

Kompetenzzentrum für ökonomische, ökologische und soziale Nachhaltigkeit Centro di Competenza per la Sostenibilità economica, ambientale e sociale Competence Centre for Economic, Ecological and Social Sustainability

24

25

**Academic Year 24/25 Activity Report** 

### **Competence Center for Sustainability - At a Glance 24/25**

This last academic year was shaped by three priorities: highlight and strengthen our disciplinary strengths, promote collaborative research, and be an active, influential voice in public dialogue across South Tyrol. We advanced disciplinary excellence with decisive steps: the newly funded Alperia Endowed Professorship in Hydrogen (Prof. Massimiliano Renzi) anchored our new hydrogen strand; this also includes integrating a new unibz member Prof Federica Viganò and her HYDRO project including the HYDRO Conference at NOI Techpark deepened the regional conversation on hydrogen and mobility; and Prof Bonacchi & Ass Prof Menicacci launched the public-facing Top-100 ESG ranking of local companies, providing transparent benchmarks for regional sustainability performance.

We believe that <u>within-Centre collaboration</u> is essential to our mission and a key driver of impact: hydrogen work connected Prof Renzi and Prof Viganò; the Centre submitted the SUSBO – South Tyrol Sustainable Business Observatory research proposal as a joint initiative of all main professors; and joint with colleagues from unibz we co-developed mobility-focused research via the Mobility Lab South Tyrol proposal. Furthermore Prof. Gsottbauer, Prof. Ammendola & Prof. van Bezooijen partnered on the German Ecodesign Award exhibition and the Visualizing Climate Change series.

Our <u>outreach and stakeholder exchange</u> matured into a recognizable brand of expertise. The Centre convened or contributed to high-visibility events such as the STARS Alliance coordination, various talks given in front of company audiences, and multi-format events co-organized with partner organizations in South Tyrol such as *Fashion for Future* and the *Climate Action Day* in Ultental as well as and provided evidence-based input to the Klimabürgerrat and a Landtag hearing on the Climate Plan. Members were present across media (RAI TV/radio, SWZ, Alto Adige, podcasts) on biodiversity loss, sustainable mobility, taxation, and ESG finance, demonstrating consistent participation in public dialogue and a trusted role with regional institutions.

Finally, we advanced our <u>education mandate</u> inside and outside unibz. The Centre delivered executive teaching and knowledge transfer—notably the multi-audience Sparkasse series on sustainable finance & reporting (Bonacchi, Dalla Via, Perego) and plans to also engage public agencies and companies (e.g., the STA Mobility Network Meeting).

### **Members** (Focus area)



Prof. Elisabeth Gsottbauer – Director (Economic Sustainbility)



Prof. Camilla Wellstein – Management Team, Board Member Alliance (Environmental Sustainability)



Prof. Aart van Bezooijn – Management Team (Social Sustainability)



Prof. Massimiliano Bonacchi - Management Team (Economic Sustainability)



Prof. Massimiliano Renzi – Management Team (Environmental Sustainabiltiy)



Prof. Paolo Perego (Economic Sustainability)



Prof. Alex Weissensteiner (Economic Sustainability)

Assoc. Prof. Nicola Dalla Via (Economic Sustainability)



Ass. Prof. Luca Menicacci (Economic Sustainability)



Prof. Giorgio Camuffo (Social Sustainability)



Ass. Prof. Federica Vigano (Social Sustainability)



Ass. Prof. Nicola Campigotto (Economic Sustainability)



Ass. Prof. Jacopo Ammendola (Social Sustainability)

Research Assistants (Environmental Sustainability)

- Ahmad Mirza Junaid
- Maria Stergiadi
- Gianmarco Tavilla

### **Visiting Fellows**

- Dr. Ulrich Atz Visiting Fellow, NYU Stern Center for Sustainable Business
- Dr. Sarah Russo Visiting Fellow, Manchester Business School
- Prof. Ricci Francesco Visiting Fellow, former Faculty of Engineering
- Prof. Carlo Gallier Visiting Fellow, Technische Hochschule Ingolstadt

#### **Team Assistants**

- Lisa Della Rosa Alliance for Sustainability
- Sonia Candura Team Assistant

### **Team updates**

For the academic year 2024/25, we welcome several new colleagues who strengthen our team and broaden our expertise in sustainability research. Prof. Massimiliano Renzi has joined us as a new endowed professor in the realm of environmental engineering, sponsored by Alperia. Ass. Prof. Sarah Russo (Manchester Business school) – a former postdoc at the Center, is joining as a visiting scholar. We are also pleased to welcome Nicola Campigotto as a

postdoctoral researcher in the Economic Sustainability pillar, along with three new postdocs/researchers— Dr. Ahmad Mirza Junaid, Maria Stergiadi, and Dr. Gianmarco Tavilla - who contribute to our work in Environmental Sustainability. Our growing network of unibz members now also includes Ass Prof Luca Menicacci from the Faculty of Economics, Ass Prof Federica Vigano from the Faculty of Education and Prof Giorgio Camuffo from the Faculty of Design and Art.

We are equally grateful for the support of our student assistants Simon Wallis, Matteo Antonazzo, and Jonas Vogt, who assist in various research and outreach activities in 24/25.

### unibz and Alperia strengthen hydrogen research

Alperia is funding a new professorship at unibz to advance research on green hydrogen, led by Prof. Massimiliano Renzi.

Hydrogen is seen as a promising clean energy carrier, especially in South Tyrol with its strong hydropower resources, but its production remains energy- and cost-intensive. Expanding research in this field is therefore key. Through the Competence Centre, unibz and Alperia are pooling expertise to accelerate innovation in hydrogen technologies and support South Tyrol's sustainability strategy. Planned initiatives include a new laboratory at NOI Techpark, linked to the H2 Centre in Bolzano South, focusing on hydrogen production, storage, distribution, and applications in energy systems and mobility. Prof. Renzi's group is also involved in several European and regional projects, including collaborations with Eurac Research on hydrogen for district heating decarbonization.



### **Support and Collaborations**

### Support

The Center has two key supporting bodies: the Scientific Committee and the Stakeholders with an Advisory Vote.

The Scientific Committee includes Prof. Athanassia Athanassiou from the Italian Institute of Technology, Prof. Robert Engle from New York University, and Prof. Martin Gerzabek from Universität für Bodenkultur, Wien.

We are especially pleased to welcome Heid Roehler to our stakeholder group, who joins us as the new representative from the Steering Committee of the Sparkasse Foundation Bozen-Bolzano, taking over from Elisabeth Ladinser. The stakeholder group continues to benefit from the expertise of Klaus Egger, Provincial Sustainability Coordinator, and Kathrin Madl, Head of CSR and Sustainability Management at Alperia AG.

#### Collaborations

In addition, we regularly collaborate with other professors and faculties at unibz for events and research. For the academic year 24/25 we would like to highlight, among others some professors from Faculties with whom we have worked

intensively such as Prof. Federico Boffa, Prof. Maurizio Righetti, and Prof. Kris Krois.

We have collaborated in events, teaching, and research with a range of organizations in South Tyrol and beyond including Ambienta, BITZ fablab, Bundespreis Ecodesign, Camera di commercio di Bolzano - Handelskammer Bozen, Climate Action South Tyrol, Confidi Alto Adige – Südtirol, Dachverband für Natur- und Umweltschutz, FiemmePER - Fondazione ETS, Fraunhofer Italia Research, IDM South Tyrol, Italian Alpine Club (CAI), Markas, trash galore, ito ito, Natural Science Museum of South Tyrol, NOI Techpark, OEW – Organisation for a Solidary World, Public Library of Bozen, REX – Materials and Things, Slow Fashion Journalist Susanne Barta, South Tyrolean Alpine Club (AVS), Sparkasse (Cassa die Risparmio die Bolzano), Südtiroler Landesregierung, Heimatpflegeverband Südtirol, Fondazione Regolino, and Weltläden Südtirol.

