



THE ROLE OF UNIVERSITIES IN THE PROCESS OF DECARBONIZATION OF URBAN AREAS

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Scuola Superiore Sant'Anna

December 8th 2023 | Dubai | Italy Pavilion

THE ATTENTION OF SSSA TO CLIMATE CHANGE AND DECARBONIZATION

#climatechange
#savetheplanet
#climateaction



A scuola di clima:
ricerca e innovazione
per un futuro
sostenibile

Le iniziative della Scuola Sant'Anna per affrontare il cambiamento climatico

Le buone pratiche per combattere il cambiamento climatico. Un approccio multidisciplinare che mette in campo idee, progetti, soluzioni, sinergie per trovare risposte concrete alla crisi climatica.



Main Event

“Addressing Climate Change: a few contributions from Sant’Anna”

Lunedì 20 novembre, ore 9.00. Aula Magna, Scuola Superiore Sant’Anna

09.00- Registrazione

09.15- Welcome

09.30- ‘The state of climate’ di **Roberto Buizza**, Professore Ordinario del Centro di Ricerca interdisciplinare sulla Sostenibilità e il Clima

09.45- ‘Combining crop genomics with seasonal forecasts to enhance climate resilience of smallholder farmers in sub-Saharan Africa’ di **Mercy Macharia Wairimu**, Ricercatrice del Centro di Ricerca in Scienze della Piante

10.00- ‘Sustainable production and applications of Laser Induced Graphene’ di **Francesco Greco**, Professore Associato dell’Istituto di BioRobotica

10.15 – ‘Steel industry’s contribution to the challenges of the European Green Deal’ di **Valentina Colla**, Ricercatrice dell’Istituto TeCIP

10.30 – ‘Grounding and enforcing ethical competence in addressing climate change’ di **Alberto Pirni**, Professore Associato dell’Istituto Dripolis

10.45 – ‘Climate change, migration and protection: Challenges and opportunities’ di **Francesca Biondi Dal Monte**, Professoressa Associate dell’Istituto Dirpolis

11.00- Coffee Break

11.30 – ‘Using big data to investigate the multiple economic footprints of climate hazards’ di **Marco Coronese**, Ricercatore dell’Istituto di Economia

11.45 – ‘Negative Emission Technologies and their socio-economic impacts’ di **Francesco Lamperti**, Professore Associato dell’Istituto di Economia

12.00 – ‘Ingredients to assess the Carbon Footprint of Scuola Superiore Sant’Anna’ di **Federico Rossi**, Ricercatore del Centro di Ricerca interdisciplinare sulla Sostenibilità e il Clima

12.15 – ‘The role of companies and local institutions in net-zero transition’ di **Maria Rosa De Giacomo**, Ricercatrice dell’Istituto di Management

12.30 – Conclusioni di **Marco Frey**, Professore Ordinario del Centro di Ricerca interdisciplinare sulla Sostenibilità e il Clima

THE MAIN EVENT: “ADDRESSING CLIMATE CHANGE: A FEW CONTRIBUTIONS FROM SANT’ANNA”

Scuola Superiore Sant'Anna, in the multidisciplinary event organized on Monday, 20th November 2023, has presented ideas, projects, solutions and synergies to find concrete answers to the climate crisis.

Scholars from different Institutes and Research Centers of SSSA have presented interesting contributions at the event.



CARBON FOOTPRINT OF SCUOLA SUPERIORE SANT'ANNA

Like **World Countries** and **Governments** participating in **COP conferences**, **Institutes for Higher Education** are declaring their commitment against **Climate Change** by publishing **Net Zero Carbon pledges**.



“Since 2019, over 500 higher education institutions representing 4.6 million students, and 60 networks representing more than 17,000 colleges and universities, have committed to be Net-Zero by 2050 at the latest.”



General standards to calculate the carbon footprint of organizations exist (i.e. **ISO 14064**), but there is a lack of **specific guidelines** for **Institutes for Higher Education**.

What if all Universities calculate GHG emissions using their own methodology?



Institutes for Higher Education should be an example of scientific and methodological rigor. **Scuola Superiore Sant'Anna** wants to be a **pioneer** in the route toward **carbon footprint calculation** and **methodological development**.



Institutions involved

1193

Institutions committed

547

Students represented

2,158,816,552

OTHER EVENTS: BETWEEN OCTOBER AND NOVEMBER 2023



24 ottobre 2023 ore 9:30
Auditorium - Camera di Commercio di Firenze
Piazza Mentana 1

Dare **VALORE** alle imprese
attraverso la
DECARBONIZZAZIONE

Logos: ALBO NAZIONALE GESTORI AMBIENTALI, Camera di Commercio Firenze dal 1770 la casa delle imprese, Sant'Anna, sùtm, European Energy Network, European Union flag.

