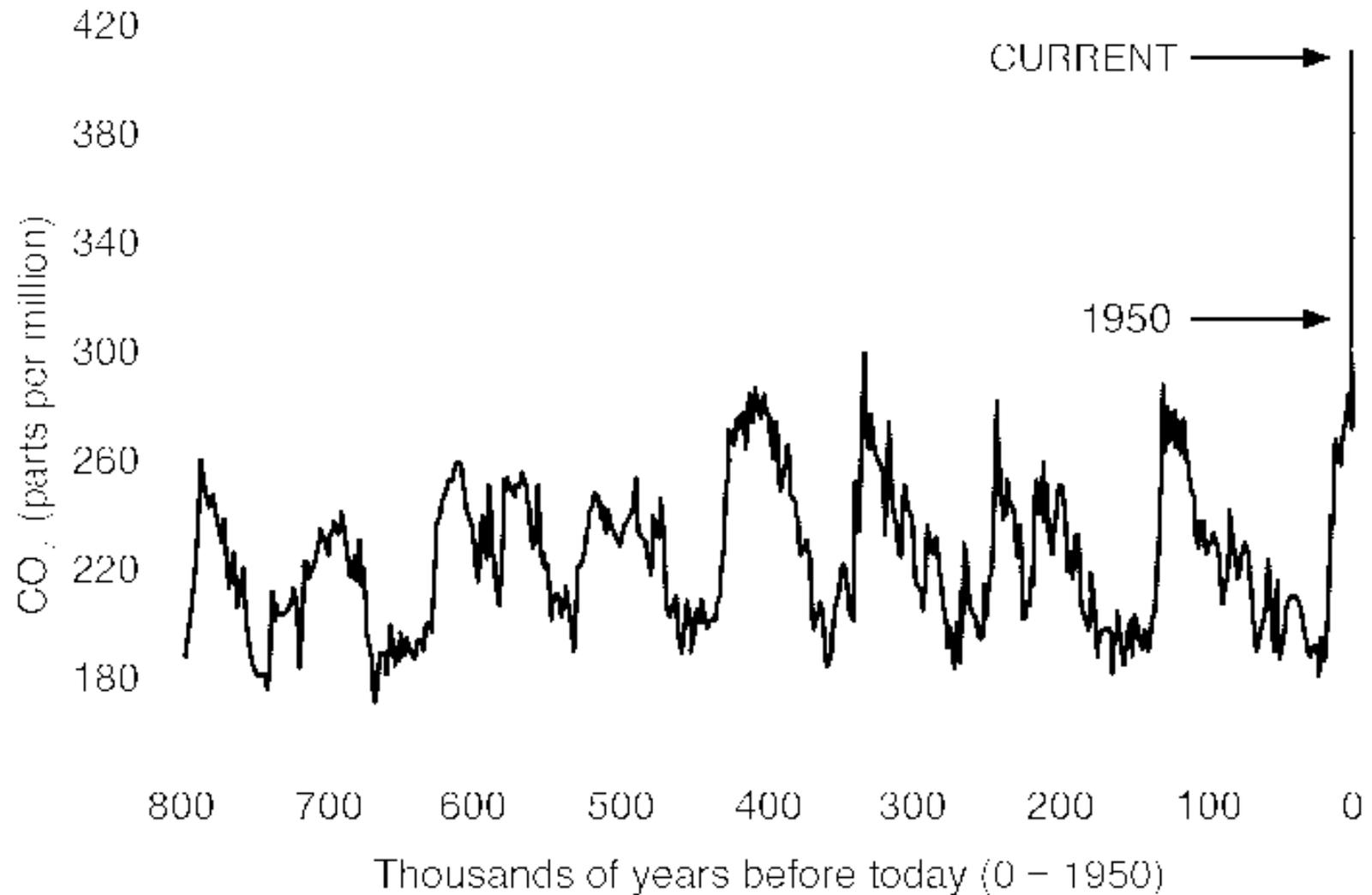
<https://ozonewatch.gsfc.nasa.gov/monthly/SH.html>

Effetto Serra

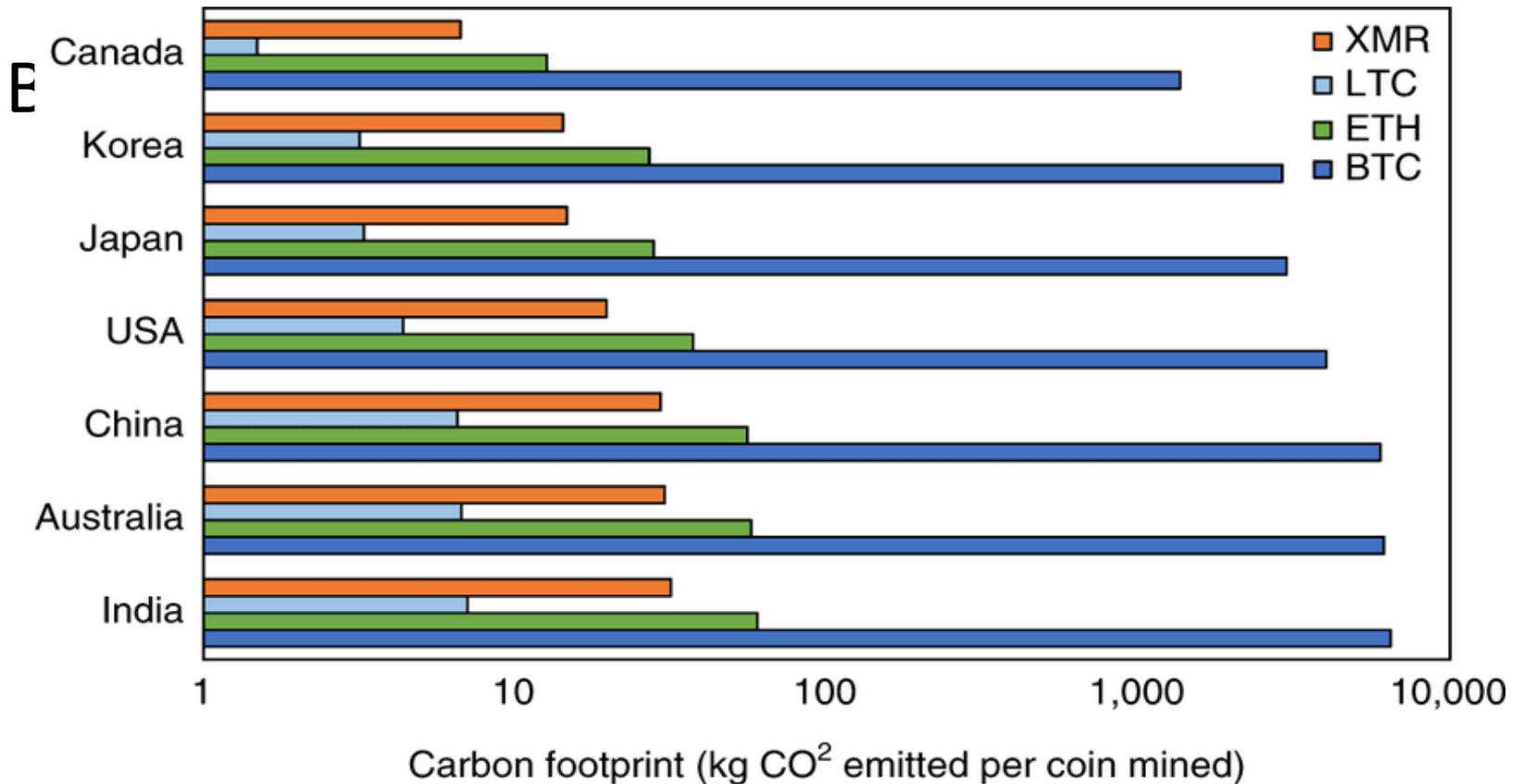


CO₂, N₂O, CH₄, SF₆, HFCs e PFC

Gas serra: Anidride Carbonica Co2



Gas serra: Anidride Carbonica Co2



Bitcoin (BTC) produces significantly more CO₂ emissions than Ethereum (ETH), Litecoin (LTC) or Monero (XMR)

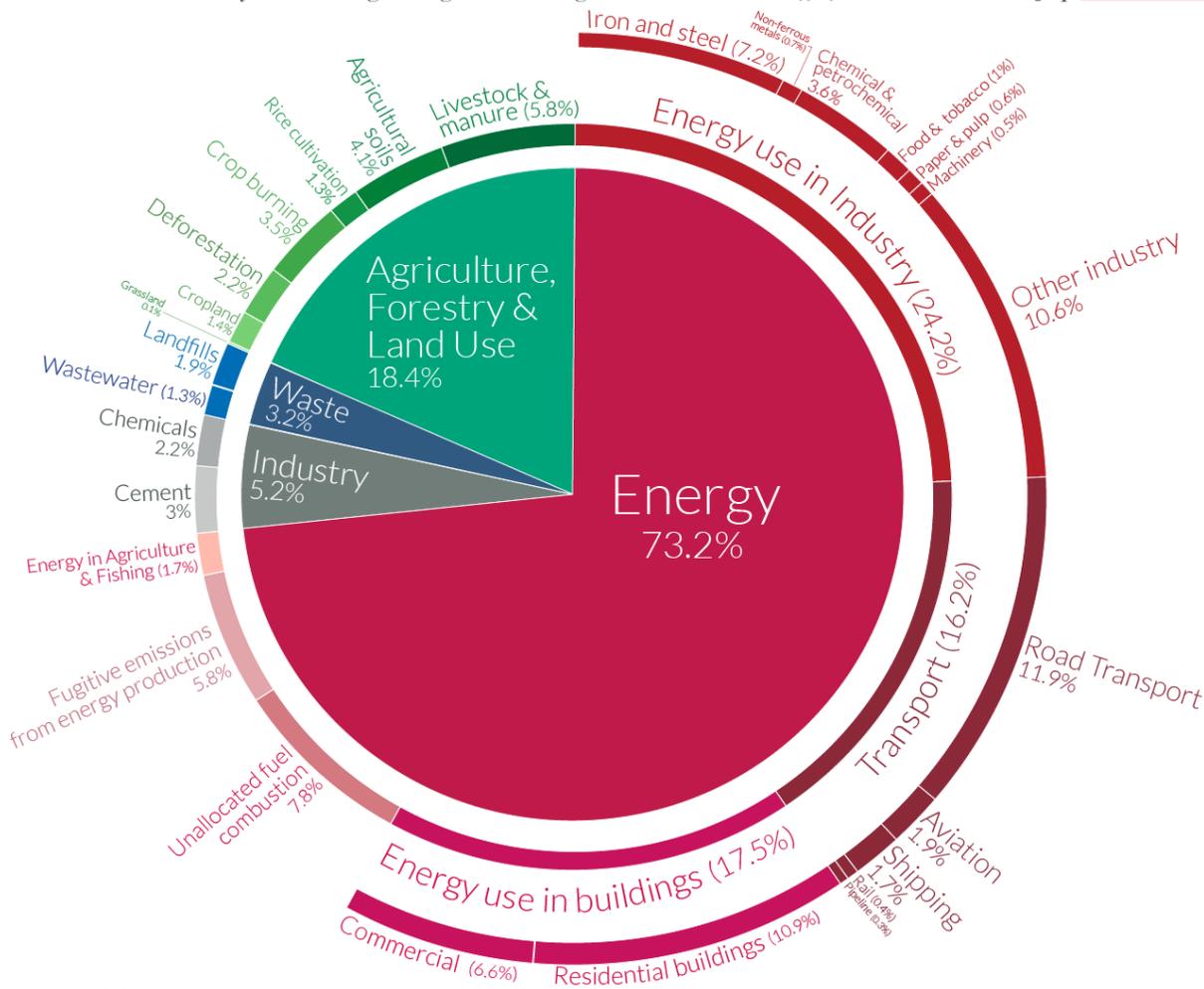
https://www.researchgate.net/figure/The-carbon-footprint-of-any-cryptocurrency-would-depend-on-the-energy-demand-of-the_fig3_328744792