### **Research highlights**

A selection of new research projects launched in 2024 and 2025 reflects our continued commitment to advancing sustainability research across disciplines.

In the Economic Sustainability pillar, recent initiatives include ANTGREENWASH, which examines the impact of greenwashing on corporate behavior and financial markets (national funding, 01/2024–08/2025, Prof. Massimiliano Bonacchi), CONT\_ANALITICA\_ProvBZ on the development of management accounting systems for the Province of Bolzano (06/2024–12/2024, Prof. Massimiliano Bonacchi), and STEP, exploring children's sustainability narratives (11/2024–12/2026, Prof. Elisabeth Gsottbauer).

In the Environmental Sustainability pillar, newly launched projects include FLASH, focusing on flash flood prediction in protected mountain regions (11/2024–12/2026, Prof. Camilla Wellstein), and BIOPAS, which investigates biodiversity tipping points in South Tyrol's traditional pasture systems (06/2024–05/2027, Prof. Camilla Wellstein). In addition, we continue work on strategic multi-year initiatives such as the Main Project "Habitats" (LEST; 04/2023–12/2026) and the Sustainable Development of Val di Fiemme-Fleimstal (FIEMS; 08/2023–08/2028), both led by Prof. Camilla Wellstein.

In the Social Sustainability pillar, recent additions include GreenWebUser, studying sustainable decision-making in digital environments (11/2024–10/2026, Ass. Prof. Jacob Ammendola), alongside the ongoing Play Ground Project, which

explores visions of play in a more-than-human world (12/2023–12/2025, Assoc. Prof. Jacob Ammendola). Also Prof. Ammendola is a recent awarded project on "Spatio-temporal conditions in 15-minute cities: Exploring the use case of time offices" funded by the DUT Partnership (Driving Urban Transitions to a sustainable future). In addition, Federica Vigano works on the HYDRO project (2024-2026) exploring the social acceptance and institutional awareness of the emerging hydrogen economy in Trentino and South Tyrol, with a particular focus on sustainable mobility.

### Special projects:

### Top 100

A special focus in our research activities is the continuous development of the "Top 100 Sustainability and Innovation Index," the first comprehensive ranking of South Tyrolean companies based on environmental, social, and governance (ESG) criteria. The project, led by Prof. Massimiliano Bonacchi together with Prof. Luca Menicacci and alumnus Fabio Zanderigo Jona, represents an ongoing effort to improve transparency and highlight sustainable business practices in the region. First presented at the Forum "Economia e Sostenibilità" in March 2025, the project has since expanded in scope and public visibility.

The ranking applies a combination of financial and ESG metrics, including estimated CO<sub>2</sub> emissions, workforce indicators, and sustainability certifications. Recent developments include the introduction of an Al-based scoring system, providing industry-adjusted sustainability ratings from AAA to CCC. The project is supported by a dedicated website - <a href="https://top100esg.projects.unibz.it/it-where">https://top100esg.projects.unibz.it/it-where</a> methodology, data, and company-level scores are published openly. This evolving initiative aims to stimulate continuous engagement from companies, foster public debate on sustainability, and encourage South Tyrol's enterprises to embrace ESG leadership. Further outputs to date include, a working paper (BEMPS107, 2025), and the *Top 100 ESG Report*, with strong public visibility through the Forum *Economia e Sostenibilità* (19 March 2025) and *Magazine Economia Alto Adige* (20 March 2025). This evolving initiative aims to stimulate continuous corporate engagement, foster public debate, and encourage ESG leadership in South Tyrol.

#### Contract-based research

In the area of contract research, we are pleased to report a significant expansion of activities. A new collaboration has been launched with the Fondazione

Regolino, supporting a project led by Prof. Giorgio Camuffo and Assoc. Prof. Jacopo Ammendola focusing on workplace safety education. This initiative will culminate in the conference "Comunicare la Sicurezza", to be held on 10-11 October 2025 at unibz.

We have also expanded collaborations with private sector partners on sustainability reporting and strategy development. Notable examples include the project *Driving Sustainable Growth in "Digital Value": Empowering People, Protecting the Planet, Ensuring Profitability* (DSG\_DV, 05/2024–05/2025), led by Prof. Bonacchi, which explores sustainability integration in digital business models, and a benchmarking analysis of sustainability reporting in the textile sector (*SU2302 ROSI\_MANTECO CUP E1812500118003*), also coordinated by Prof. Bonacchi.

Additionally, a major new contract project has been secured with Alperia. Congratulations to Prof. Massimiliano Bonacchi and Assoc. Prof. Sarah Russo for establishing this collaboration, which will assess the economic and social impacts of the Pumped-Storage Power Plant in the Ulten Valley. This project demonstrates how our academic expertise can directly support regional investment decisions, and we thank Alperia for their trust and partnership.

### Publication highlights

Prof. Elisabeth Gsottbauer published in *PNAS Nexus* on how choice architecture in online food-delivery apps can nudge consumers towards more sustainable food options. The study provides rigorous evidence that small design interventions in digital platforms can have meaningful impacts on climate-friendly consumption, showcasing the power of behavioral insights in advancing sustainability.

• Lohmann, P., Gsottbauer, E., Farrington, J., Human, S., & Reisch, L. (2024). *Choice architecture promotes sustainable choices in online food-delivery apps.* PNAS Nexus, 3(10).

Prof. Camilla Wellstein advanced climate and forest ecology with several high-impact studies. In *Science of the Total Environment*, she co-authored research on carbon dynamics and nutrient limitations in oak forests under nitrogen deposition, offering new insights into ecosystem responses to atmospheric change. In *Landscape Ecology*, her work on forest–grassland ecotones projects how climate and land-use change will reshape Alpine landscapes, with significant implications for biodiversity and land management.

- Minikaev, D., Tonon, G., Ventura, M., Fornasier, F., Da Ros, L., Du Toit, B., & Wellstein, C. (2025). Carbon dynamics and potential nutrient limitations in an oak forest under experimental canopy nitrogen deposition. Science of the Total Environment, 994.
- Marzini, S., Tasser, E., Wellstein, C., Albrich, K., Rammer, W., & Mina, M. (2025). *Future expansion of upper forest-grassland ecotone under land-use and climate change in the Eastern Alps.* Landscape Ecology, 40(3).

Prof. Max Bonacchi and Prof. Paolo Perego have contributed to the fields of accounting and management. Their article in *Accounting Horizons* explores how customer analytics can reshape performance measurement and reporting systems, offering managers tools to better align reporting with value creation. In addition, Perego co-authored a critical reflection in the *Journal of Management Studies* on the planetary boundaries framework, assessing its relevance for organizations operating in the Anthropocene and its implications for corporate governance.

- Bonacchi, M., & Perego, P. M. (2024). *Customer Analytics in Performance Measurement and Reporting Systems*. Accounting Horizons, 38(4).
- Williams, A., Perego, P. M., & Whiteman, G. (2025). *Boundary Conditions for Organizations in the Anthropocene: A Review of the Planetary Boundaries Framework 10 Years On.* Journal of Management Studies, 62(4), 1811–1846.

Dr. Luca Menicacci has published a series of articles on taxation, ESG, and corporate reporting. His research in the *Sustainability Accounting, Management and Policy Journal* shows how negative media coverage of ESG issues can be linked to corporate tax avoidance. Menicacci, L., & Simoni, L. (2024). *Negative media coverage of ESG issues and corporate tax avoidance*. Sustainability Accounting, Management and Policy Journal, 15(7).

