







Life Terra introduction

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at Life Terra



Life Terra is a European initiative with the mission to restore our connection with the Earth and to enable people to take impactful climate action now. We facilitate tree planting, educate future generations, and develop tree-monitoring technology.



Plant trees. Grow forests. Restore Earth.





What makes us unique



Plant the right tree in the right place, sharing knowledge and expertise



Monitor each tree planted with our unique platform to "tag your tree"

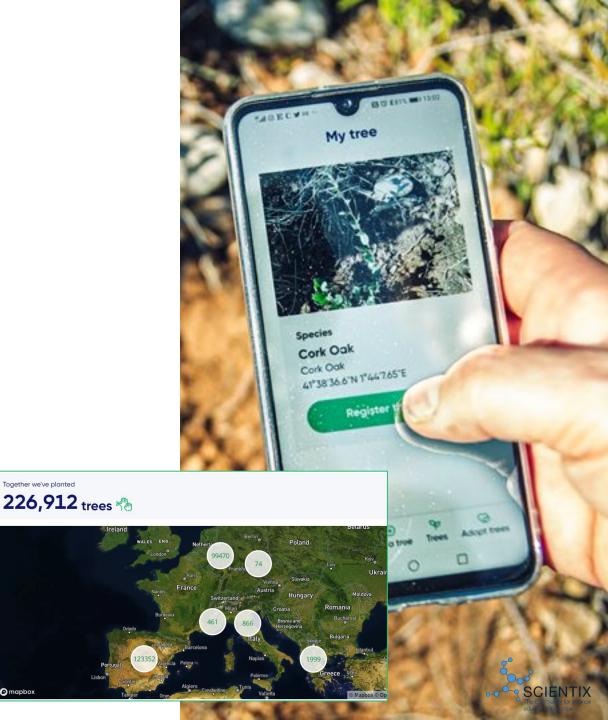


Educate future generations about sustainability and climate change

Together we've planted



Engage communities in tree planting for large-scale positive impacts





Strong pact



We are proud to work with a consortium of 16 partners from 8 EU countries that bring together expertise, knowledge and network in **Implementation**, **Technology**, **Communications**, and **Education**. Life Terra is approved and supported by the European Commission through their LIFE programme.





































Our results (2020 - 2021)



~ 7,500 Volunteers involved in +130 tree-planting events

in 9 Countries from Europe (BE, CZ, DE, FR, GR, IT, NL, PT, SP)



~ 1,300 Teachers from +30 countries interested



~ 20,000 Students potentially participating

+100 Terra Leaders trained

+225,000
Trees planted









Not just trees

but ecosystems, ecosystem processes, with a long-term goal











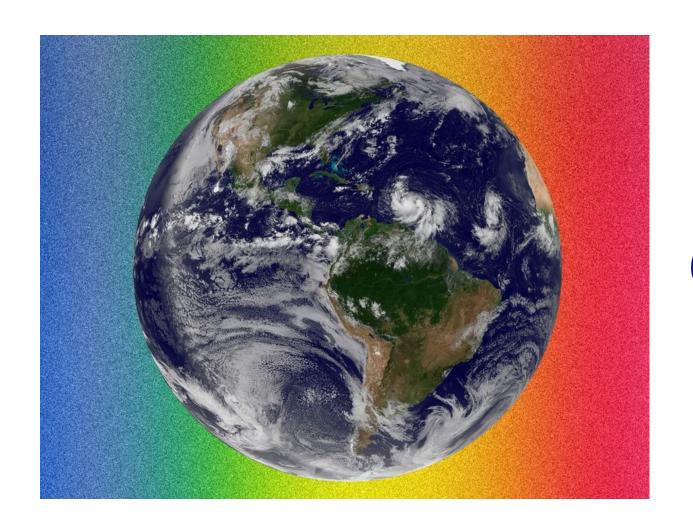
Why trees and which trees



- Climate change benefits from trees and forests Why do we want to plant trees?
- Selecting tree species to plant in the EU In different countries: which criteria to follow, where to find information, trees to plant and trees to avoid, etc.
- Why we must monitor planted trees