Gas serra: Anidride Carbonica Co2

Global greenhouse gas emissions by sector

Our World
in Data

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



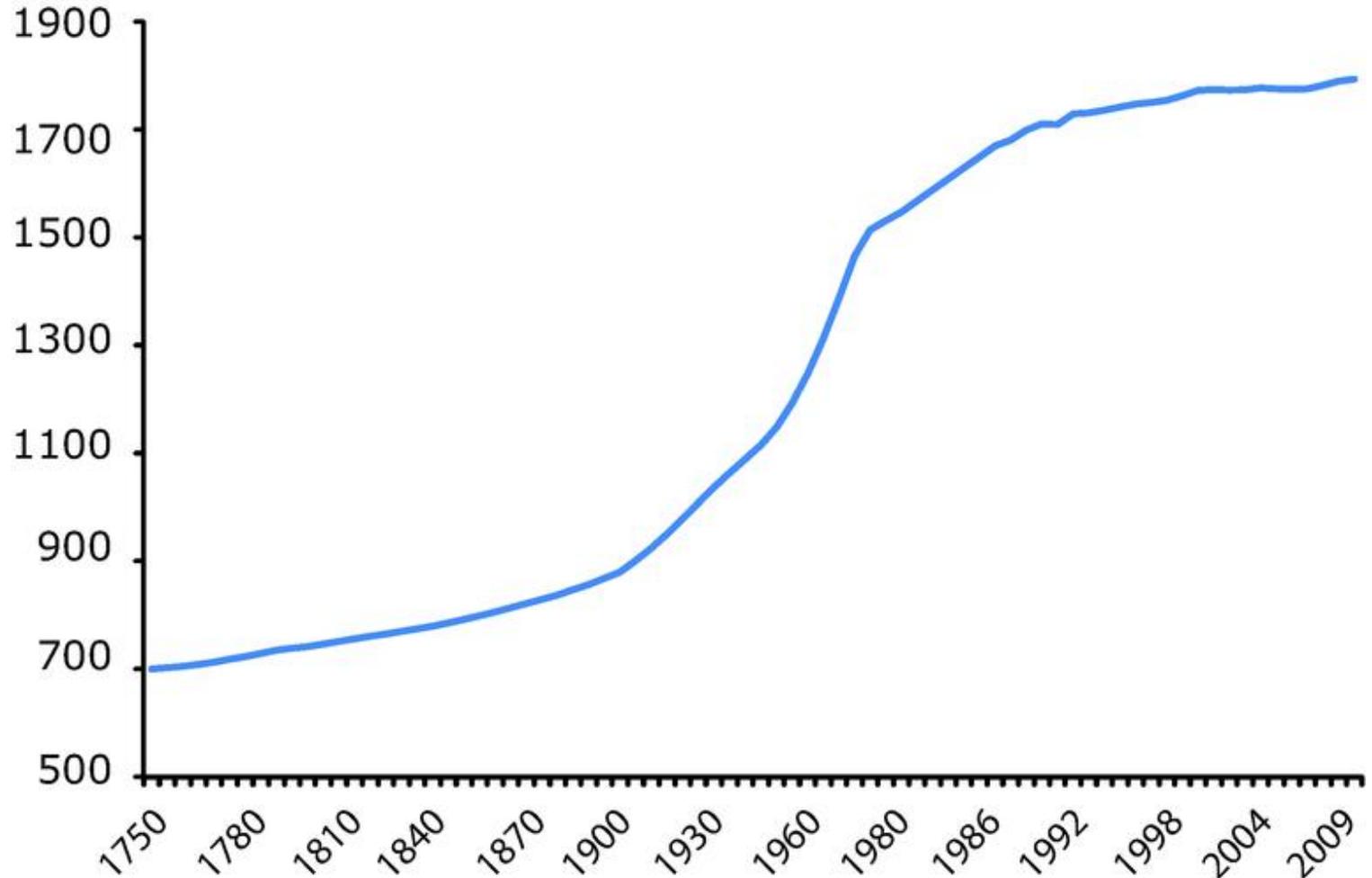
<https://ourworldindata.org/emissions-by-sector>

Our World in Data.org – Research and data to make progress against the world's largest problems.
Source: Climate Watch, the World Resources Institute (2020).

Licensed under CC-BY by the author Hannah Ritchie (2020).

Gas serra: Metano CH₄

CH₄ concentration (ppb)

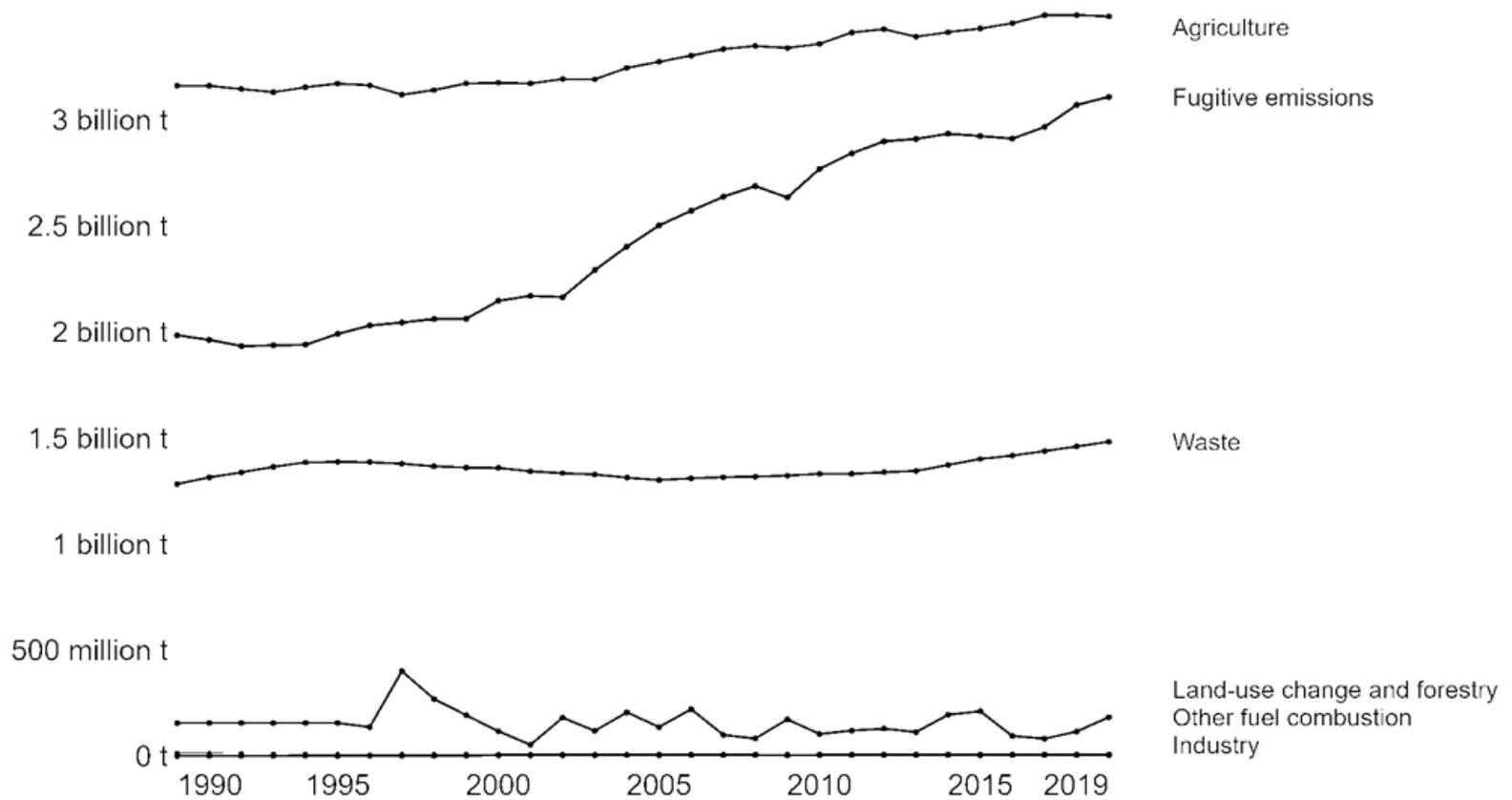


Gas serra: Metano CH4

Methane emissions by sector, World

Methane (CH₄) emissions are measured in tonnes of carbon dioxide equivalents (CO₂e) based on a 100-year global warming potential value.

Our World
in Data

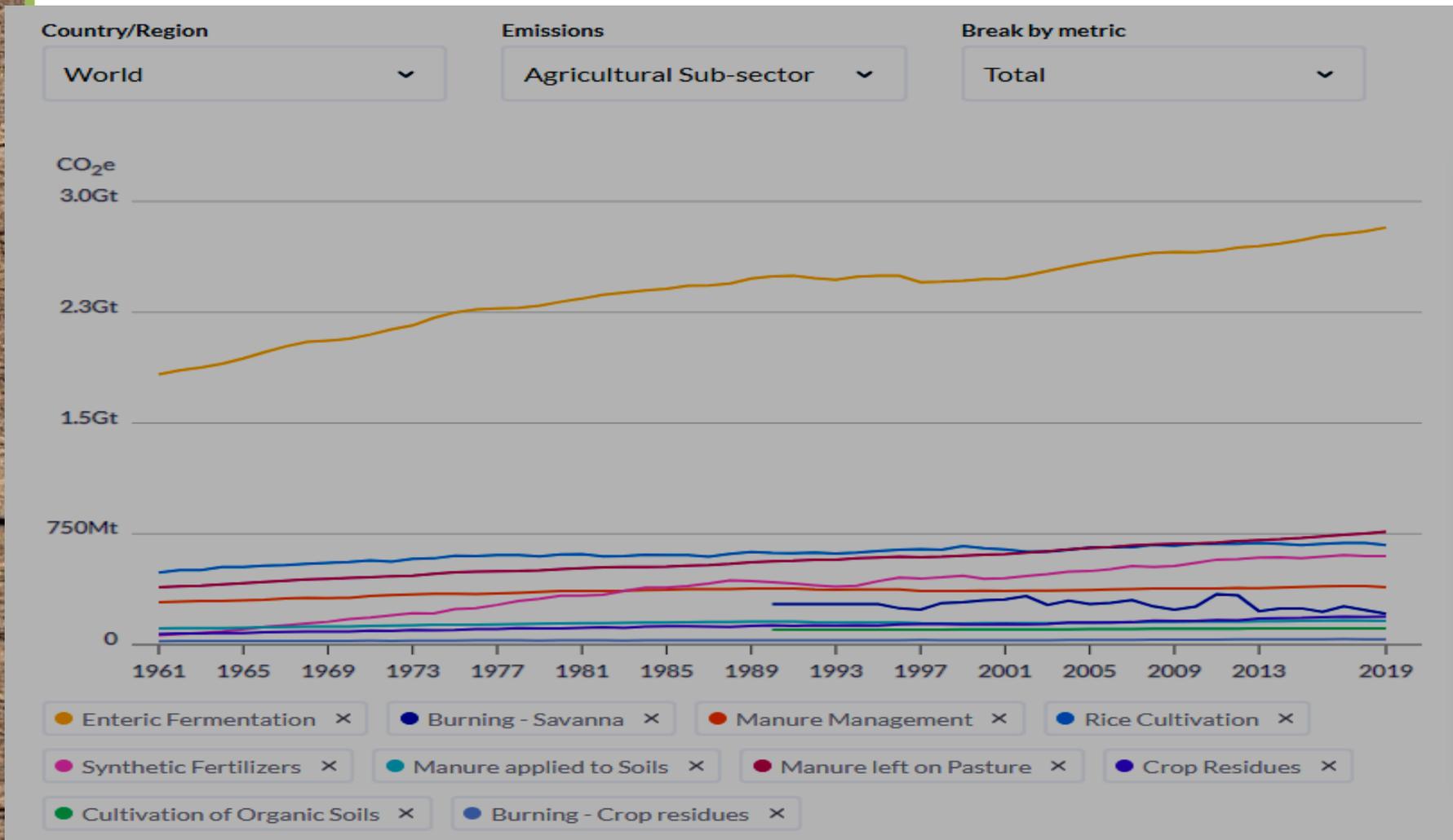


Source: Our World in Data based on Climate Analysis Indicators Tool (CAIT).