Prof. Alexander Weissensteiner contributed to financial economics with innovative research on portfolio optimization under downside risk measures. His work in the *Annals of Operations Research* develops new methods for smoothed semicovariance estimation, offering investors and asset managers improved tools for risk-adjusted portfolio selection in uncertain markets.

• Ferrari, D., Paterlini, S., Rigamonti, A., & Weissensteiner, A. (2024). *Smoothed semicovariance estimation for portfolio selection*. Annals of Operations Research, 1–40.

Prof. Massimiliano Renzi contributed significantly to applied energy research, with a focus on low-carbon technologies and urban energy systems. In *Applied Thermal Engineering*, he co-authored an article on ammonia-fueled micro gas turbines with steam injection, exploring their performance and emissions potential. In *Smart Energy*, he co-authored a study on urban smart energy systems, providing integrated technical, economic, and environmental optimization models to inform future energy transitions.

- Fatehi, M., Campaldini, G., & Renzi, M. (2025). *Micro gas turbine fed by ammonia with steam injection: Performance and combustion analysis.* Applied Thermal Engineering, 264.
- Battini, F., Menapace, A., Stradiotti, G., Zanfei, A., Nicolosi, F. F., Dalla Torre, D., Renzi, M., et al. (2025). *Urban smart energy systems from a climate change perspective: Technical, Economic and Environmental optimization analysis*.
   Smart Energy, 18.

Prof. Aart van Bezooijen and Dr. Jacopo Ammendola published on design and sustainable innovation. Van Bezooijen co-authored studies on sustainable material substrates for thin-film sensors (*MRS Advances*) and bio-design applications in footwear innovation. Ammendola focused on participatory and vernacular design approaches, including a chapter in *Resilient Planning and Design for Sustainable Cities* examining how co-design can safeguard cultural identity in urban communities.

- Nijkoops, A., Bhatt, D., Carrasco Pena, A., Husain, Q. Z., Rapagnani, N., van Bezooijen, A., et al. (2024). *Suitability of plant fiber residue-based paper as substrates for sustainable thin-film thermistors*. MRS Advances, 9(20).
- Ammendola, J., Masiani, B., & Saavedra, C. (2024). Experimental Co-Design with a Ludic Urban Community: The Safeguard of the Identity of Vale Do Anhangabaù as a Skateboarding Spot. In Resilient Planning and Design for Sustainable Cities.

#### Grants

Under the 2024/25 funding period, the Centre was awarded the nationally funded project *The impact of greenwashing activities on corporate policies and security pricing (ANTGREENWASH)*, led by Prof. Massimiliano Bonacchi (01/2024–08/2025).

In addition, Centre members successfully secured three interdisciplinary research grants under the most recent unibz internal funding call. These projects include Empowering Web Applications End-users to Make Sustainable Choices (led by Jacopo Ammendola), Sensitise perception, recognise multiplicity: Children's path to sustainability through narrative and participatory research (led by Elisabeth Gsottbauer), and Flash floods prediction and impact in protected mountain areas (led by Camilla Wellstein). These awards highlight the Centre's growing interdisciplinary profile, bridging sustainability themes across social, environmental, and technological domains.

Building on this, Camilla Wellstein is also contributing her expertise to the newly funded DiCAM initiative (A Cutting-Edge Data Infrastructure for Climate Change Adaptation and Mitigation) funded by Autonomous Province of Bolzano-Bozen under its Provincial Research Funding Scheme. This collaborative project brings together key regional research institutions including Eurac Research, Eco Research, and the Ökoinstitut to develop a federated digital platform for climate-related data in South Tyrol, further strengthening the Centre's role in regional climate adaptation efforts.

In addition, members of the Center have actively contributed to the new ID 2025 open call by unibz, submitting several interdisciplinary project proposals. Among the submissions, Camilla Wellstein and Elisabeth Gsottbauer are participating team members in the project SUNSHINE: Sustainable forest management as a Nature-based Solution for promoting Human well-being and biodiversity. Moreover, Elisabeth Gsottbauer collaborated with Prof. Matthias Fuchs, Prof. Federico Boffa, and Prof. Kris Krois on the submission of a joint proposal for a Mobility Lab South Tyrol, aiming to advance sustainable mobility solutions in the region. In addition, Prof. Aart van Bezooijen and Prof. Lukas Münzenrieder jointly submitted ProtoPaper: Nanotechnology meets design, a proposal exploring the intersection of materials innovation and sustainable design.

Also, in the latest round of funding applications by the Autonomous Province of Bolzano-Bozen, Centre members submitted a cross-disciplinary proposals involving main members of the Centre – Prof. Massimiliano Bonacchi, Prof. Camilla Wellstein, Prof. Aart van Bezooijen, Prof. Elisabeth Gsottbauer, Prof. Paolo Perego, Ass. Prof Luca Menicacci: the South Tyrol Sustainable Business Observatory (SUSBO), a project designed to systematically monitor ESG performance among regional businesses. Additionally, Prof. Massimiliano Renzi submitted the Lab-GPT

project under the EFRE/FESR capacity-building call, focusing on hydrogen value chain research infrastructure, and contributed as a partner in a Horizon 2020 proposal on sustainable ammonia use in hard-to-abate sectors.

#### **Events**

The Center is committed to advancing sustainability dialogue through a rich portfolio of events, including academic conferences, workshops, seminars, exhibitions, and public engagement activities. Between October 2024 and July 2025, the Center organized or co-organized:

- Large scale multi format events include *UpCon 2024 and Fashion for Future 2025* combining workshops, talks and a festival character over several days with wide participation across sectors;
- Field trips and community engagement include activities connected directly to the landscape and society, such as the Action for Climate excursion in Val d'Ultimo (Oct 2024) and local collaborations like the CO<sub>2</sub> Footprint Awareness Week (Oct 2024) and participation in the student-led Sustainability Festival at unibz;
- Various academic and policy conferences and workshops with 50–100 participants, including on Innovations for Transport and Sustainable Mobility Workshop (Apr 2025), climate litigation and climate justice (Feb 2025), and financial literacy (Dec 2024);
- Various thematic research seminars focused on key topics including sessions on E&S disclosure regulation and political ideology (Nov 2024), climate stress tests for banks (Apr 2025), and pension education and social sustainability (Dec 2024);
- 2 curated public exhibitions including the German Ecodesign Award Exhibition 2025 and Visualizing Climate Change 24/25, both hosted in Bolzano over one month, featuring various public talks and guided tours.

These activities reflect the Centre's interdisciplinary approach and its goal to connect academia, policy, business, and civil society in addressing sustainability issues.

01 Oct - 03 Oct 2024 <u>UpCon 2024 - Workshop</u>

### 04 Oct 2024 18:00-22:00 UpCon 2024 - Conference

#### 05 Oct 2024 11:00-22:00 UpCon 2024 - Festival

This year's UpCon with a Conference, Festival and Workshop

#### 12 Oct 2024 09:00-18:30 Escursione "Action For Climate" 2024

Una giornata in Val d'Ultimo sul tema "Cambiamento climatico e Acqua" tra relazioni di esperti in materia e visite a laghi e biotopi

### 15 Oct 2024 18:00-19:00 Public Talk N55 - Tangible Utopias

Walking houses, rolling gardens and the blueprint for a better world.

# 17 Oct 2024 14:30-18:30 Public Seminar <u>I decreti in materia di fiscalità,</u> governance e sostenibilità

L'evento darà una chiave di lettura agli interventi normativi in un'ottica aziendale, sottolineando che la buona governance è un elemento essenziale per affrontare tutte le sfide future.