 And why we must keep for 40 years at least



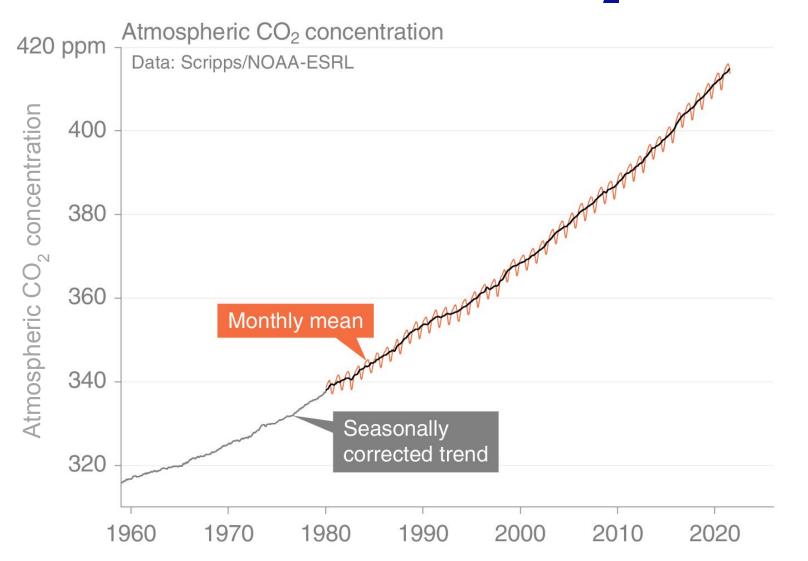


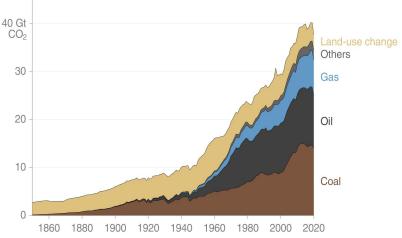
Climate Change





Atmospheric CO₂ concentration





Fossil carbon



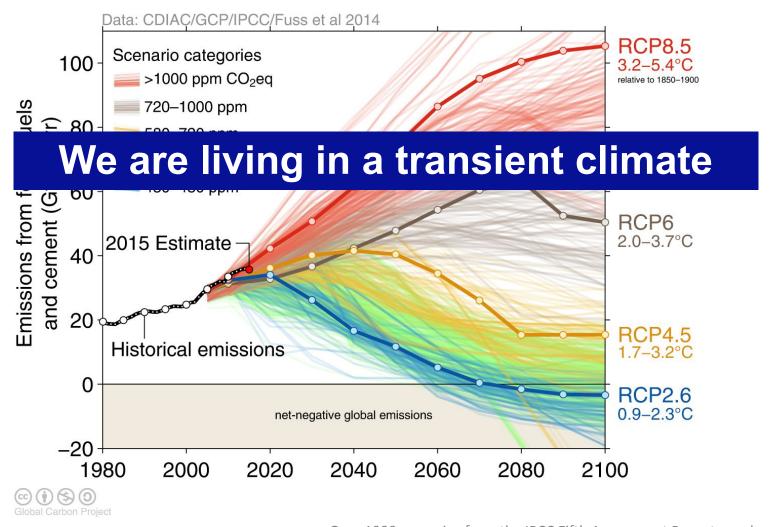




How much? The future is not written yet!



Thus, so much to do!









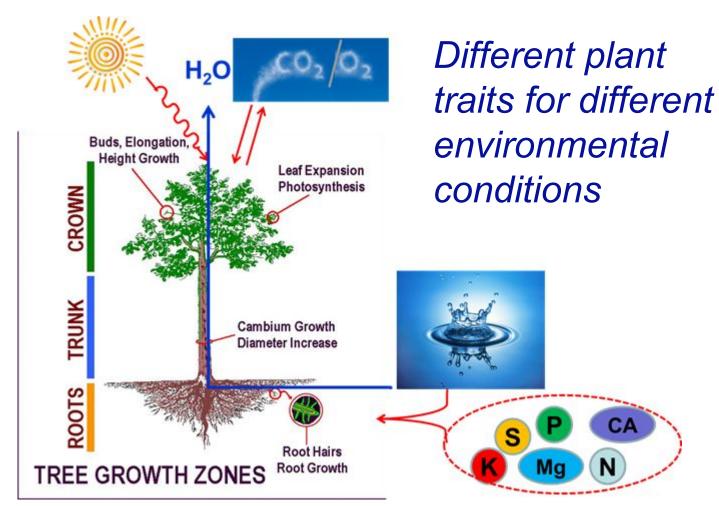
Planting trees: building carbon stocks and restoring ecosystems