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

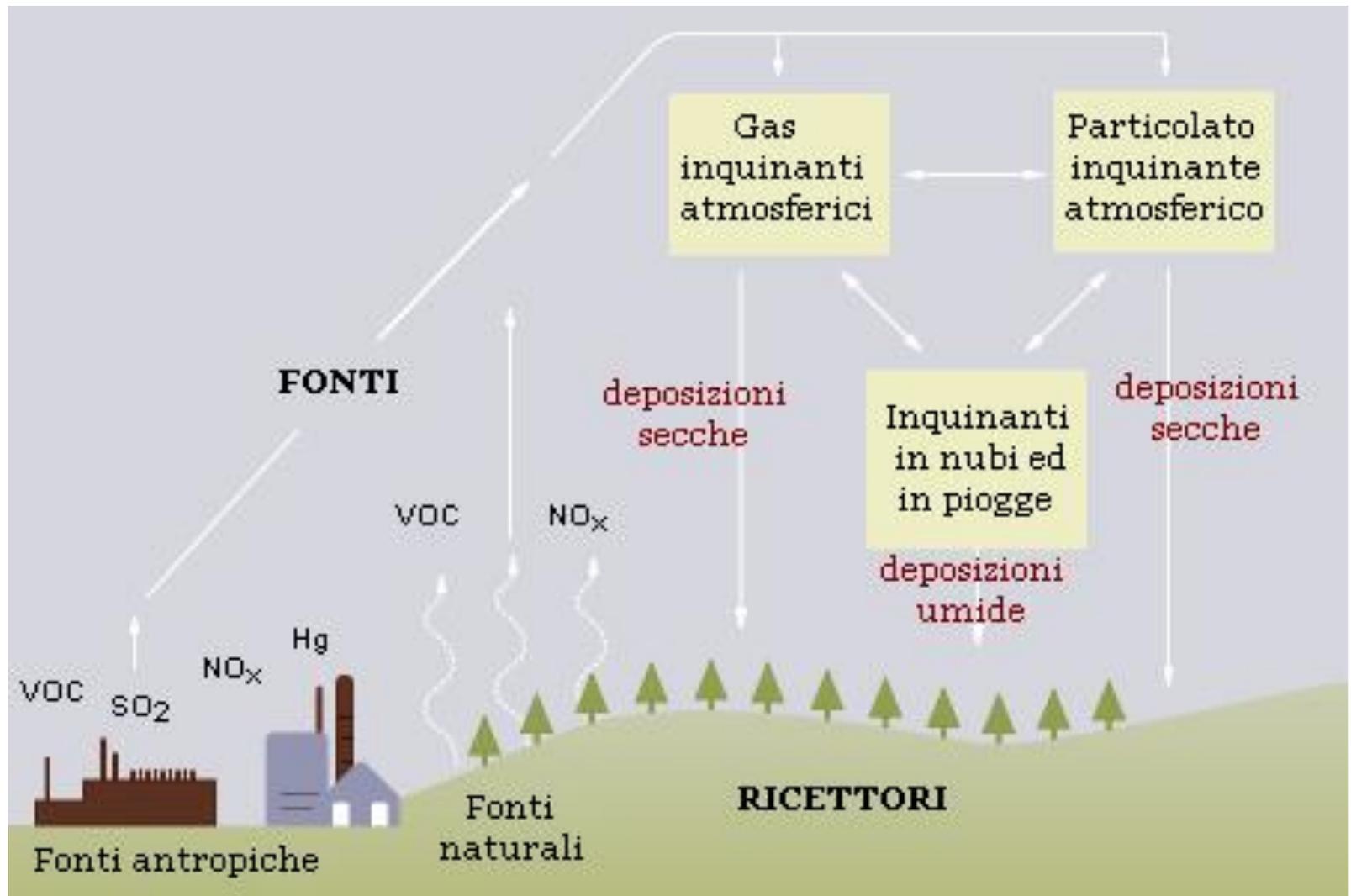
<https://ourworldindata.org/>

Gas serra e agricultura



<https://www.climatewatchdata.org>

Piogge acide

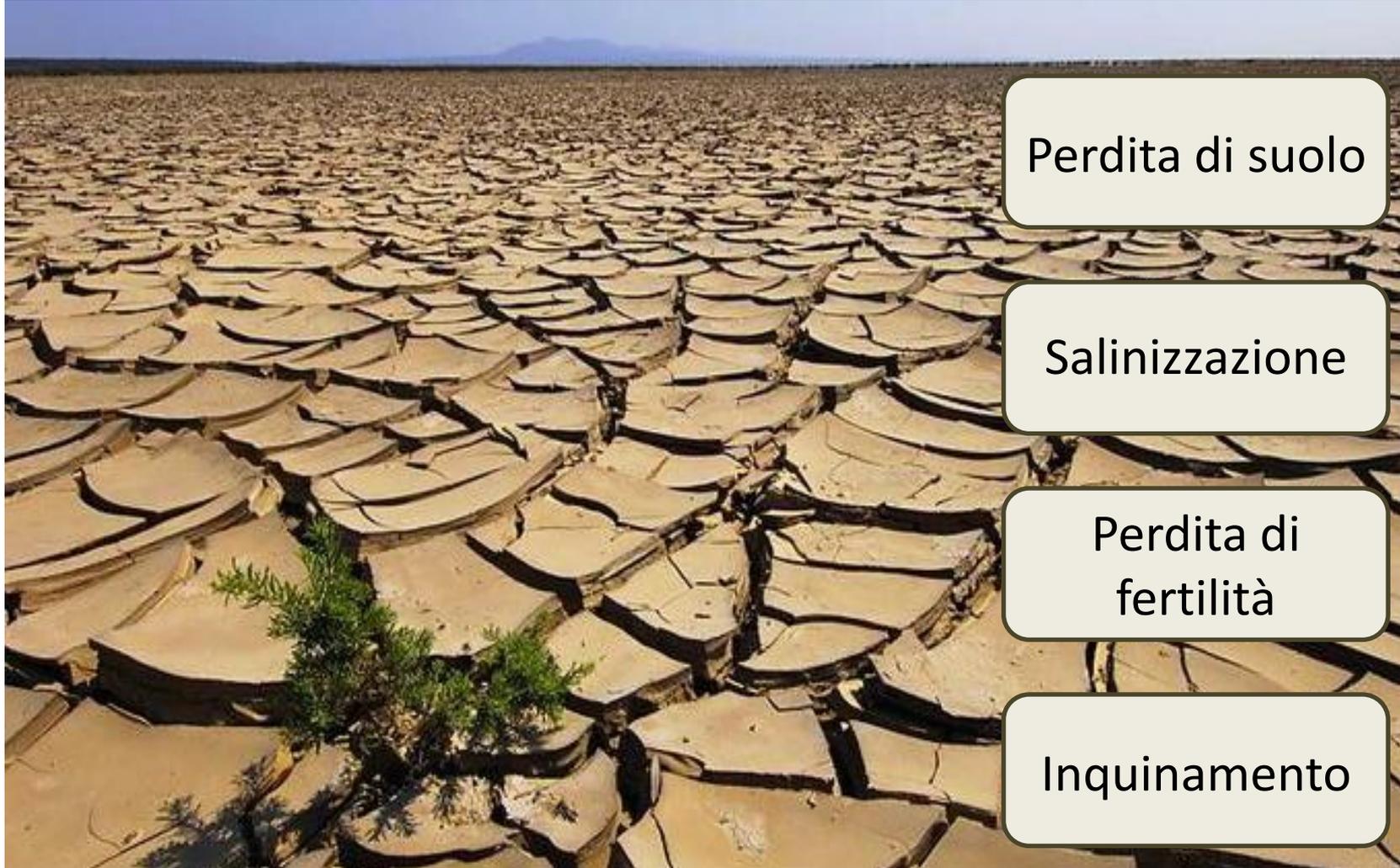


https://it.wikipedia.org/wiki/Pioggia_acida

Scioglimento ghiacciai



Degradazione del suolo



Perdita di suolo

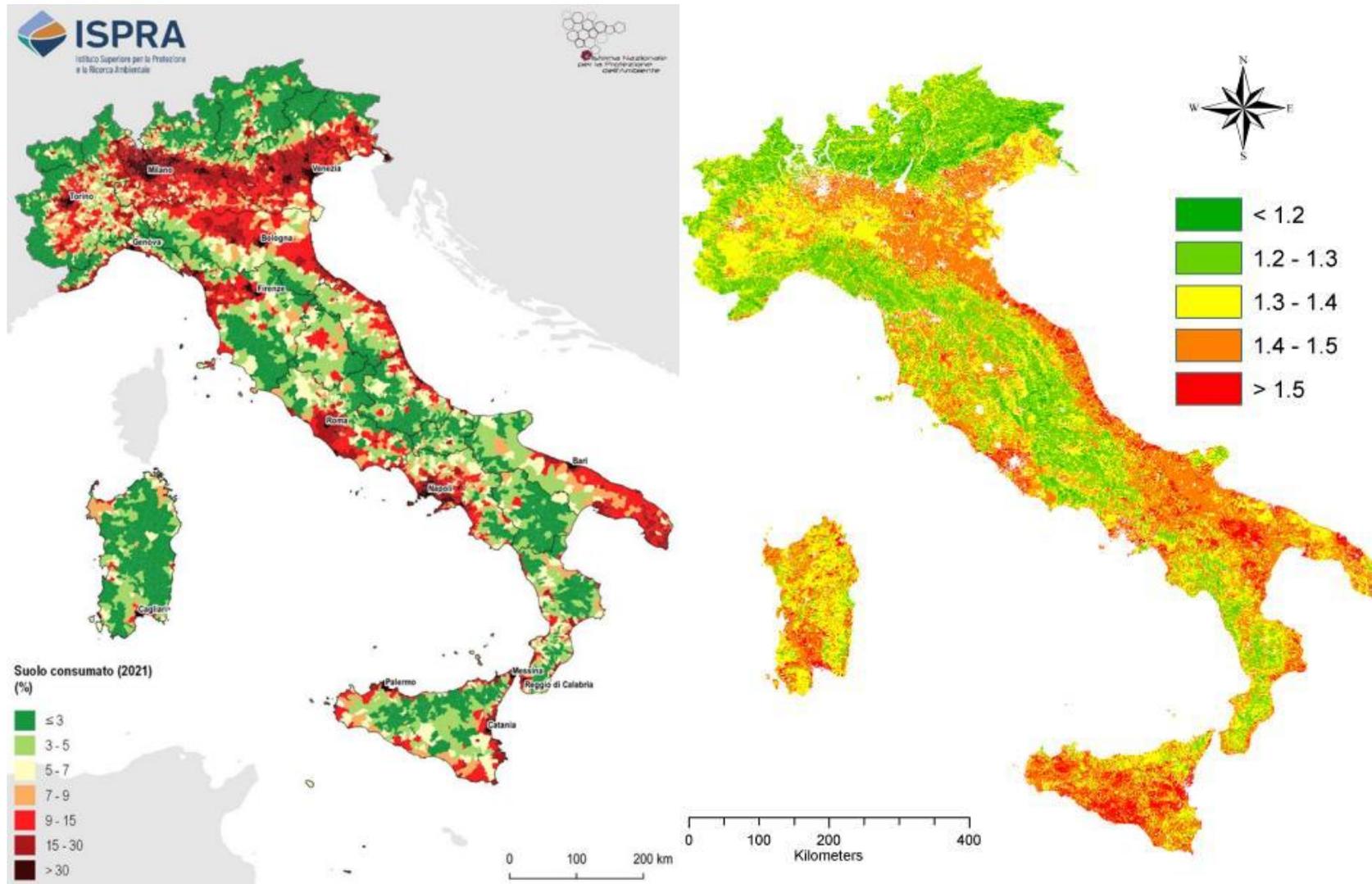
Salinizzazione

Perdita di
fertilità

Inquinamento

Affligge circa 3.5 miliardi di persone

Consumo del suolo



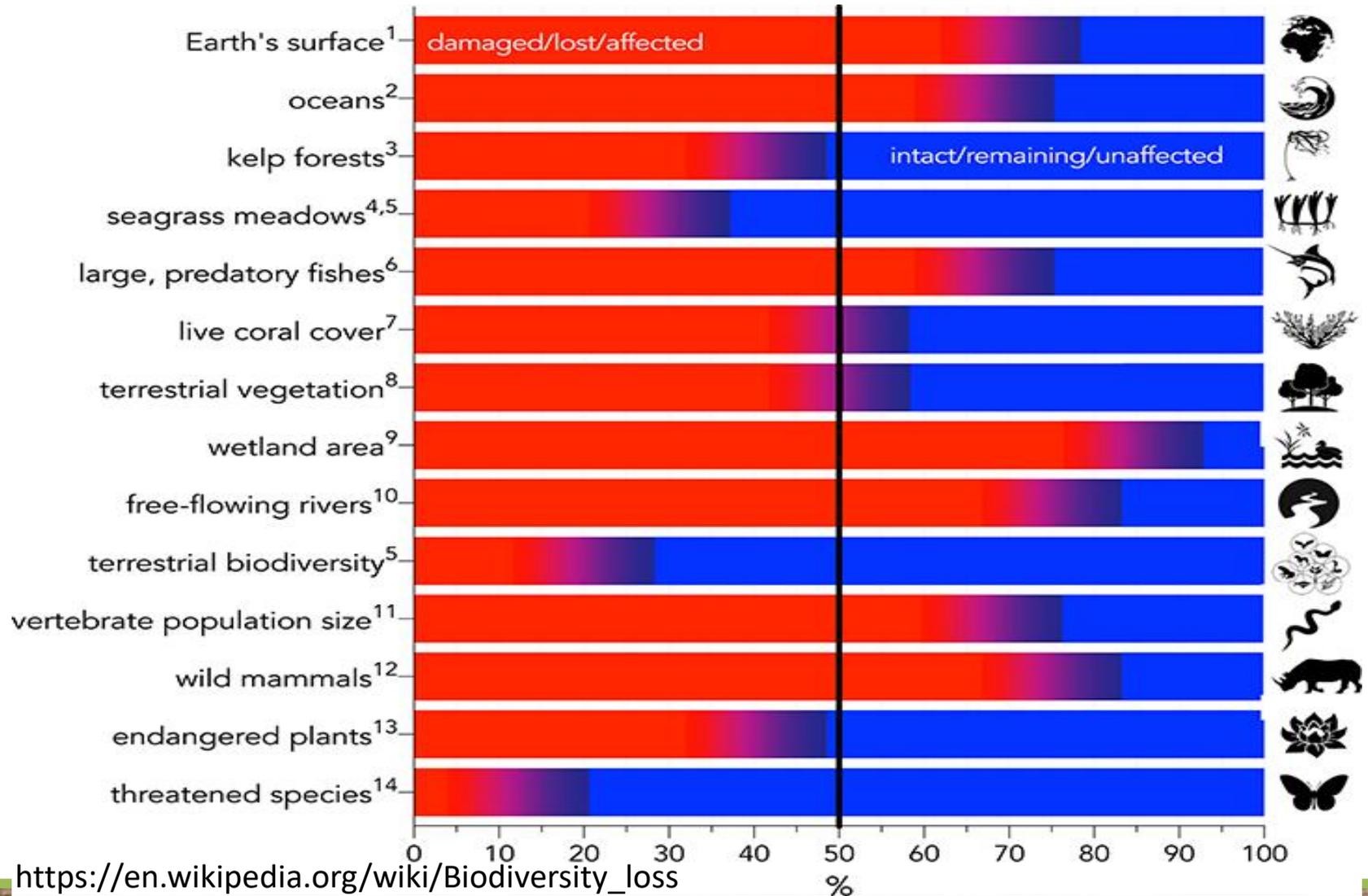
Suolo consumato a livello comunale (% 2021).
Fonte: elaborazioni ISPRA su cartografia SNPA

<https://protectaweb.it/ambiente/paesaggio-e-desertificazione-la-geografia-del-rischio-in-italia>