## 24 Oct 2024 09:00-12:00 Public Seminar <u>Seminar: CO2 Footprint Awareness</u> <u>Week</u>

The CO2 Footprint Awareness Week aims to raise awareness about individual carbon footprints and how certain behaviors impact climate change.

# 12 Nov 2024 12:00-13:00 Research Seminar <u>E&S Disclosure Regulation and Political Ideology</u>

Political ideology shapes Environmental and Social disclosure rules: politicians' views predict support in voting, co-sponsorship, feedback to the SEC—more than campaign funds or protests

# 04 Dec 2024 14:00-16:30 Workshop <u>Educazione Previdenziale e Sostenibilità</u> <u>Sociale in Trentino-Alto Adige</u>

Il ruolo dell'educazione previdenziale per affrontare le sfide demografiche e promuovere una crescita economica equa e sostenibile

# 16 Dec - 17 Dec 2024 Conference <u>Extreme weather events and adaptation in the South-Eastern Alps</u>

What do we know about future extreme weather (rain, drought, storms)? What were their environmental impacts? How can forecasting improve mountain management and disaster prevention?

## 15 Jan 2025 17:30-18:30 Public Talk & Exhibition: <u>Visual Communication for Mobility Transition</u>

Join us at "Visual Communication for Mobility Transition" to explore how design and communication can shape the future of sustainable transport.

## 22 Jan 2025 17:30-18:30 Public Talk & Exhibition: <u>Visual Journalism with</u> <u>Matteo Moretti</u>

Matteo Moretti (Sheldon Studio) creates data design for social issues, exploring glocal climate change. Join him for a discussion on visual journalism.

## 28 Jan 2025 17:30-18:30 Public Talk & Exhibition: <u>Climate Activism and Neuroscience</u>

Climate activism and neuroscience intersect by exploring how brain processes influence environmental behavior, helping improve sustainability awareness strategies.

## 14 Feb 2025 09:00-13:00 Workshop <u>Klimaklagen und Klimagerechtigkeit in</u> Zeiten des Klimawandels

Die Veranstaltung beleuchtet die rechtlichen, politischen und ökologischen Aspekte von Klimaklagen auf internationaler und nationaler Ebene, mit Fokus auf Italien und Südtirol.

# 03 Apr - 04 Apr 2025 Workshop <u>Innovations for Transport and Sustainable</u> <u>Mobility Workshop</u>

From autonomous driving to behavioral science in sustainable mobility – discover innovations in transport at our workshop this April.

### 07 Apr 2025 16:15-18:00 Public Talk <u>Europäische Klima- und</u> <u>Innovationspolitik im Angesicht eines globalen Dilemmas"</u>

Trotz weniger Armut weltweit steigen Umweltbelastungen. Um Klimaneutralität zu erreichen und den Wirtschaftsstandort zu sichern, braucht es marktwirtschaftliche Lösungen

## 10 Apr 2025 12:00-13:00 Research Seminar <u>Transparency and Real Effects of</u> Banks' Climate Stress Tests

The seminar, led by Gerrit von Zedlitz-Neukirch, will explore how climate stress tests impact banks' disclosure and lending policies, especially under ESG pressure.

# 21 May 2025 16:00-17:00 Public Talk <u>"Is plastic truly that bad as a material?"</u> by Efrat Friedland

Join Efrat Friedland, founder of Positive Plastics, for a talk on sustainable materials and the future of plastics at BITZ fablab!

### 19 Jun - 19 Jul 2025 Exhibition German Ecodesign Award Exhibition 2025

Explore innovative, sustainable designs at the German Ecodesign Award exhibition at NOI Techpark Bolzano. Discover visionary concepts and market-ready solutions for a sustainable future.

## 01 Jul 2025 10:00-11:00 Exhibition <u>German Ecodesign Award Exhibition 2025 –</u> Free Guided Tour

Explore innovative, sustainable designs at the German Ecodesign Award exhibition in Bolzano! Join a free guided tour with experts & learn how to participate. Don't miss it!

# 10 Jul 2025 18:00-20:00 Exhibition <u>German Ecodesign Award Exhibition 2025</u> – Open Talk: ito ito

What if textile design meets digital manufacturing? Join us for an open talk by Florian Pfeffer from ito ito, a shared factory for on-demand knitwear production.

# 14 Jul 2025 18:00-20:00 Exhibition German Ecodesign Award Exhibition 2025 - Open Talk: Trash Galore

How to keep reusable materials in the loop and out of landfills? Join us for an open talk and discussion with Lukas Binner from Trash Galore, a sustainability service provider from Leipzig.

## 18 Jul 2025 18:00-20:00 Exhibition German Ecodesign Award Exhibition 2025 x Bolzano Critical Mass

Bolzano Critical Mass! Reclaim the streets together and celebrate cycling, community, and more sustainable mobility. All bikes welcome - bring your lights, friends & good vibes!

### 19 Jul 2025 10:00-11:00 Exhibition German Ecodesign Award Exhibition 2025 - Final Coffee Hour

Explore innovative, sustainable designs at the German Ecodesign Award exhibition in Bolzano! Join our free (final) coffee hour with Aart van Bezooijen (Professor of Material Driven Design)

Events 24/25:



### Europäische Klimaund Innovationspolitik im Angesicht eines globalen Dilemmas



Prof. Dr. Christoph M. Schmidt RWI Essen: RWI - Leibniz-Institut für Wirtschaftsforschung

7. April 2025 | 16:15 – 18:00 Freie Universität Bozen Campus Bozen Zentrum Raum F6

### Seminar CO2 Footprint Awareness Week

24th October 2024 - room **E3.22** 



April 03-04 Free University of Bozen-Bolzano Campus NOI Techpark Bruneck-Brunico Room -1.05

Lecture:

6-7 pm

Bolzano

Surpersonation to Contract Land April Contract

15 October 2024

BITZ unibz fablab **TANGIBLE** 



supported by

#### 12 OKT 2024 09:00-18:30

#### Exkursion "Action For Climate" 2024

Ein Tag im Ultental zum Thema "Klimawandel und Wasser" mit Expertenberichten zum Thema und Besuchen von Seen und Biotopen







#### Conference

Meteorological Extreme Events - Forecasting, Impact, Case studies

16-17 December 2024
unibz, Aula Magna (room D0.01)
Universitätsplatz 1 – Piazza Università 1, 39100 Bozen-Bolzano
Conference in presence

### Media and expert service

Talks / TV / Interviews / Keynotes

### Prof. Elisabeth Gsottbauer

- Interview swz "Das Klima Paradoxon" (August 2025)
- **Interview** unibz insight "Wer soll unsere Welt retten?" (July 2025)
- Roundtable of the BNE Center (Bildung für nachhaltige Entwicklung) in Neustift (June 13, 2025).