Building up Carbon stocks

By choosing appropriate species for different conditions

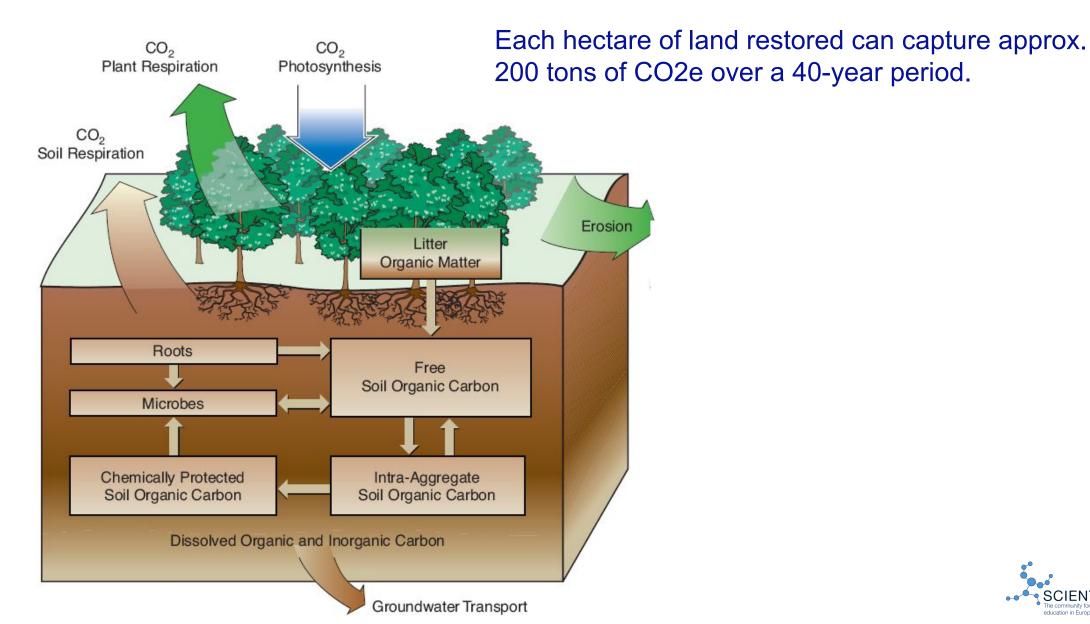








Building up Carbon stocks takes time



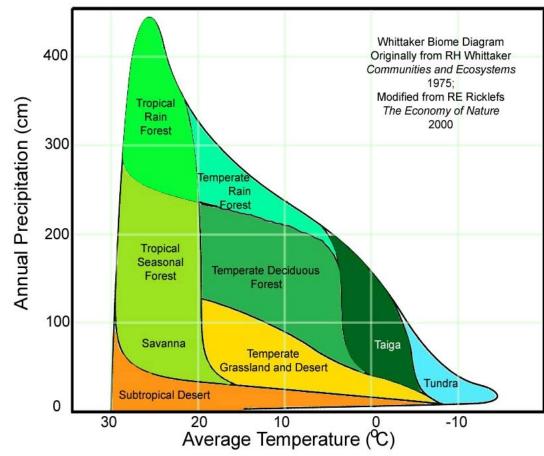




Restoring landscapes and ecosystems, not just trees







Climate is key (temperature + water availability)