Crescita e sviluppo economico



Perdita di biodiversità a causa nostra

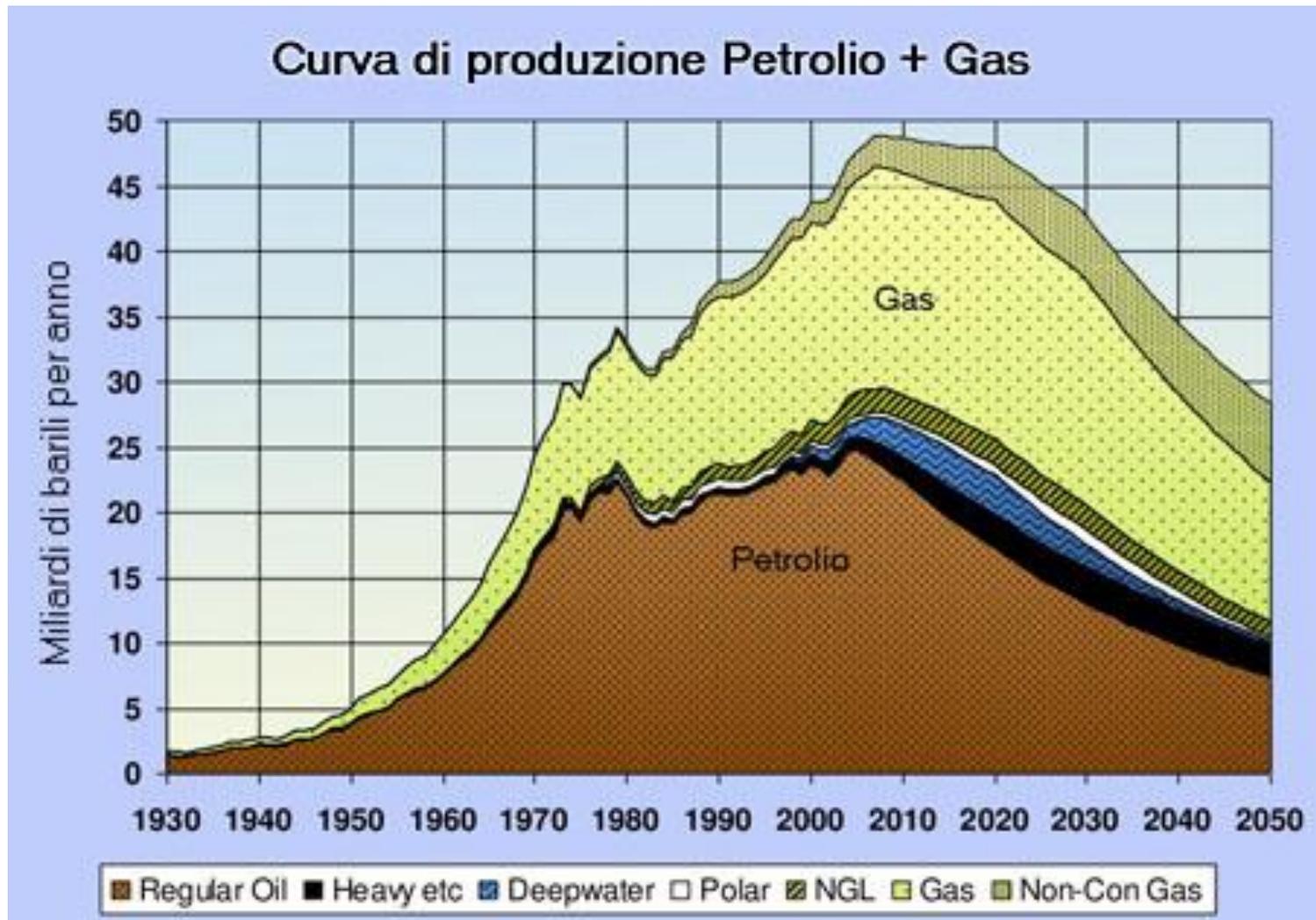


Cambiamento Climatico



Eventi intensi e poco prevedibili, concentrati in pochi giorni invece che su mesi, calamità “naturali” estreme in periodi dove prima erano assenti.

Picco del Petrolio e Gas



Picco delle risorse

- **Fosforo: 2033**

https://www.researchgate.net/figure/Peak-phosphorus-curve-indicating-a-peak-in-production-by-2033-derived-from-US-Geological_fig4_227439251