- **TV interview** on biodiversity loss for RAI Südtirol (aired June 16, 2025).
- **Talk** at the Sustainability Festival on "Do carbon offsets really offset carbon", unibz (May 16, 2025).
- **Talk** at Microgate GmbH on "Nachhaltigkeit sichtbar machen: Ökonomische Aspekte von Berichterstattung und Reputation" (Confindustria event, May 16, 2025).
- **Talk** at IIT Genova on "What motivates us to protect the climate? Insights for effective climate policy" (May 22, 2025).
- **TV roundtable** on inflation & cost of living for RAI Südtirol's *Nachgeschaut* (May 2025).
- **Student mentor** at IN MOTION Idea Lab and Tech Festival at NOI Techpark Bruneck (May 8–10, 2025).
- **Workshop co-organization**: Innovations for Transport and Sustainable Mobility (Bruneck, April 3–4, 2025).
- **Roundtable**, "Careers in Sustainability", unibz Alumni homecoming (April 2025)
- **Keynote** at Tagung der Bäuerinnen on *Landwirtschaft im Wandel: Politische Maßnahmen und technologische Innovationen* (April 2025, Bozen)
- **Jury member** at competition "Gemeinsam für unsere Zukunft", Raiffeisen Südtirol (Dec-Feb 2025)
- **Talk** at Kulturrunde Bruneck on *Was motiviert uns zu nachhaltigen Verhalten?* (March 2025, Bruneck).
- **Keynote** on *Wirtschaftliche Aspekte von Klimaklagen*, conference on climate litigation organized with Heimatpflegeverband, Dachverband für Natur- und Umweltschutz, and Klimaclub Südtirol (Feb 2025, Bozen).
- **Talk** *Behavioral Insights for Sustainable Behavior* at SME 5.0 Doctoral Winter School, Bruneck (Dec 2024).
- **Lecture** *Making a career in science. Stories from professors!* schools event (3 Dec 2024)
- **TV Interview**, Campus Magazin für Forschung und Entwicklung, featured in RAI Südtirol (TV) (aired February 202)
- **Keynote** on *What is the economic and social impact of the creative industry?,* Creative Industry Roundtable, IDM Bozen (November 2024)
- **Keynote** on *How to promote more sustainable transport*, 20th STA Mobility Network Meeting, NOI Techpark, Bozen (November 2024)
- **Lecture** on *What motivates us to protect the climate?* at University of Innsbruck Aurora Ringvorlesung (Nov 2024).
- **Lecture on** *Do carbon offsets really offset carbon?* at CO2 Footpring Awareness Week (Oct 2024, Bozen)

#### Prof. Massimiliano Bonacchi

- **Talk** at Confindustria event on sustainability reporting (May 2025)
- Roundtable on sustainability & innovation at Alto Adige Forum (March 2025).
- Talk on sustainability reporting **Sostenibilità: il report come strumento di crescita dell'impresa** at Markas headquarters (Nov 2024).
- **Decarbonizzazione, governance e sostenibilità: Top 100 altoatesine** media participation (2024) (*Bonacchi + Menicacci*)

#### Dr. Luca Menicacci, Assoc Prof Nicola Dalla Via

- **Talk** on Sostenibilità d'impresa: vantaggi competitivi e finanziari unibz Industry Day presentation (26 Sep 2024) (*Dalla Via Nicola*)
- **Editorial** Alto Adige Fisco, nuove sfide per le PMI (15 Oct 2024) (Menicacci)
- **Interview** Alto Adige *Le sfide per le PMI tra fisco, governance e sostenibilità* Alto Adige Innovazione, 18 Oct 2024) (*Menicacci*)
- **Editorial** and talk on tax reform and sustainability (Nov 2024) (Menicacci)
- **Press Article** *Si fa presto a dire "global minimum tax* article (lavoce.info, 2024) (*Menicacci*).

#### Prof. Camilla Wellstein

- **Co-organization** of Climate Action Day hike in Ultental (Oct 2024).
- Radio interview Climate change and water Ultental (Oct 2024)
- Organization CO2 Footprint Week, coordination of unibz contributions
- **Talk** at Euregio Biodiversity Research Conference (Nov 2024).
- **Roundtable** book discussion "*Migrazioni Verticali: La montagna ci salverà?*" at Bozen library (Dec 2024).
- **Organization** of Extreme Weather Events in the South-Eastern Alps Conference (Dec 16–17, 2024).
- **Interview** Salto Media Extreme weather & adaptation (Dec 2024)
- Interview RAI Umwelt Extreme weather conference (Dec 2024)
- **Organization** and coordination of annual Alliance meeting (May 2025)

#### Prof. Aart van Bezooijen and Dr. Jacopo Ammendola

- **Curator** of the German Ecodesign Award Exhibition (June–July 2025) *(van Bezooijen)*
- **Co-organizer** Fashion for Future exhibition (April 2025) (van Bezooijen)
- **Co-organization** of Upcycling Convention (Oct 2024) (van Bezooijen)
- Participant GRASSI Museum exhibition, Leipzig (Nov 2024) (van Bezooijen)
- **Curator** Visualizing Climate Change exhibition & talks (Dec 2024-Jan 2025) (*Ammendola*)
- Talk & Panel Change Agents: Inter-institutional collaborations in social design (2024) (Ammendola)
- **Talk** CONNECTION advanced training dotdotdot/OpenDotLab, Milano (2024) (van Bezooijen).
- **Guided tour**, contribution to a guided tour for citizen engagement (BAW 2024) (van Bezooijen).

### Prof. Massimiliano Renzi

 Radio interviews and press coverage of his Alperia-endowed professorship on hydrogen (Dec 2024–March 2025).

### **Teaching in the academic year 2024/25**

The Centre is committed to addressing contemporary sustainability challenges through innovative approaches in the classroom. In the 2023/24 academic year, this included, among others, the following tailored offers:

Professor Elisabeth Gsottbauer's Economics of Climate Change course equips students with a deep understanding of the economic principles underlying climate change and policy, enabling them to critically evaluate strategies for mitigation and adaptation. In her Sustainable Mobility course, students examine barriers to sustainable transport and explore policy instruments such as taxation, zoning, and behavioral nudges to promote sustainable choices.

Professor Aart van Bezooijen's Design & Production provides hands-on experience in production processes, ranging from self-built tools to industrial systems. It fosters a critical perspective on traditional and innovative sustainable techniques within circular and bio-based sectors. Together with Design & Materials, these courses form the backbone of eco-social design education, linking creativity with sustainability.

Professor Camilla Wellstein's courses, including Applied Botany, Principles of Botany, and Structure and Function of Mountain Ecosystems, focus on both foundational and practical aspects of nature conservation, biodiversity, and mountain ecosystem management. They prepare students to address sustainability challenges in agriculture and forestry in mountain regions.

Professor Paolo Perego's Sustainability Accounting and Integrated Reporting develops student knowledge of contemporary sustainability reporting practices, exploring how accounting can serve as a tool for corporate transparency, responsibility, and the integration of sustainability into business strategy.

Dr. Jacopo Ammendola's project-based courses in Eco-Social Design engage students directly with external partners such as municipalities, associations, and cultural institutions. Through collaborative projects, students tackle real-world sustainability issues including land conservation, circular economy, waste reduction, cultural accessibility, social cohesion, gender equality, and climate change mitigation.

Professor Massimiliano Renzi's *Thermal Engines* course introduces students to energy conversion and storage technologies, with particular emphasis on green fuels, hybrid/electric systems, and efficient energy solutions for sustainable industrial and mobility applications.

Professor Federica Viganò's Social Sustainability through Innovation course explores how social innovation can address sustainability challenges, bridging communication, culture, and social service perspectives to foster more inclusive and resilient societies.

Professor Massimiliano Bonacchi integrates sustainability into his accounting and finance teaching by linking *Advanced Financial Statement Analysis* with corporate social responsibility and disclosure practices. His courses emphasize how financial reporting can account for environmental and social dimensions of business performance. In addition, Dr. Luca Menicacci teaches courses in accounting, including *Advanced Accounting, Italian Accounting Principles*, and the *Chartered Accountant State Exam Laboratory*. Also Associate Professor Nicola Dalla Via teaches *Accounting for Decision Making, Business Analytics*, and *Performance Analytics for Business*.

Dr. Nicola Campigotto's Innovation Economics and Regional Economics and Development courses address sustainability indirectly by focusing on innovation ecosystems and regional development strategies, which are essential to fostering sustainable tourism and entrepreneurship.