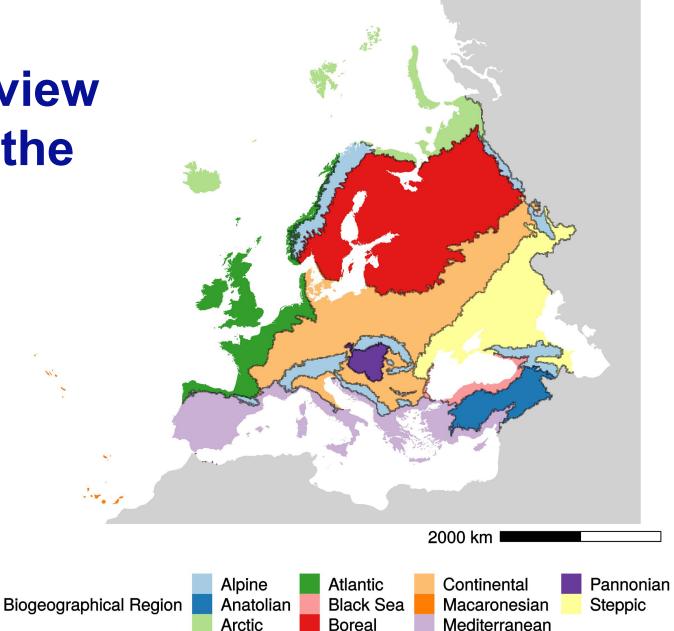


From the global view to the details on the terrain

An example for Europe

A grid-based map for the Biogeographical Regions of Europe

Cervellini et al 2020 Biodiversity Data Journal









Some principles

Using native species

Increasing biodiversity by using several tree species

Diversity of plant traits





Designing a planting project

- Planting starts with a class research project
 - Climate in your city/region
 - Geological maps, soil types
 - Information about vegetation in your neighbourhood
 - Main natural forests in your region, dominant trees in the parks
 - Which tree species are available for planting
- **■** Planning the planting
 - Field trip to the site, explore the terrain
 - Slope, aspect (north/south), others
 - Learn about the environmental requirements of selected species
- **■** European atlas of tree species

https://forest.jrc.ec.europa.eu/en/european-atlas/atlas-download-page/





After planting

Monitoring seedling survival

Monitoring tree growth and carbon stocks

Resources for teaching/learning







To keep in mind!

Our Core Principles and challenges (in short)

- 1. **Transparency** Creating tools to make planting initiatives measurable and visible.
- 2. **Biodiversity** Life Terra plantings will be multispecies, to ensure mixed forest stands and rich, biodiverse ecosystems. Species that are right for the area.
- **3.** The right tree in the right place an "ecosystem-based approach". We consider all the conditions of a terrain and its surrounding area. To ensure that the restoring lands need trees.
- **4. Trees are not enough** planting trees alone cannot halt the climate crisis. We all need to take action, prioritizing sustainable agriculture, the circular economy, green energy, and biodiversity.
- 5. **Knowledge is power –** essential to educate the next generation providing them the knowledge and tools they need.
- 6. **Sustainability** Survival tree success by working with landowners committed to maintaining their new trees over the long term to take full advantage of their carbon capture potential.
- 7. **Green procurement** Our suppliers: organizations that have social and environmental goals in addition to their financial ones.









Carbon footprint calculator & online questionnaire

Chrystal Moore, Teresa Sauras-Yera, Santi Sabaté, Samuel Allasia

University of Barcelona

What is a carbon footprint & carbon footprint calculator (CFC)?







Life Terra's CFC

Methodology:

Based on a mathematical methodology, devised from literature reviews and reviews of other CFC's

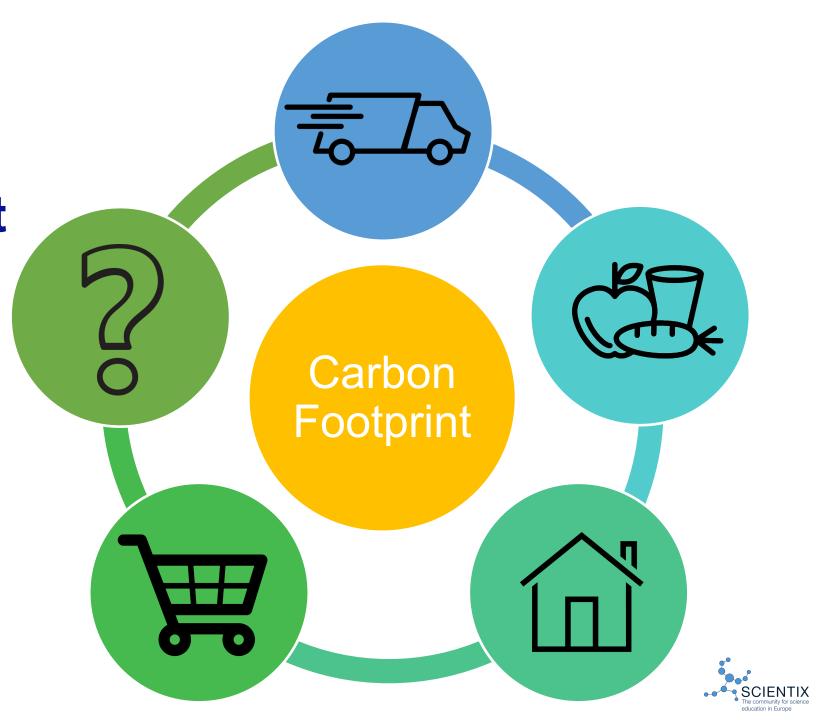
Aims:

- Gather data
- Encourage people to reduce their footprint
- Encourage people to offset their emissions by supporting the Life Terra project
- Address the existing research and market gap



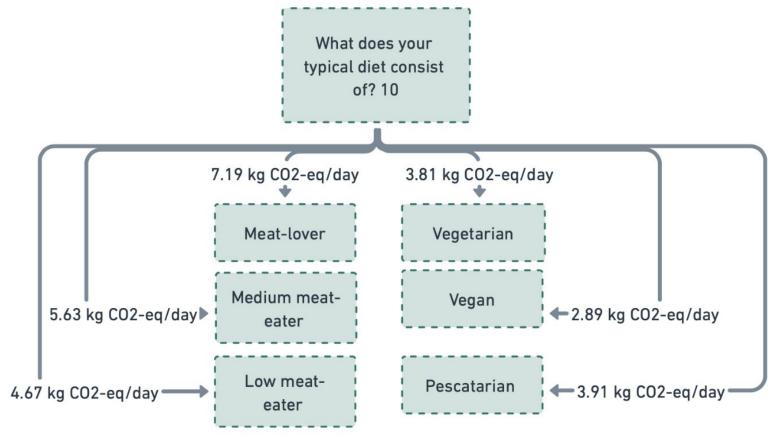


Overview of the carbon footprint calculator





Example: diet









Next steps

Collecting data

Analysing data

Empowering people to act sustainably











Planting trees with pupils: why & how

Aroa Gregori Montaner Education Coordinator





Plant trees with your pupils: why

Environmental benefits

- Improve air quality + noise at school / neighbourhood
- Provide shade to face heat waves → "Climate Shelters"
- Enhance **aesthetic** value → healthier learning environment
- Increase **health & wellbeing** for pupils & teachers

Pedagogical benefits (I)

- Fantastic learning resource → STEAM projects (CC, tree growth, seasons, birds, flowers, butterflies, pollinators, etc.)
- Maintenance & tree caring → skills/values: responsibility, patience, stewardship, teamwork, cooperation, respect, long-term vision...
- Outdoor learning spaces → creativity, motivation





Plant trees with your pupils: why

- Pedagogical benefits (II)
 - Fun hands-on experience → rewarding feelings & positive life-time memories (*learning by doing*)
 - Emotional connection with Nature & oneself → meaningful learning & self-confidence (learning by feeling)
 - **Interest** for natural sciences → inspiration for green projects

Social benefits

- Make a contribution for the local community & themselves
- Engage in climate solutions → Better future for all the Planet

think globally, act locally



Our focus on Education & Training







2. Train the trainers



3. Plant with communities





1. Educate all generations



Terra Mission, the Life Terra Educational Pack

for pupils aged 8-14

Terra Challenge Terra Exchange

upcoming



Terra Leaders, our *train the trainers* programme

Terra Leaders are empowered volunteers who take the lead in Life Terra's tree-planting events

2. Train the trainers

Terra Leaders **support participants** to plant trees correctly. They make a difference in their community by **inspiring others** to take climate action while getting knowledge, skills, and hands-on experience in ecosystem restoration and climate solutions.

Teachers can also become Terra Leaders!







Life Terra Events, engaging local communities in tree planting

Involving all stakeholders

Schools, land owners & managers, NGOs, governments, private sector, associations, and the general public.