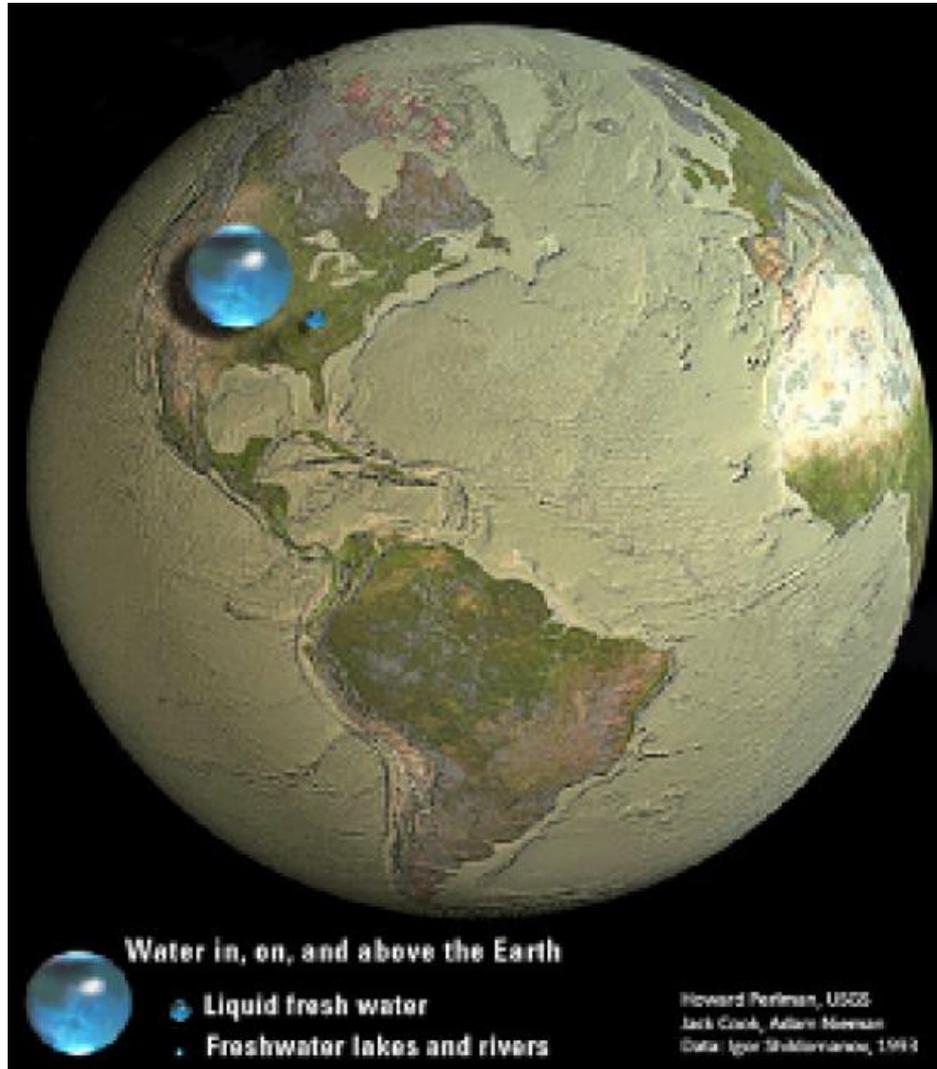
- **Oro: 2015**

- **Rame: stima 2030-2040**

- **Acqua dolce: ?**

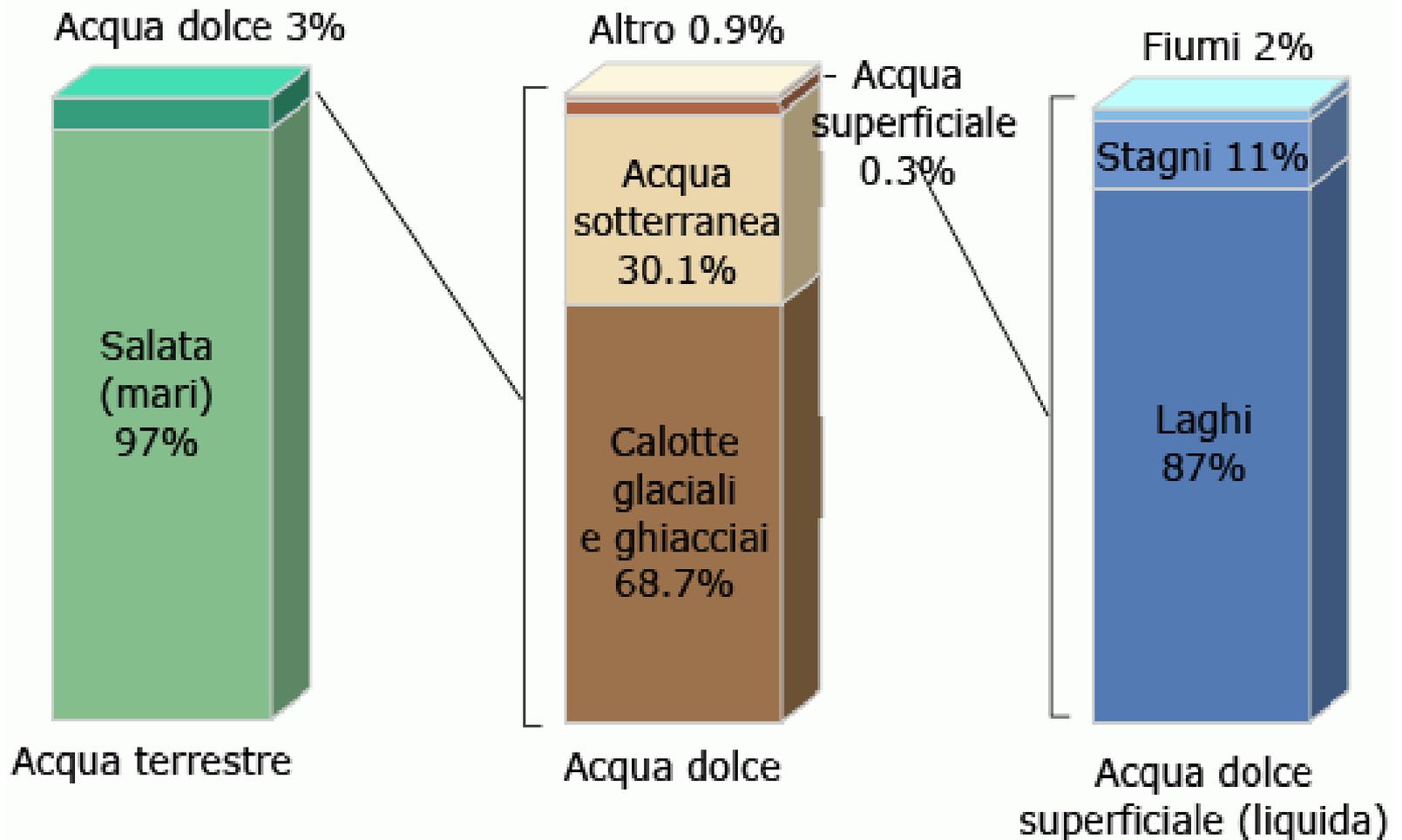
- **Suolo: ?**

Acqua sul pianeta

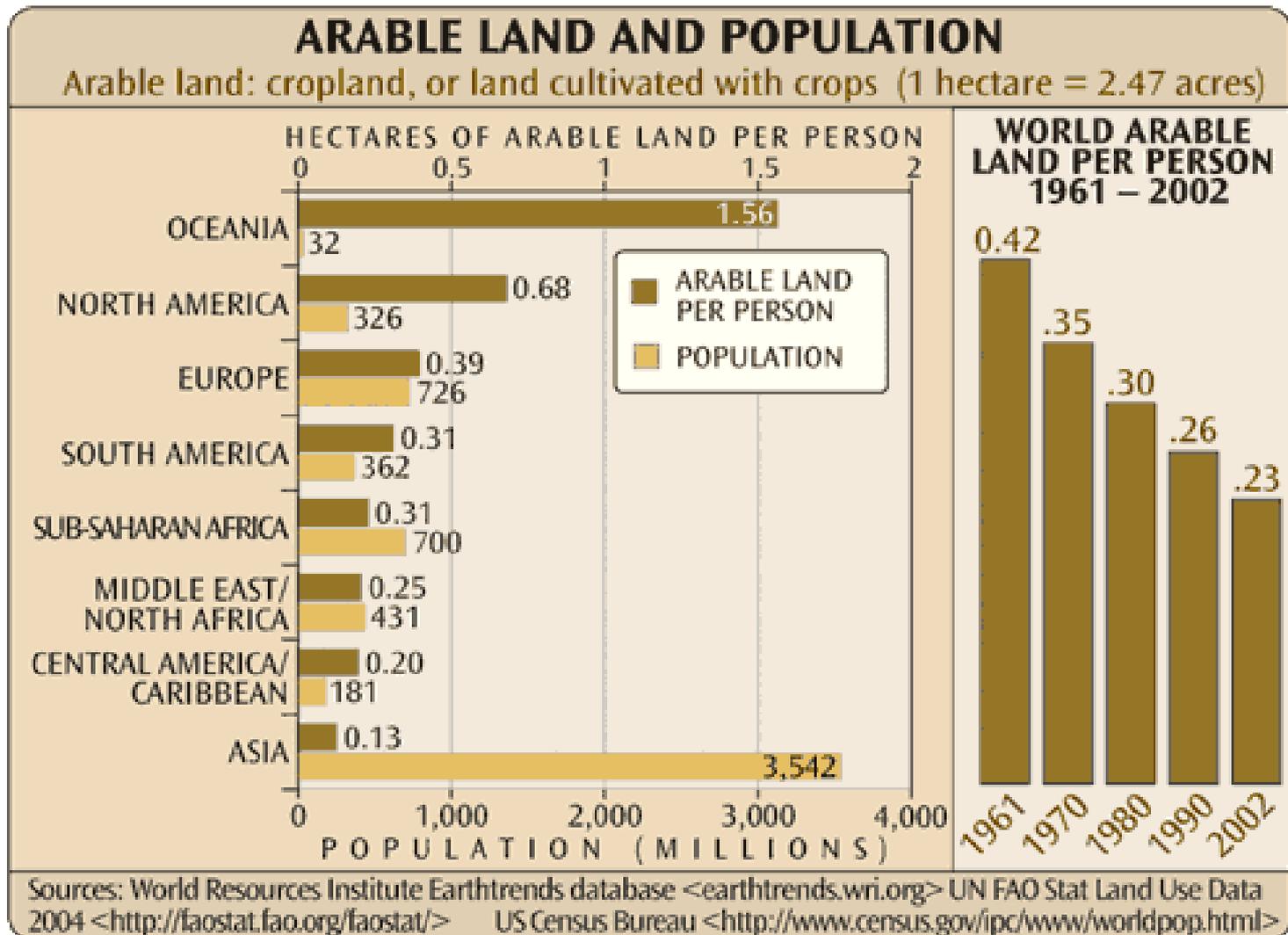


Acqua sul pianeta

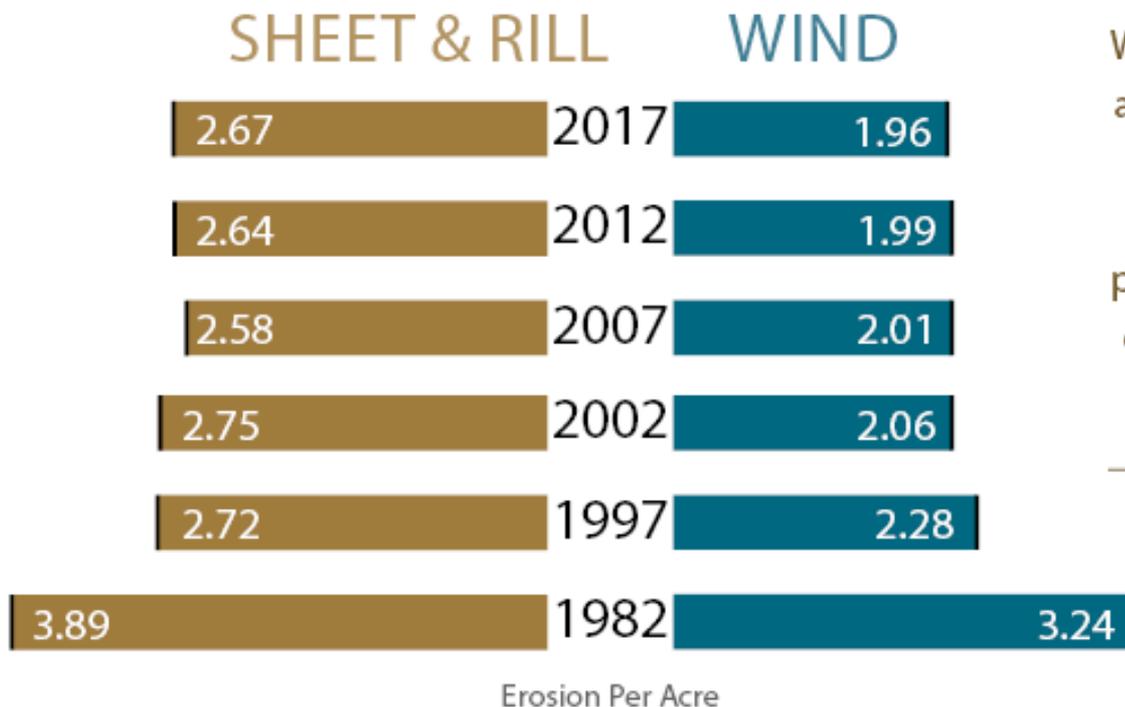
Distribuzione dell'acqua globale



Suolo 1° prodotto export dal 1940

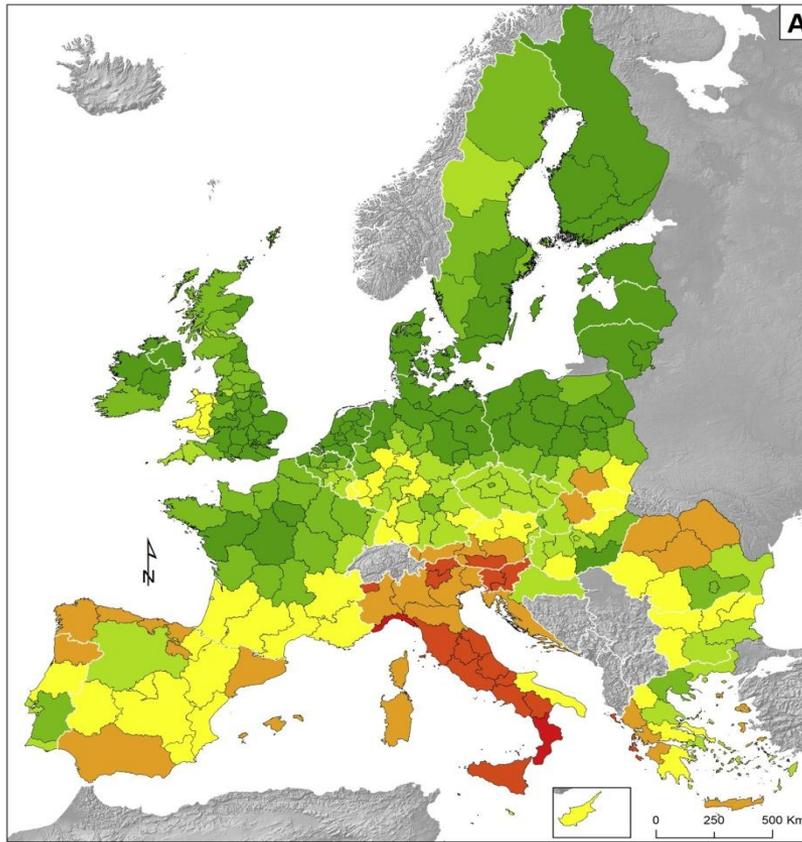


Suolo 1° prodotto export dal 1940



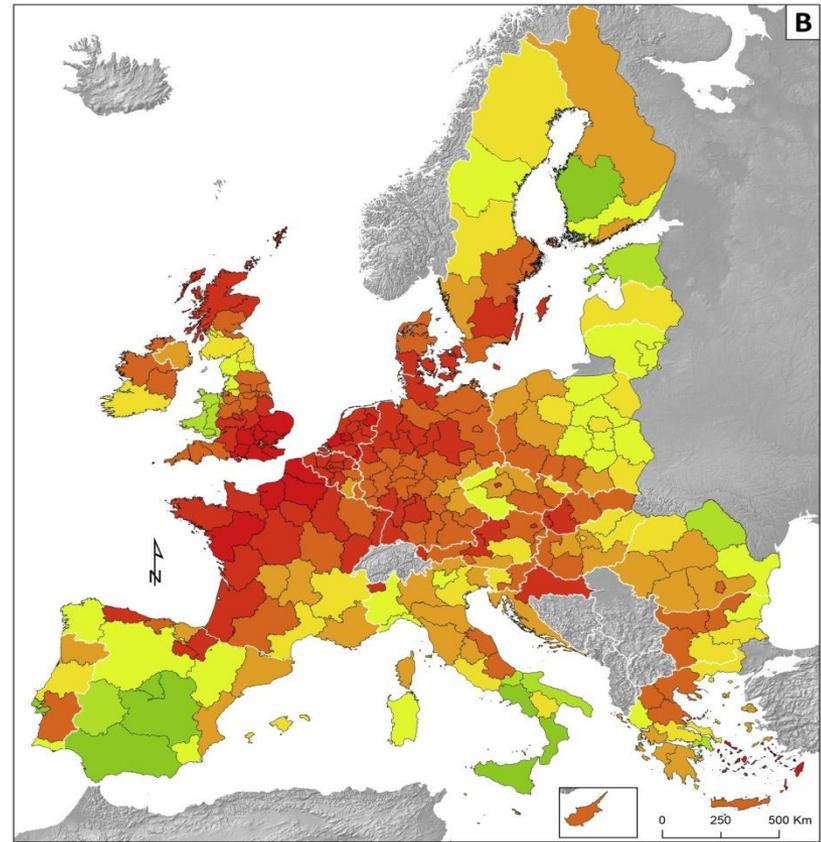
While soil erosion levels are improving, they still take a big bite out of U.S. farm operations' productivity. Some soils experts say current levels are unsustainable.

Suolo 1° prodotto export dal 1940



Baseline Soil erosion 2016 (Mg/ha/yr)

0-1	1-2	2-3	3-5	5-10	10-20	>20
-----	-----	-----	-----	------	-------	-----



Soil erosion change [%] 2016-2050 (RCP 2.6)

<-100	-100	-50	-20	-10	0	10	20	50	100	>100
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<https://esdac.jrc.ec.europa.eu/>

Altri picchi

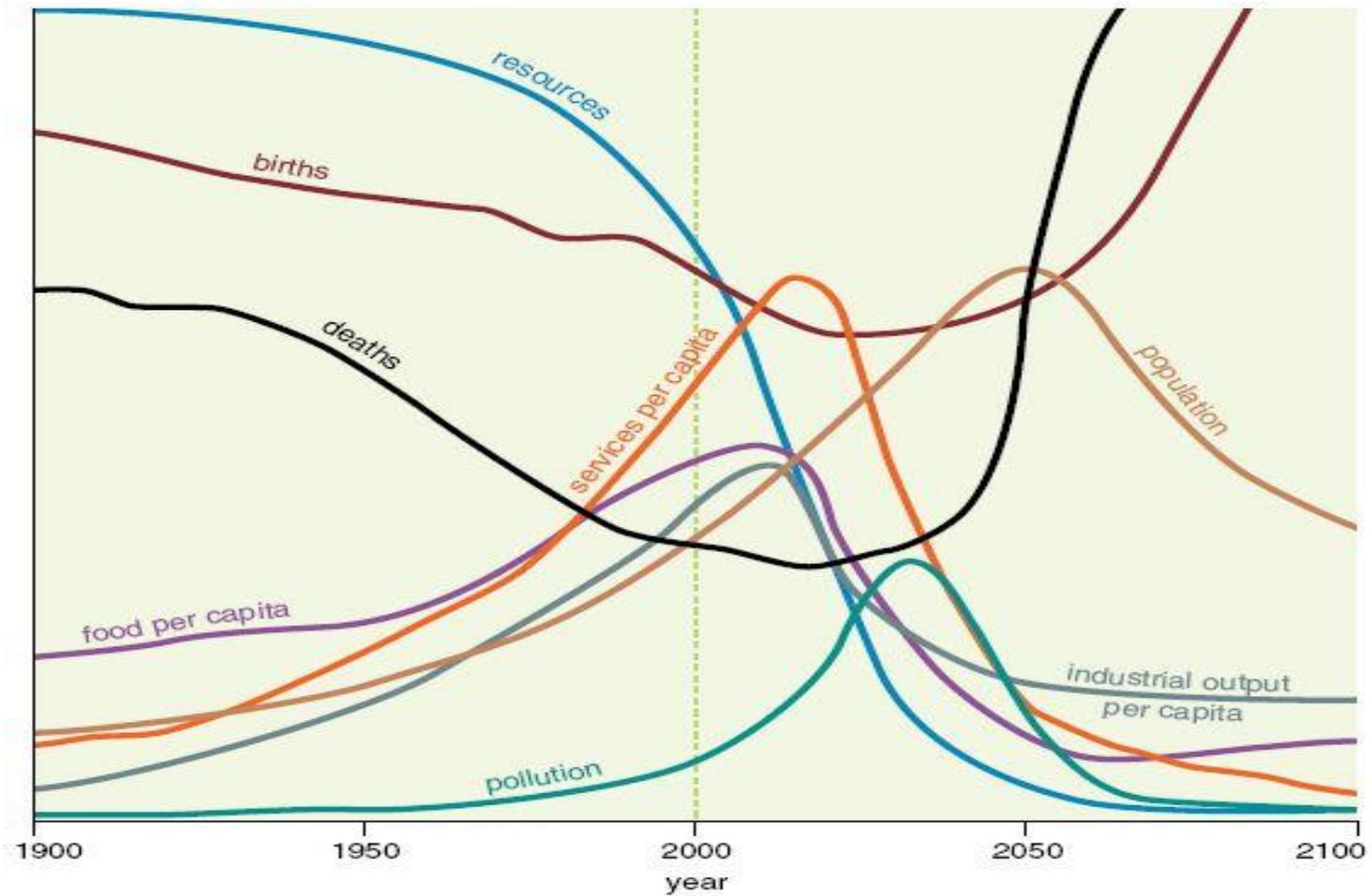


Figure 7. The original projections of the limits-to-growth model examined the relation of a growing population to resources and pollution, but did not include a timescale between 1900 and 2100. If a halfway mark of 2000 is added, the projections up to the current time are largely accurate, although the future will tell about the wild oscillations predicted for upcoming years.

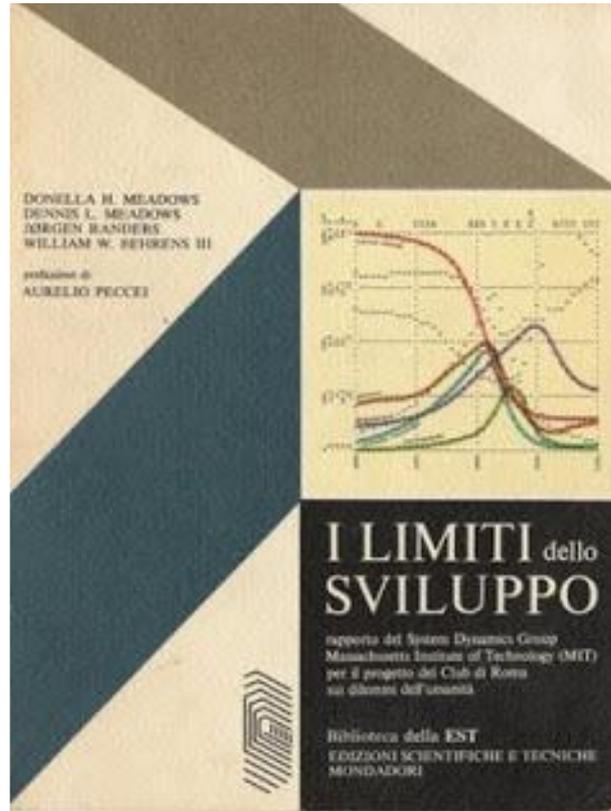
Noi cosa possiamo fare?