- Prof. Aart van Bezooijen: Design & Materials; Design & Production
- Prof. Camilla Wellstein: Applied Botany; Principles of Botany; Structure and Function of Mountain Ecosystems
- Prof. Elisabeth Gsottbauer: Economics of Climate Change; Sustainable Mobility
- Ass. Prof. Jacopo Ammendola: Project 1 & 2 in Eco-Social Design
- Prof. Paolo Perego: Sustainability Accounting and Integrated Reporting
- Prof. Massimiliano Renzi: Thermal Engines
- Prof. Federica Viganò: Social Sustainability through Innovation
- Prof. Massimiliano Bonacchi: *Advanced Financial Statement Analysis* (CSR and sustainability reporting dimensions)

- Dr. Nicola Campigotto: Innovation Economics; Regional Economics and Development
- Luca Menicacci: *Advanced Accounting*; *Italian Accounting Principles* (links to sustainability through research in sustainability accounting)
- Prof. Nicola Dalla Via: *Accounting for Decision Making* (with links to sustainability in executive teaching)

### **Student involvement**

In addition to teaching, we aim to actively involve students in our work and events by offering positions as student assistants. Last academic year, we welcomed three student assistants: Wallis Simon, Matteo Antonazzo, Jonas Vogt.

#### Homepage Design: Top 100

Our student assistant Jonas Vogt used his web design skills to assist our member Ass Prof Luca Menicacci in representing his work on the ESG analysis of the Top 100 companies in South Tyrol in a visual manner. See below a screenshot from the <a href="https://doi.org/10.2016/jona.2016/j

Start Rankings Methodology Contact **(#)** EN

## THE TOP 100 SOUTH TYROL FIRMS UNDER THE ESG LENS

Our research is based on public data, offering a first overview of the ESG metrics of the main local firms

Using advanced AI (ChatGPT, model GPT-4o), we simulate comprehensive ESG ratings from AAA (leader) to CCC (laggard), with sector-specific weightings based on Standard & Poor's methodology

The rating does not represent in any way an assessment of corporate merit in terms of sustainability for credit access and/or other purposes, but a purely methodological exercise aimed at transparency and accessibility based on publicly available data

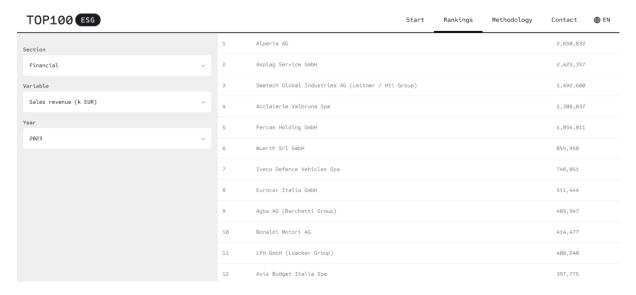


Figure: Screenshots Top 100 Homepage



We are also engaged in student mentoring and field activities, including the NOI Student Sprint (24–29 February 2025), where Aart van Bezooijen served as mentor, as well as the In MOTION Tech Festival and the IN MOTION Idea Contest at NOI Bruneck (8–10 May 2025), where Elisabeth Gsottbauer took on a mentoring role.

Besides, all members are actively involved in supervising bachelor's and master's theses at their respective faculties. For example, Prof. Max Bonacchi is currently supervising work on the topic "ROSI Analysis for the Porsche Center Dresden."

### **Executive education**

The Competence Center provides essential lifelong learning through short courses and tailored executive teaching programs.

Executive Training: ESG skills (in execution)

Prof. Massimiliano and his team continues to execute a tailored executive degree program for Sparkasse on ESG skills for the financial sector. They also provided a customized short course specifically for Sparkasse's leadership team.

Lecturers: Prof. Massimiliano Bonacchi, Prof. Paolo Perego, Ass. Prof. Nicola Dalla Via, Ulrich Atz

Partner: Sparkasse (Cassa die Risparmio die Bolzano)

Executive Training: Policy and Program Evaluation for Mobility (in planning)

Prof. Gsottbauer is planning a tailored training for STA employees (senior managers, program managers) to equip them with the tools and frameworks needed to systematically evaluate mobilities policies and programs.

Lecturers: Prof. Elisabeth Gsottbauer, Prof. Carlo Gallier

### **Alliance**

The Competence Centre co-manages the Alliance in Research and Teaching for Sustainability, which brings together nine institutions to consolidate expertise and foster dialogue on SDG-related topics in South Tyrol. The seven core partners are the Free University of Bozen-Bolzano, Eurac, Philosophical-Theological College of Brixen/Bressanone, Fraunhofer Italia Research, Eco Research, Laimburg Research Centre, and the Natural Science Museum of South Tyrol, joined by two associate partners: IDM South Tyrol and the Ökoinstitut. Prof. Camilla Wellstein represents us on the Alliance board, while Lisa della Rosa supports its management and outreach. Our member Prof. Camilla Wellstein is

serving on the board of the Alliance and Lisa della Rosa supports the management of the Alliance and its outreach activities.

On May 20, 2025, the Competence Centre organized the annual meeting of the South Tyrol Alliance for Research in Sustainability (STARS) at the Free University of Bozen-Bolzano (unibz). Alliance members, together with a provincial representative, gathered to review progress, coordinate ongoing initiatives, and plan future activities.

Key milestones and ongoing efforts managed by the Center include:

- Integration into the UN Sustainable Development Solutions Network (SDSN): strengthening the Alliance's international visibility.
- Planning of a Studium Generale module "Sustainability: Challenges" for the winter term 2025.
- Joint participation in regional initiatives, such as the *Week of the CO<sub>2</sub> Footprint* in October 2025.
- Development of a public expert directory to map sustainability expertise across Alliance members, designed to support collaborations, inform policymakers, and make it easier for journalists and the public to identify relevant experts.

Currently, discussions are also hold on the Alliance's role in evaluating the Climate Plan 2040 and further supporting the participatory climate process.

### List of peer-reviewed publications 2024/2025

Minikaev, D., Tonon, G., Ventura, M., Fornasier, F., Da Ros, L., Du Toit, B., & Wellstein, C. (2025). Carbon dynamics and potential nutrient limitations in an oak forest under experimental canopy nitrogen deposition. *Science of the Total Environment*, *994*(), 1–18. https://doi.org/10.1016/j.scitotenv.2025.180027

Pandey, K., Wellstein, C., Bräuning, A., & Bhuju, D. (2025). Climatic Influence on Growth Performance of Abies spectabilis in the Himalayas. *Forests*, *16*(3), 1–20. https://doi.org/10.3390/f16030473

Marzini, S., Tasser, E., Wellstein, C., Albrich, K., Rammer, W., & Mina, M. (2025). Future expansion of upper forest-grassland ecotone under land-use and climate change in the Eastern Alps. *Landscape Ecology*, *40*(3), 1–21. https://doi.org/10.1007/s10980-025-02070-8

Pienaar, L., Calama, R., Olivar, J., Wellstein, C., Pretzsch, H., & du Toit, B. (2024). Allometric equations for biomass and carbon pool estimation in short rotation Pinus radiata stands of the Western Cape, South Africa. *European Journal of Forest Research*, 1–19. https://doi.org/10.1007/s10342-024-01730-9

Torresani, M., Montagnani, L., Rocchini, D., Moudrý, V., Andreoli, A., Wellstein, C., Koyanagi, K., Da Ros, L., Bacaro, G., Perrone, M., Salvatori, C., Menegaldo, I., Guatelli, E., & Tognetti, R. (2024). LiDAR insights on stand structure and topography in mountain forest wind extreme events: The Vaia case study. *Agricultural and Forest Meteorology*, *359*, 1–14. https://doi.org/10.1016/j.agrformet.2024.110267