14 novembre ore 19- Caffè Letterario Volta pagina, via San Martino 71, Pisa

'Quante ne sai sul clima? Quiz a premi con ricercatori e ricercatrici di economia e cambiamento climatico'

A cura dell'**Istituto di Economia**

14 novembre ore 16- Aula Magna Storica, Sede Centrale Scuola Superiore Sant'Anna, Pisa

'Addressing Climate Change: Legal and Philosophical Perspectives'

A cura dell'**Istituto DIRPOLIS** con i seguenti interventi:

- *'Artificial Intelligence and the Anthropocene dilemma. The cybernetic-digital revolution and climate emergencies'* di **Barbara Henry**, Professoressa Ordinaria, e **Valentina De Gregorio**, Allieva PhD
- *'Climate change litigation: An international and tort law perspective'* di **Riccardo Luporini**, Assegnista di Ricerca, e **Paola Merli**, Assegnista di Ricerca
- *'Forced environmental migrants as victims of 'ecological disorganisation?'* di **Stefano Porfido**, Allievo PhD
- *'The normative framework for Earth Observation Technologies in the EU Common Agricultural Policy'* di **Antonio Manzoni**, Assegnista di Ricerca

15 novembre ore 16- ARTES, viale Rinaldo Piaggio 34, Pontedera

'CLIMAX – la sfida della sostenibilità e le nuove tecnologie'

a cura dell'**Istituto di BioRobotica**

14 novembre ore 14- Aula 3, Sede Centrale Scuola Superiore Sant'Anna, Pisa

'Who takes the land? Quantifying the use of built-up land by economic sectors to assess biodiversity-related transition risks in France' seminario con **Mathilde Salin** (CIRED and Banque de France)

A cura dell'**Istituto di Economia**

20 novembre ore 20,30- Cinema Arsenale, Vicolo Scaramucci 2, Pisa

Proiezione del film *'Honeyland'* di Tamara Kotevska e Ljubomir Stefanov (2019)

a cura del **Centro di Ricerca di Scienze delle Piante**

ONE OF THE PROJECTS OF THE INSTITUTE OF MANAGEMENT

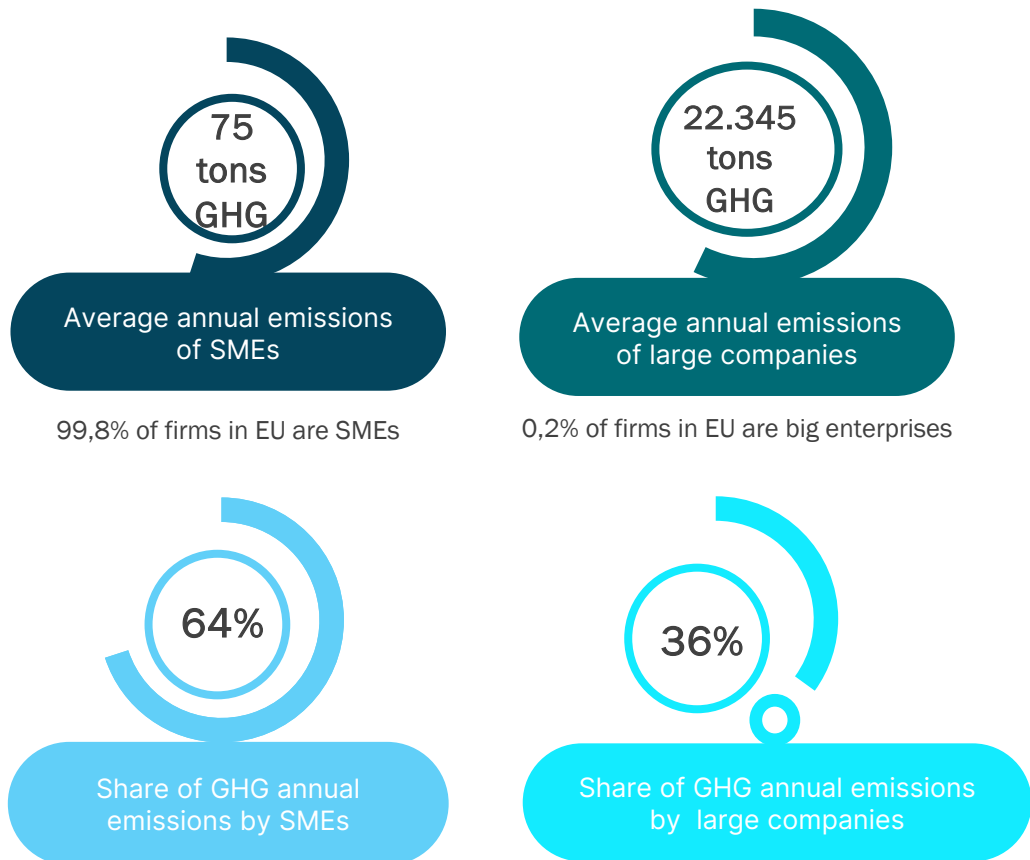
Progetto decarbonizzazione:

Percorso di formazione e sperimentazione di azioni per migliorare le strategie delle imprese toscane



WHY SUPPORTING SMES IN NET-ZERO TRANSITION IS CRUCIAL?

The relevance of SMEs' GHG emissions (EU context)



European Commission, (2022) - Annual report on European SMEs 2021/2022

SMEs are behind Large companies in terms of strategies to reduce their carbon footprint.

Q14 Does your company have a concrete strategy in place to reduce your carbon footprint and become climate neutral or negative? (% SMEs and large companies, EU27)



Ipsos European Public Affairs (2022) - SMEs, green markets and resource efficiency

KEY PROJECT'S PHASES



TRAINING PHASE
Dissemination phase
In-depth training



GROUP WORK
PHASE
Questionnaires
Sharing of tools and metrics
Discussion of specific
aspects



EXPLORATORY
PHASE
Best practices
Possible
partnerships
Guidelines

CONCLUSIONS

The role of companies is crucial in the net-zero transition. However, the support offered to that aim by other institutions, such as Universities (and local authorities), is essential.

Synergies among them are needed.



THANKS FOR YOUR ATTENTION!