- Vediamolo insieme!



www.permaculturaincorso.it

Il nostro approccio



Chi



David Holmgren



Bill Mollison

Dove e quando



In Italia



www.permacultura.it

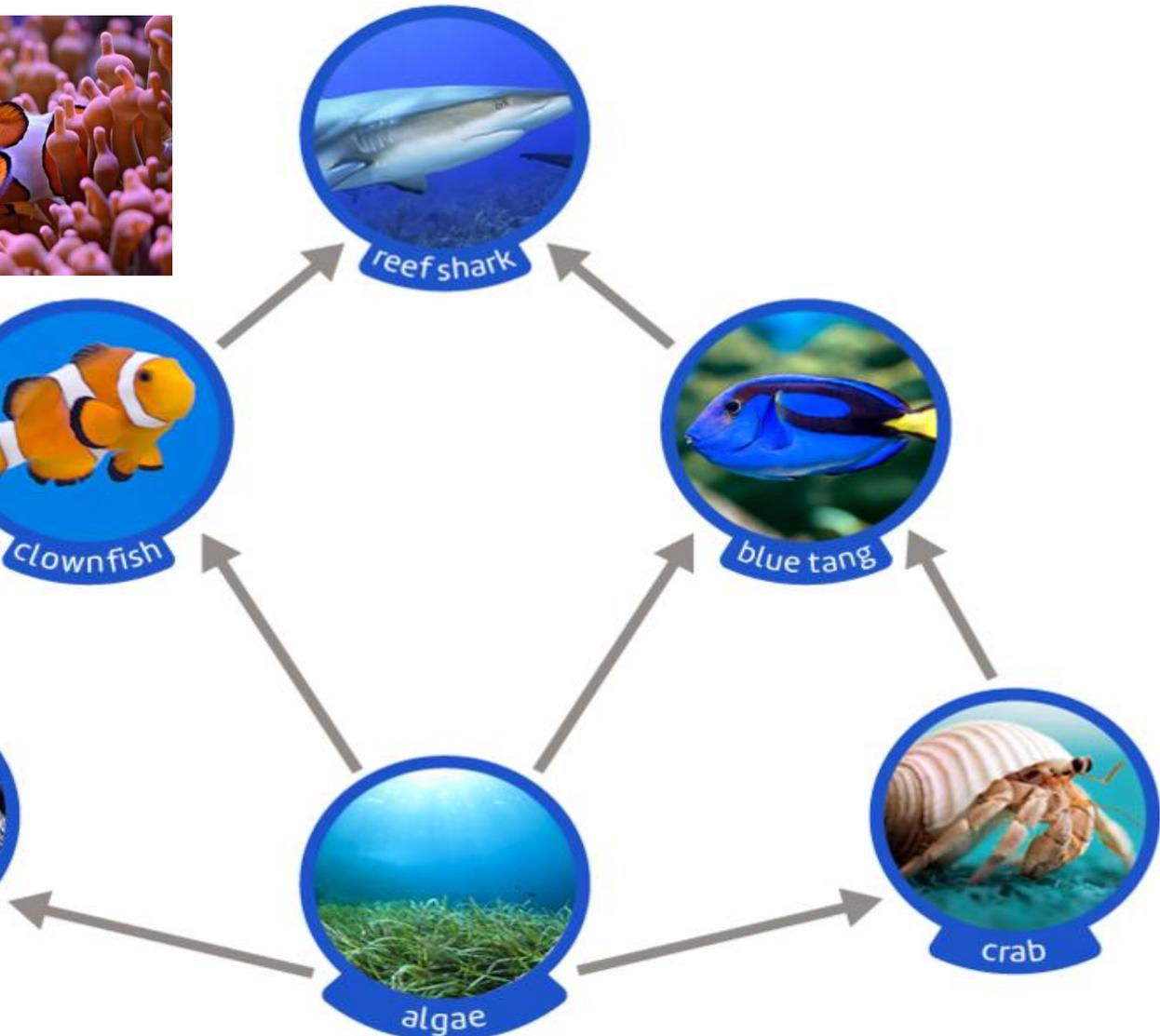


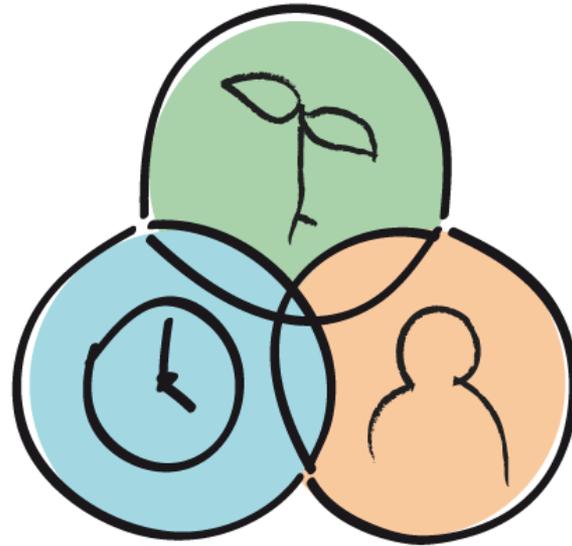


Permacultura è cultura permanente che si ispira alla natura.

Un *Metodo di progettazione* di **ecosistemi umani sostenibili, stabili, efficienti e resilienti.**







Cura della Terra

Cura delle Persone

Cura del Futuro



Osserva e interagisci



Cattura e conserva
l'energia



Ottieni un raccolto



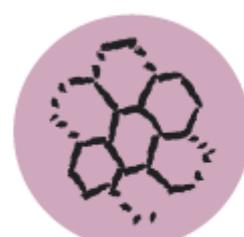
Applica l'autoregolazione
e accetta il feedback



Usa e valorizza risorse
e servizi rinnovabili



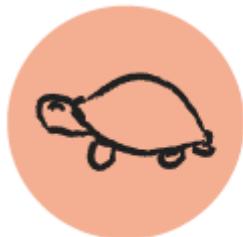
Non produrre rifiuti



Progetta dal modello
naturale al dettaglio



Integra invece
che separare



Usa soluzioni
piccole e lente



Usa e valorizza
le diversità

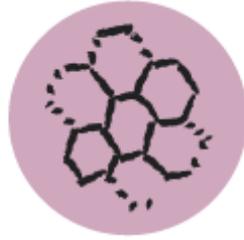


Usa e valorizza
i margini



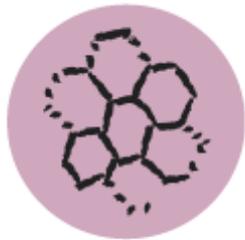
Rispondi al cambiamento
in modo creativo