Puglielli, G., Bricca, A., Chelli, S., Petruzzellis, F., Acosta, A., Bacaro, G., Beccari, E., Bernardo, L., Bonari, G., Bolpagni, R., Boscutti, F., Calvia, G., Campetella, G., Cancellieri, L., Canullo, R., Carbognani, M., Carboni, M., Carranza, M., Castellani, M., et al. (2024). Intraspecific variability of leaf form and function across habitat types. *Ecology Letters*, *27*(3), 1–15. https://doi.org/https://doi.org/10.1111/ele.14396

Haile, S. A., Ventura, M., Bravo, F., Giberti, G. S., Olivar, J., Bielak, K., Tonon, G., & Wellstein, C. (2024). Pure and mixed Scots pine forests showed divergent responses to climate variation and increased intrinsic water efficiency across a European-wide climate gradient. *European Journal of Forest Research*, 18. https://doi.org/10.1007/s10342-024-01731-8

Kolisnyk, B., Wellstein, C., Czacharowski, M., Drozdowski, S., & Bielak, K. (2024). Contrasting Regeneration Patterns in Abies alba-Dominated Stands: Insights from Structurally Diverse Mountain Forests across Europe. *Forests*, *15*(7), 1–20. https://doi.org/10.3390/f15071182

Minikaev, D., Tonon, G., Ventura, M., Fornasier, F., Da Ros, L., Du Toit, B., & Wellstein, C. (2025). Carbon dynamics and potential nutrient limitations in an oak forest under experimental canopy nitrogen deposition. *Science of the Total Environment*, *994*(), 1–18. https://doi.org/10.1016/j.scitotenv.2025.180027

Pandey, K., Wellstein, C., Bräuning, A., & Bhuju, D. (2025). Climatic Influence on Growth Performance of Abies spectabilis in the Himalayas. *Forests*, *16*(3), 1–20. https://doi.org/10.3390/f16030473

Marzini, S., Tasser, E., Wellstein, C., Albrich, K., Rammer, W., & Mina, M. (2025). Future expansion of upper forest-grassland ecotone under land-use and climate change in the Eastern Alps. *Landscape Ecology*, *40*(3), 1–21. https://doi.org/10.1007/s10980-025-02070-8

Pienaar, L., Calama, R., Olivar, J., Wellstein, C., Pretzsch, H., & du Toit, B. (2024). Allometric equations for biomass and carbon pool estimation in short rotation Pinus radiata stands of the Western Cape, South Africa. *European Journal of Forest Research*, 1–19. https://doi.org/10.1007/s10342-024-01730-9

Torresani, M., Montagnani, L., Rocchini, D., Moudrý, V., Andreoli, A., Wellstein, C., Koyanagi, K., Da Ros, L., Bacaro, G., Perrone, M., Salvatori, C., Menegaldo, I., Guatelli, E., & Tognetti, R. (2024). LiDAR insights on stand structure and topography in mountain forest wind extreme events: The Vaia case study. *Agricultural and Forest Meteorology*, *359*, 1–14. https://doi.org/10.1016/j.agrformet.2024.110267

Puglielli, G., Bricca, A., Chelli, S., Petruzzellis, F., Acosta, A., Bacaro, G., Beccari, E., Bernardo, L., Bonari, G., Bolpagni, R., Boscutti, F., Calvia, G., Campetella, G., Cancellieri, L., Canullo, R., Carbognani, M., Carboni, M., Carranza, M., Castellani, M., et al. (2024). Intraspecific variability of leaf form and function across habitat types. *Ecology Letters*, *27*(3), 1–15. https://doi.org/https://doi.org/10.1111/ele.14396

Haile, S. A., Ventura, M., Bravo, F., Giberti, G. S., Olivar, J., Bielak, K., Tonon, G., & Wellstein, C. (2024). Pure and mixed Scots pine forests showed divergent responses to climate variation and increased intrinsic water efficiency across a European-wide climate gradient. *European Journal of Forest Research*, 18. https://doi.org/10.1007/s10342-024-01731-8

Kolisnyk, B., Wellstein, C., Czacharowski, M., Drozdowski, S., & Bielak, K. (2024). Contrasting Regeneration Patterns in Abies alba-Dominated Stands: Insights from Structurally Diverse Mountain Forests across Europe. *Forests*, *15*(7), 1–20. https://doi.org/10.3390/f15071182

Bonacchi, M., & Perego, P. M. (2024). Customer Analytics in Performance Measurement and Reporting Systems. *Accounting Horizons*, *38*(4), 1–29. https://doi.org/10.2308/HORIZONS-2021-016

Bonacchi, M., & Mattei, M. M. (2024). Replication & re-examination of empirical research in corporate reporting and accounting [Editorial]. *Financial Reporting*, (2), 5–12. https://doi.org/10.3280/FR2024-002001

Bonacchi, M., Marra, A., & Shalev, R. (2024). The Effect of Fair Value Accounting on Firm Public Debt: Evidence from Business Combinations under Common Control. *European Accounting Review*, 1–29. <a href="https://doi.org/10.1080/09638180.2024.2315142">https://doi.org/10.1080/09638180.2024.2315142</a>

Schwarz, H., Menicacci, L., & Bonacchi, M. (2024). Die CO2-Bilanz der Großen. *Südtiroler Wirtschaftszeitung*, 3. https://swz.it/die-co2-bilanz-der-suedtiroler-top-unternehmen/

Menicacci, L., & Simoni, L. (2024). Negative media coverage of ESG issues and corporate tax avoidance. *Sustainability Accounting, Management and Policy Journal*, *15*(7), 1–33. https://doi.org/10.1108/SAMPJ-01-2023-0024

Menicacci, L., Moretti, G., & Terzani, S. (2025). Red, Blue and the Bottom Line: Political Ideologies in Financial Reporting. *Journal of Financial Reporting and Accounting*, 1–31. https://doi.org/10.1108/JFRA-12-2024-0929

Alexander, A., & Menicacci, L. (2025). Tax governance as a social responsibility of the firm: Evidence from the Italian Cooperative Compliance program. *Social Responsibility Journal*, 1–17. https://doi.org/10.1108/SRJ-01-2025-0094

Menicacci, L. (2025). Real effects of investment tax incentives: Evidence from Italian private firms. *Journal of Management and Governance*, *29*(2), 409–451. https://doi.org/10.1007/s10997-024-09733-9

Williams, A., Perego, P. M., & Whiteman, G. (2025). Boundary Conditions for Organizations in the Anthropocene: A Review of the Planetary Boundaries Framework 10 Years On. *Journal of Management Studies*, *62*(4), 1811–1846. https://doi.org/10.1111/joms.13150

Hussaini, M., Nguyen, V., Rigoni, U., & Perego, P. M. (2025). The value of information risk: Is there an acquisition discount for less readable financial disclosures? *Applied Economics*, *57*(31), 4596–4613. https://doi.org/10.1080/00036846.2024.2364082

Dalla Via, N. (2024). The dynamics of cost behavior: Unveiling sticky costs in private companies. *Financial Reporting*, 2024/2, 13–46. https://doi.org/10.3280/FR2024-002002

Dalla Via, N. (2024). Il reporting di sostenibilità: Gli indicatori per le PMI non quotate. *Controllo Di Gestione (Online)*, *21*(3), 5–18.