Supported by the Life Terra Web App User-friendly platform to tag and georeference every tree planted.

3. Plant with communities





School Planting Events: 3 in 1

Educate all generations

Terra Mission in the classroom (and beyond)

Train the trainers

Motivated & committed teachers

Plant with communities

School Planting Event





What do you need?

Key elements for tree-planting:

- 1. Land: schoolyard, private landowners, municipality
 - a. ask friends, neighbours, local decision-makers for suitable land



- a. Get expert advice for species selection
 - i. university, gardening/landscape school, etc.
 - ii. native, diverse, density (e.g. 50 trees-500 m²)
- b. Become an expert!
 - i. you, your team & your students
 - ii. class research













tree saplings

What do you need?

Key elements for tree-planting:

3. Trees

- a. local tree nurseries
- b. 1-2 year old saplings (seedlings)
- c. protectors
- **4. People**: students, families, neighbours, NGOs... and Teachers Terra Leaders!



















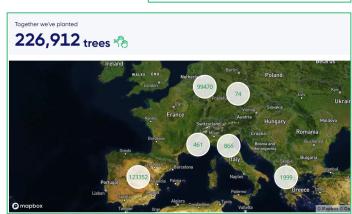
What do we offer?

- Life Terra's platform
 - Keep track of your trees
 - Engage students & families
 - Be part of the Life Terra community!

Training materials:

- Terra Mission (8) → "Trees"
- how to plant guide
- how to tag trees guide
- ...









What do we offer?

Dissemination

 Life Terra blog / Social Media channels → EC, international reach









Create a legacy that matters!

- A meaningful learning tool & a green legacy for your school
- An opportunity to get your students (& yourself) involved in real climate action, explore climate solutions, learn about trees, and meet local experts & activists







Plant trees with your pupils: how to get started?

- Work in progress! :)
- Make sure to explore ALL key elements: land, trees, people, and knowledge.
- Check if Life Terra is active in your country
- Follow us on social media:











- Sign up to our monthly newsletter: shorturl.at/mBU04
- Life Terra can process a limited number of planting proposals, according to various criteria. More info coming soon!









Menu

O Dashboard

Trees

Adopt trees

Account

My account

→ Sign out

Q EN V

Together we've planted

226,912 trees %









Menu

O Dashboard

Trees

Adopt trees

Account

A My account

→ Sign out

Q EN V

My trees

All trees

You've got

46 trees 🕸

Waiting to be planted

O trees 🕸













The Project ∨ Events & Partners ∨ News ∨ Contact ∨ ⊕ EN ∨ Login

Adopt a tree



Holm Oak

Your tree

<u>View large image</u>

9 Species: Quercus Ilex

Read more info about the tree species

Planted

- **#** 27/11/2021
- 🛱 Planting in Mula with Climates

Life Terra Event in which your tree was planted

Location

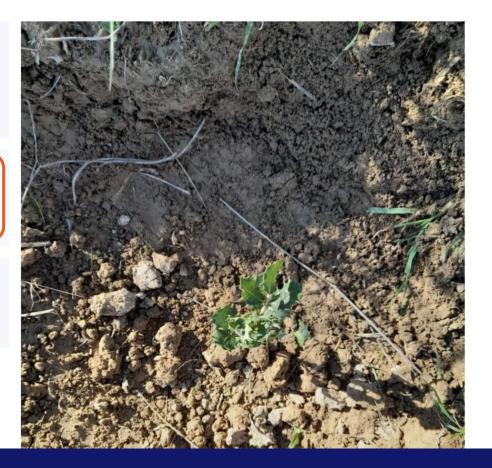
Latitude: 38.0147725 Longitude: -1.5361983

Do you want to share your tree?













Any questions?



LET'S PLANT TOGETHER















Thank you!

This course has been developed by Life Terra, co-financed by the European Commission through the LIFE Programme (LIFE19 CCM/NL/001200). The course is additionally supported by Scientix 4 (Grant agreement N. 101000063). Scientix has received funding from the European Union's H2020 research and innovation programme and is coordinated by European Schoolnet (EUN). The content of the document is the sole responsibility of the organizer and it does not represent the opinion of the European Commission (EC), and the EC is not responsible for any use that might be made of the information contained.