Osserva la natura e poi



Progetta dal modello
naturale al dettaglio





Progetta dal modello
naturale al dettaglio





**Può essere applicata
all'esterno...**



**Può essere applicata
all'interno...**



Sia nel piccolo che nel grande



Riappropriandosi del proprio quartiere o città



Lavorando sulle dinamiche di gruppo

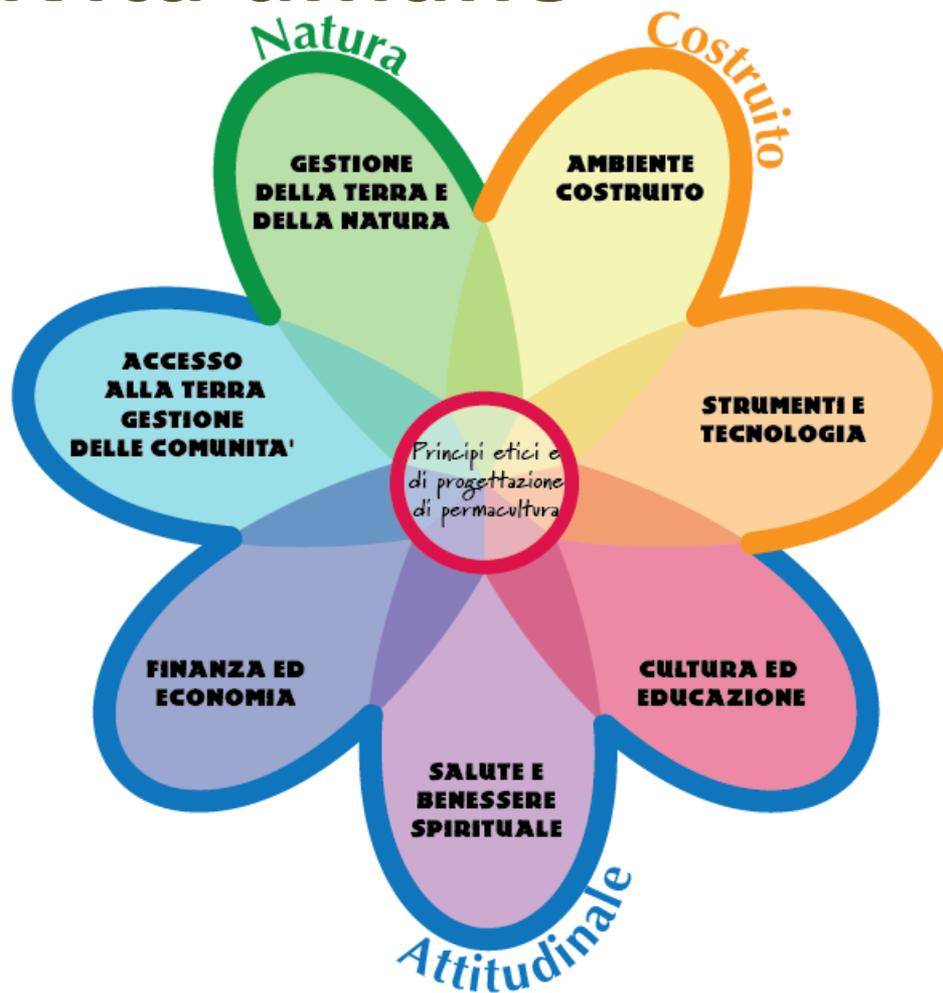


Creando o rafforzando relazioni sociali





Attività umane

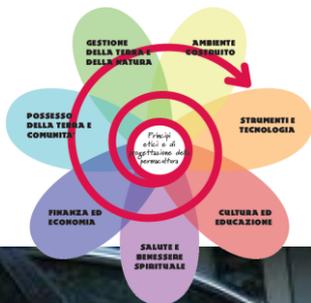


AMBIENTE COSTRUITO

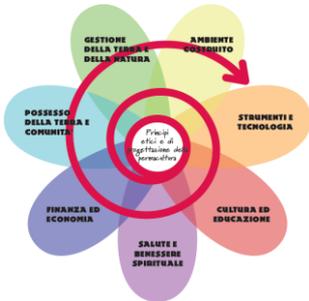


AMBIENTE COSTRUITO

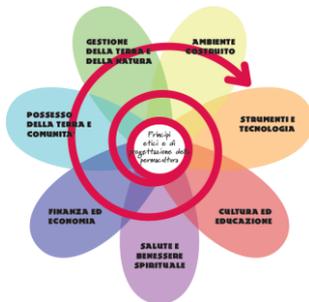
Gestione acque piovane



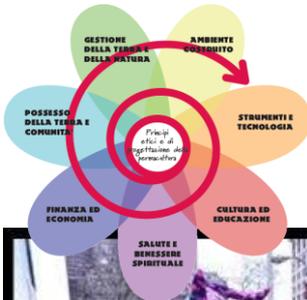
STRUMENTI E TECNOLOGIA



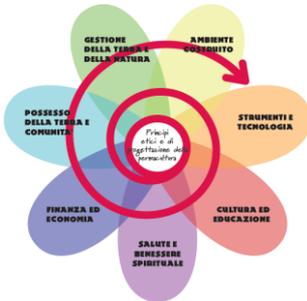
SALUTE E BENESSERE SPIRITUALE



CULTURA ED EDUCAZIONE

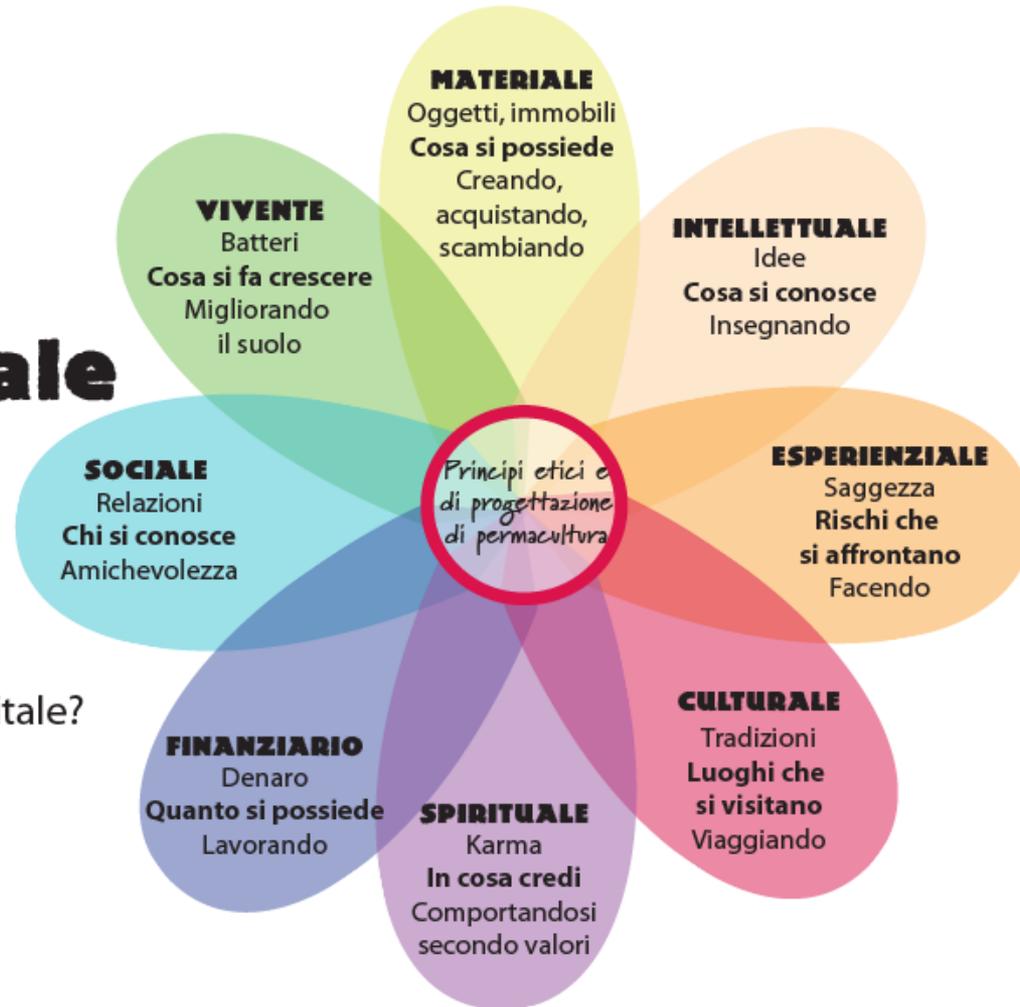


FINANZA ED ECONOMIA

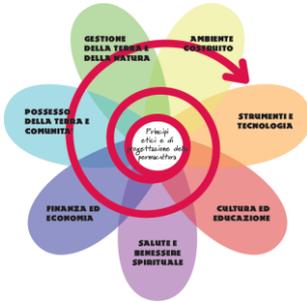


Forme di Capitale

- Quale valuta?
- Si misura con
- Come aumenta questa forma di capitale?



FINANZA ED ECONOMIA

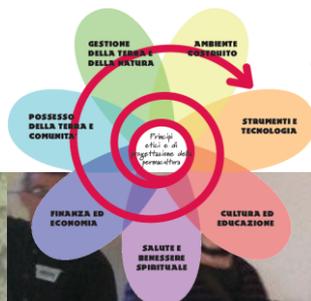


Esempio:

Capitale intellettuale

- Quale valuta/moneta? *Idee*
- Come la misuro? *Cosa si sa*
- Come acquisisco ricchezza? *Insegnando*

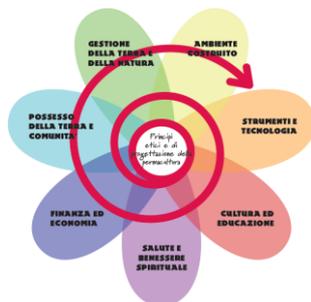
ACCESSO ALLA TERRA E COMUNITA'



GESTIONE DELLA TERRA E DELLA NATURA



AGRICOLTURA PERMANENTE

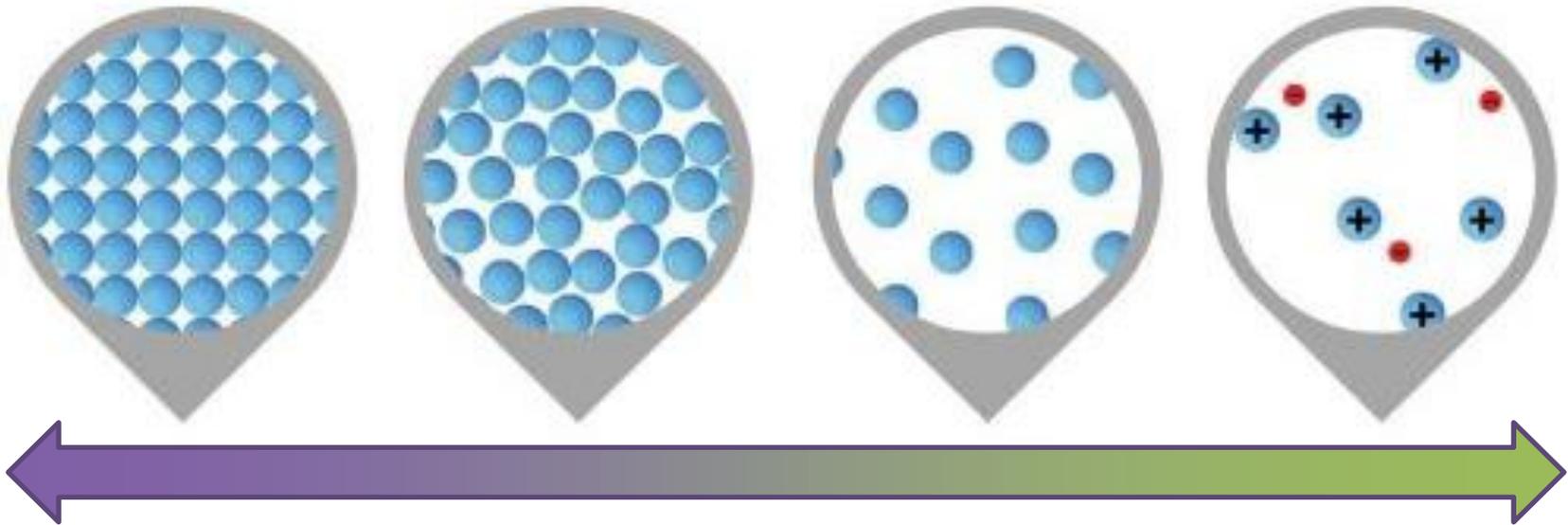


Agricoltura permanente, rigenerativa,
per il cambiamento a partire da noi stessi

Da Entropia a Sintropia



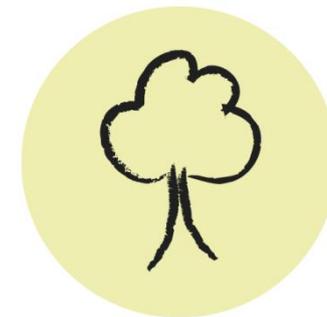
Cattura e conserva
l'energia



Ordine
SINTROPIA
Biologico, cristallino

Disordine
ENTROPIA
Caos, 2° legge
termodinamica

Imparando dalla natura



Osserva e interagisci

FASCE FITOCLIMATICHE

Alpinetum

prateria di altitudine, mugheta e lariceto



1800 - 2000 m

1600 - 1900 m

Picetum

pecceta (abeti)



1200 - 1600 m

1000 - 1400 m

Fagetum

faggeta



700 - 800 m

600 - 700 m

Castanetum

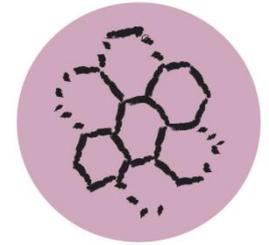
castagneto, ostrieto



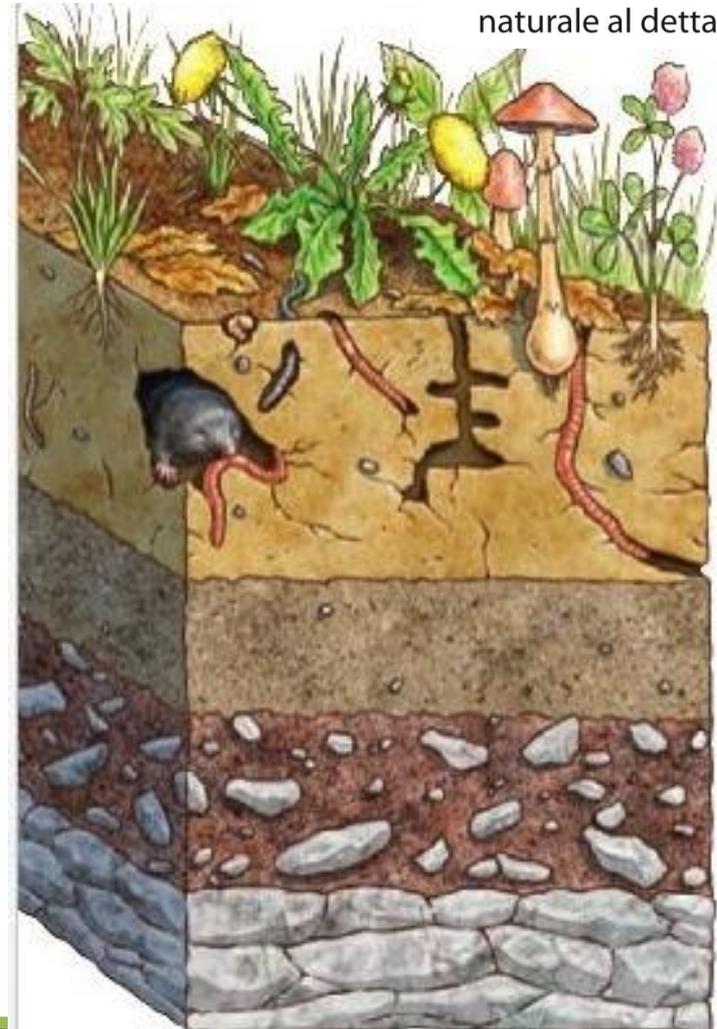
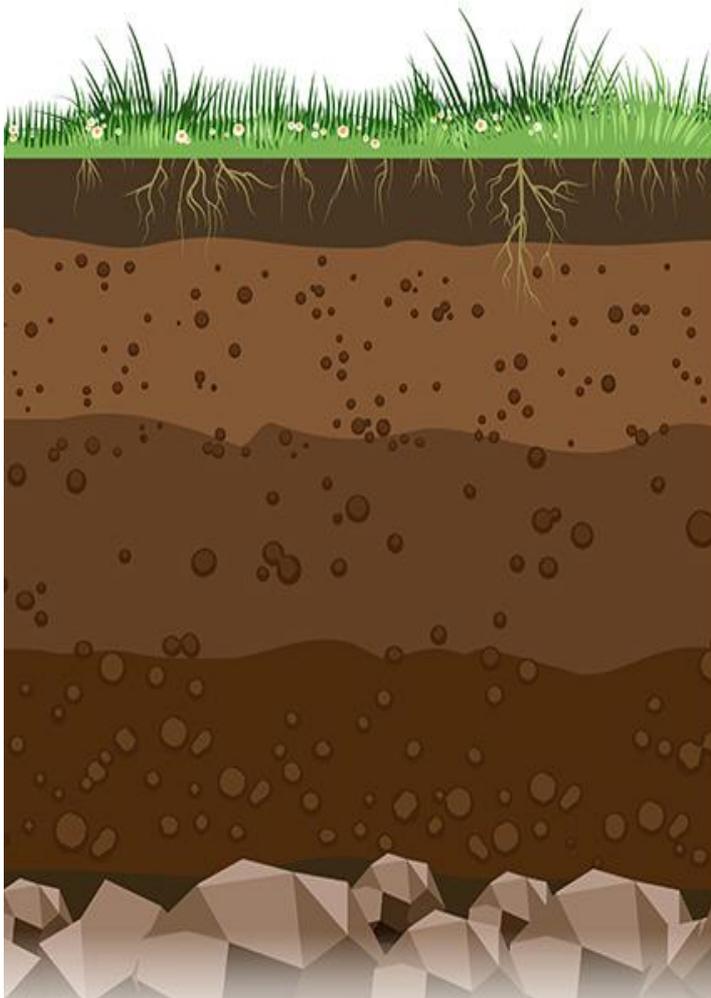
SUD

NORD

Imparando dalla natura



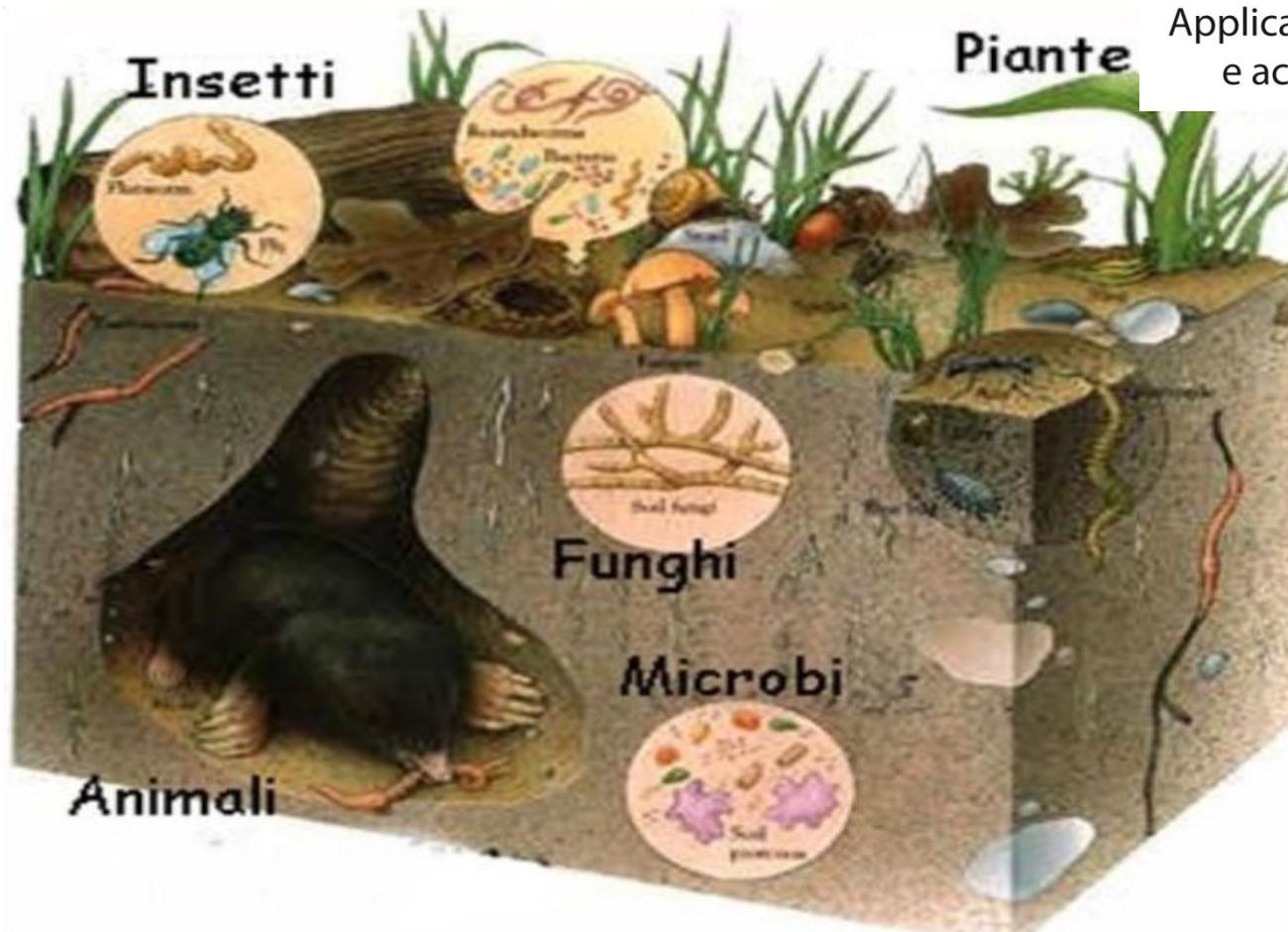
Progetta dal modello
naturale al dettaglio



Imparando dalla natura



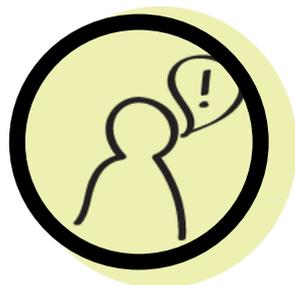
Applica l'autoregolazione
e accetta il feedback



Agricoltura permanente e rigenerativa



Usa e valorizza
le diversità



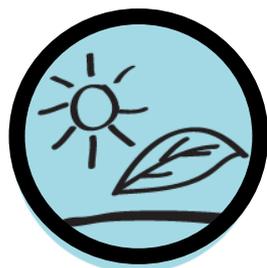
Comprendere
il contesto
di coltivazione



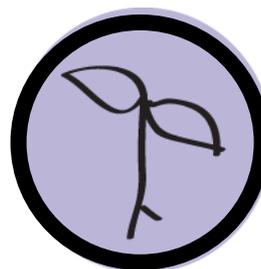
Minimizzare
il disturbo
del suolo



Massimizzare
la biodiversità
delle colture



Mantenere
il suolo
coperto



Mantenere
radici vive
tutto l'anno



Integrare
animali
d'allevamento

Comprendere il contesto di coltivazione



Osserva e interagisci



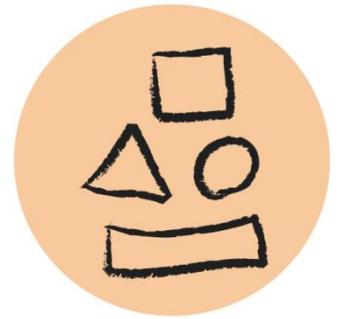
Minimizzare il disturbo del suolo



Usa e valorizza risorse
e servizi rinnovabili



Massimizzare la biodiversità delle colture



Usa e valorizza
le diversità

Mantenere il suolo coperto

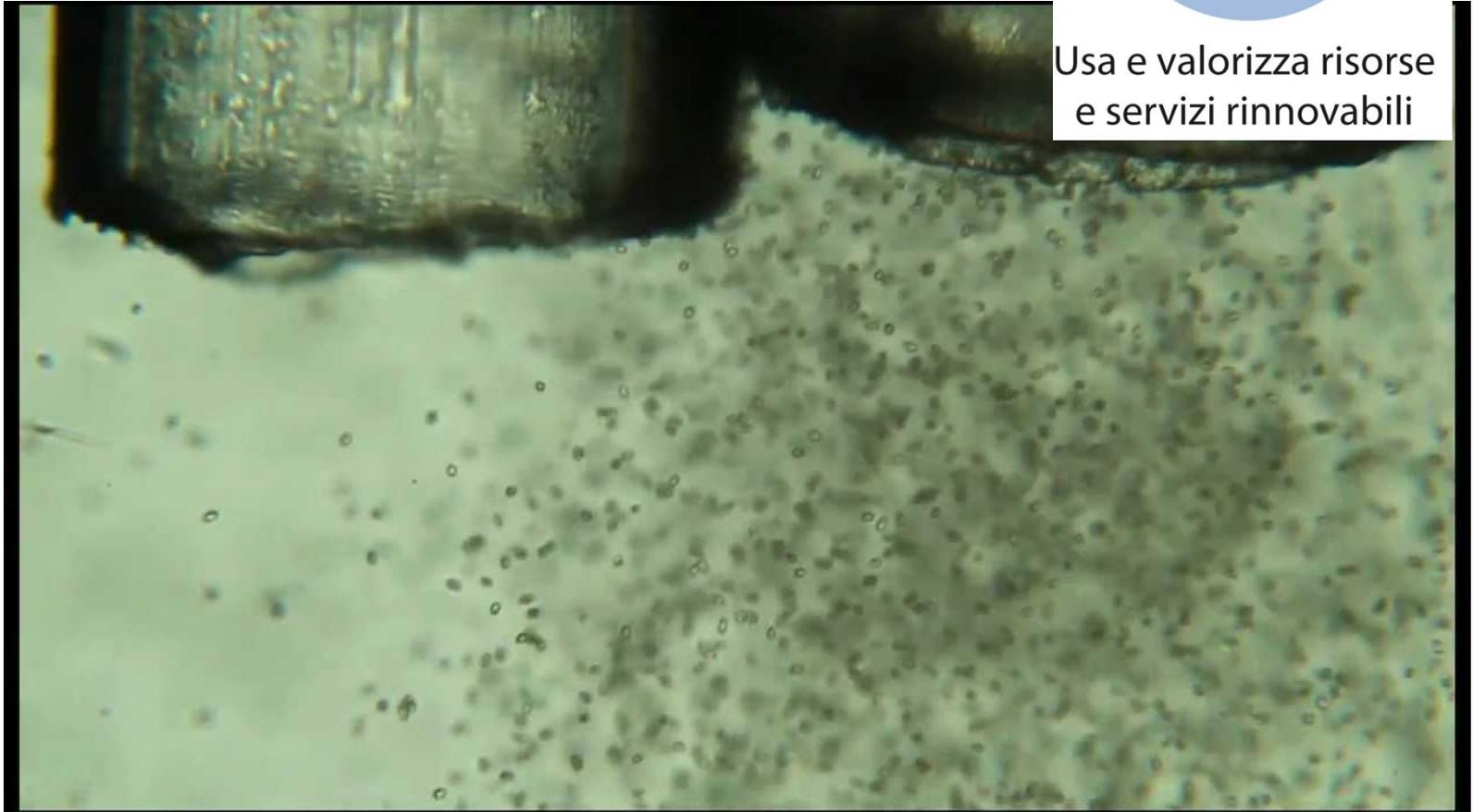


Usa e valorizza
i margini

Mantenere radici vive tutto l'anno



Usa e valorizza risorse
e servizi rinnovabili



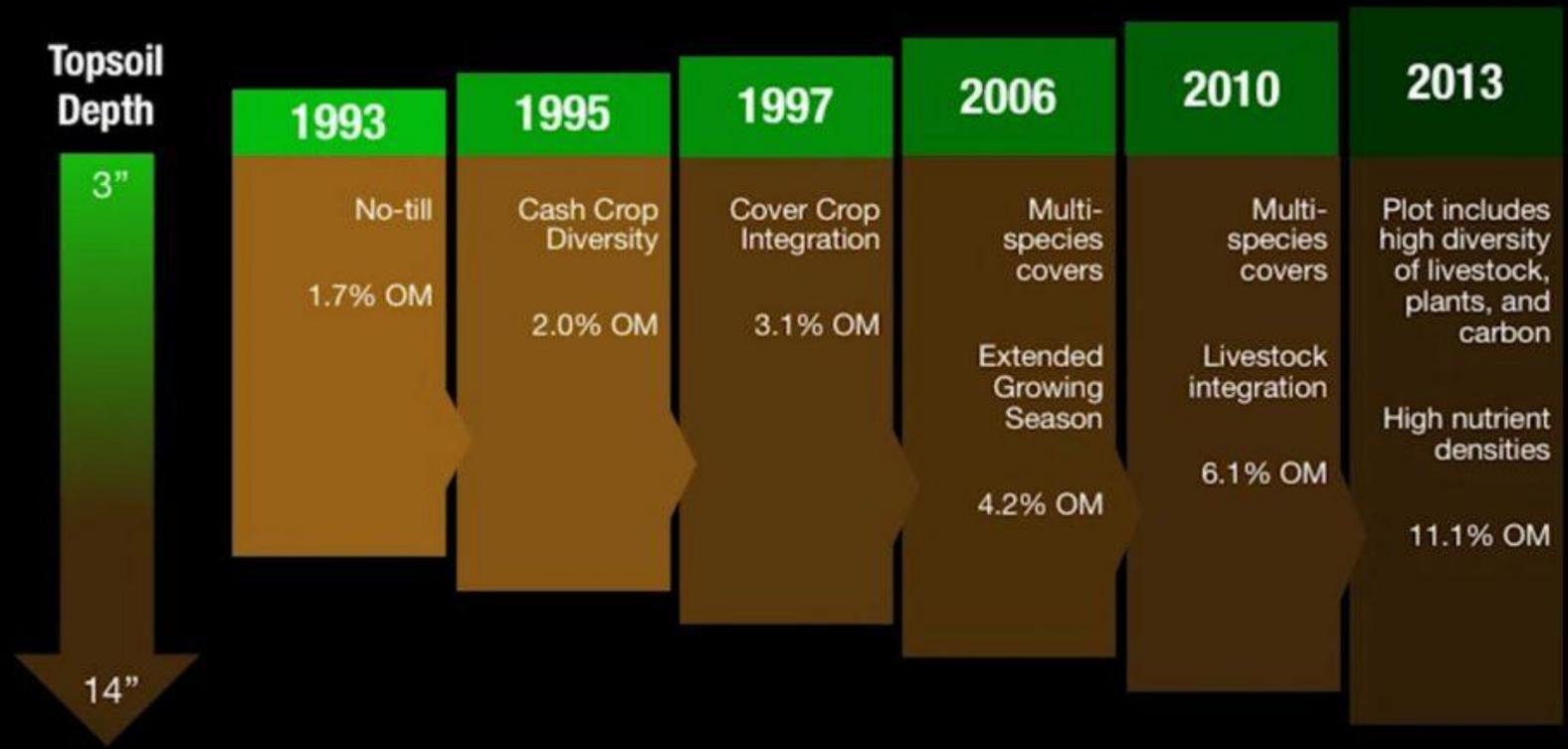
Integrare animali d'allevamento



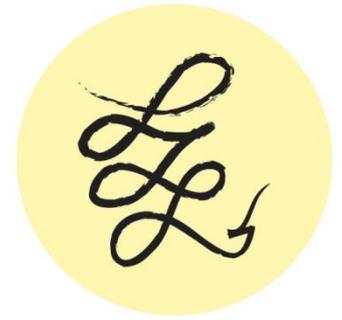
Regeneration of Our Lands: A Producer's Perspective | Gabe Brown | TEDxGrandForks

Integra invece che separare

Brown's Ranch Soil Building



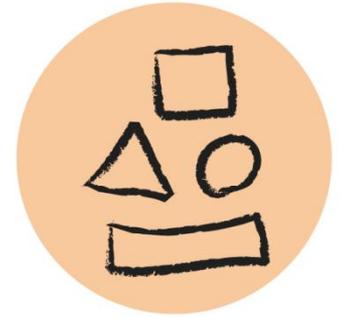
Piccola e vasta scala



Rispondi al cambiamento
in modo creativo



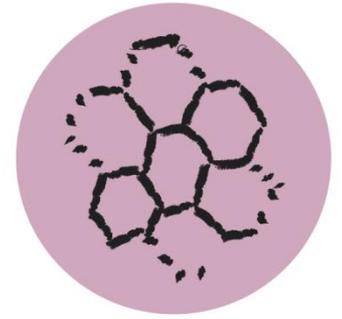
Policolture



Usa e valorizza
le diversità



Perenni



Progetta dal modello
naturale al dettaglio



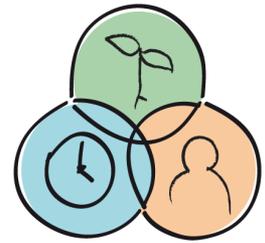
Silvicoltura integrata



Non produrre rifiuti



In conclusione



- abbiamo visto che i problemi che l'uomo con le sue attività ha generato sul pianeta non sono trascurabili, anzi l'abuso delle risorse ha portato al loro picco ed indisponibilità per il futuro... quindi la permacultura, ispirandosi alla natura e ai suoi meccanismi valorizza la biodiversità, la rigenerazione del suolo e la sua fertilità, producendo cibo altamente nutraceutico per noi e le generazioni future.
- A ricaduta ci sarà una vita migliore per tutti, meno malattie e spese per la sanità!

Per saperne di più



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