Nijkoops, A., Bhatt, D., Carrasco Pena, A., Husain, Q. Z., Rapagnani, N., van Bezooijen, A., Cohen, N., Cantarella, G., & Münzenrieder, N. S. (2024). Suitability of plant fiber residue-based paper as substrates for sustainable thin-film thermistors. *MRS Advances*, *9*(20), 1560–1567. https://doi.org/10.1557/s43580-024-00989-9

Rapagnani, N., van Bezooijen, A., Borruso, L. V., Mimmo, T., & Bouaicha, O. (2024). Bio Design for Footwear Innovation: Growing Sneaker Components with Composite Mycelium-based Materials. *Cambridge Open Engage*, 1–17. https://doi.org/10.33774/coe-2024-5cc7n

Saeedzadeh Khaanghah, N., De Souza Oliveira, H., Krik, S., Carrasco Pena, A., Cantarella, G., Haller, M., Rapagnani, N., van Bezooijen, A., Nippa, M. C. E., & Münzenrieder, N. S. (2024). Application of Stone-Derived Substrates in Thin-Film Temperature Sensing. *IEEE Sensors Journal*, (1), 1–8. <a href="https://doi.org/10.1109/JSEN.2024.3393113">https://doi.org/10.1109/JSEN.2024.3393113</a>

Ammendola, J., Masiani, B., & Saavedra, C. (2024). Experimental Co-Design with a Ludic Urban Community: The Safeguard of the Identity of Vale Do Anhangabaù as a Skateboarding Spot. *Resilient Planning and Design for Sustainable Cities*, 161–172. https://doi.org/10.1007/978-3-031-47794-2\_14

Dipasquale, L., Ammendola, J., Montoni, L., Ferrari, E. P., & Zambelli, M. (2024). Harnessing Vernacular Knowledge for Contemporary Sustainable Design through a Collaborative Digital Platform. *Heritage*, 7(9), 5251–5267. https://doi.org/10.3390/heritage7090247

Lohmann, P., Gsottbauer, E., Farrington, J., Human, S., & Reisch, L. (2024). Choice architecture promotes sustainable choices in online food-delivery apps. *PNAS Nexus*, *3*(10), 1–12. https://doi.org/10.1093/pnasnexus/pgae422

Gsottbauer, E., Kirchler, M., & König-Kersting, C. (2024). Financial professionals and climate experts have diverging perspectives on climate action. *Communications Earth and Environment*, *5*(1), . https://doi.org/10.1038/s43247-024-01331-9

Lohmann, P., Probst, B., Gsottbauer, E., & Kontoleon, A. (2024). High levels of air pollution reduce team performance. *Journal of Economic Psychology*, *101*, . https://doi.org/10.1016/j.joep.2024.102705

Malan, M., Carmenta, R., Gsottbauer, E., Hofman, P., Kontoleon, A., Swinfield, T., & Voors, M. (2024). Evaluating the impacts of a large-scale voluntary REDD+ project in Sierra Leone. *Nature Sustainability*, *7*(2), 120–129. https://doi.org/10.1038/s41893-023-01256-9

Lohmann, P., Gsottbauer, E., van der Linden, S., & Kontoleon, A. (2024). Chilling results: how explicit warm glow appeals fail to boost pro-environmental behaviour. *Behavioural Public Policy*, . https://doi.org/10.1017/bpp.2024.4

Fatehi, M., Campaldini, G., & Renzi, M. (2025). Micro gas turbine fed by ammonia with steam injection: Performance and combustion analysis. *Applied Thermal Engineering*, *264*(), 1–11. https://doi.org/10.1016/j.applthermaleng.2025.125428

Piri, H., Caligiuri, C., Brolpiasino, M., Renzi, M., & Bietresato, M. (2025). Biolubricant ageing analysis: Proposal for a real-engine test and chemical characterization. *Journal of the Energy Institute*, *121*(), 1–16. https://doi.org/10.1016/j.joei.2025.102121

Battini, F., Menapace, A., Stradiotti, G., Zanfei, A., Nicolosi, F. F., Dalla Torre, D., Renzi, M., Pernigotto, G., Ravazzolo, F., Righetti, M., Gasparella, A., Thellufsen, J., & Lund, H. (2025). Urban smart energy systems from a climate change perspective: Technical, Economic and Environmental optimization analysis. *Smart Energy*, *18*(), 1–12. https://doi.org/10.1016/j.segy.2025.100180

Fatehi, M., & Renzi, M. (2024). Modelling and development of ammonia-air non-premixed low NOX combustor in a micro gas turbine: A CFD analysis. *International Journal of Hydrogen Energy*, 88, 1–10. https://doi.org/10.1016/j.ijhydene.2024.09.071

Fatehi, M., Campaldini, G., & Renzi, M. (2024). Performance Analysis of a Micro Gas Turbine Fed by Ammonia as Fuel with Steam Injection. *Latest Advancements in Mechanical Engineering: ISIEA 2024, 1124*, 245–258. https://doi.org/10.1007/978-3-031-70462-8\_24

Di Tommaso, M., Rossi, M., Comodi, G., Renzi, M., Durin, B., Testarmata, F., & Margione, D. (2024). Water mills refurbishment for increasing the hydropower capacity: an italian case study. *Proceedings of the 37th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems [ECOS 2024]*, 3(), 2400–2410. https://doi.org/10.52202/077185-0207

Grotti, E., Monsorno, D., & Renzi, M. (2024). Thermal management improvement in electric vehicles through design optimization of coolant distributor valves. *Next Energy*, *3*(), 1–16. https://doi.org/10.1016/j.nxener.2024.100099

Renzi, M. (2024). Hydropower and pumped-hydro energy storage (PHES) (, Ill.). In *Small Scale Power Generation Handbook: Towards Distributed Energy Systems* (pp. 225–253). Elsevier. https://doi.org/10.1016/B978-0-12-821672-9.00010-1

Perez Estevez, M., Melendez Frigola, J., Armengol Llobet, J., Alberti, L., & Renzi, M. (2024). Optimal design of a series hybrid powertrain for an agricultural tractor. *Energy Conversion and Management: X, 24,* 1–16. https://doi.org/10.1016/j.ecmx.2024.100789

Akbari, M., Piri, H., Renzi, M., & Bietresato, M. (2024). The Effects of Biodiesel on the Performance and Gas Emissions of Farm Tractors' Engines: A Systematic Review, Meta-Analysis, and Meta-Regression. *Energies*, *17*(17), 1–31. <a href="https://doi.org/10.3390/en17174226">https://doi.org/10.3390/en17174226</a>

Ferrari, D., Paterlini, S., Rigamonti, A., & Weissensteiner, A. (2024). Smoothed semicovariance estimation for portfolio selection. *Annals of Operations Research*, 1–40. https://doi.org/10.1007/s10479-024-06043-z

Boselli, E., Viganò, F., Orzes, G., Cesco, S., Longo, E., Sacco, P. G., Duley, G. P., & Piccoli, A. (2025). *Enhancing Sustainability in Winemaking: The Role of PIWI in South Tyrol*. https://doi.org/

Longo, E., Viganò, F., Duley, G. P., Piccoli, A., Ceci, A. T., Sacco, P. G., Orzes, G., Cesco, S., & Boselli, E. (2025). *Chemical and sensory quality, environmental sustainability, and consumer acceptance of South Tyrolean wines produced from hybrid grape varieties*. https://doi.org/

Piccoli, A., & Viganò, F. (2025). Unveiling the Motivations Behind Cultivating Fungus-Resistant Wine Varieties: Insights from Wine Growers in South Tyrol, Italy. *Sustainability*, *17*(6), 1–20. https://doi.org/10.3390/su17062615

Forlenza, D., & Viganò, F. (2024). La povertà sociale oltre la deprivazione materiale: uno sguardo ai dati macroregionali. *Comunicazionepuntodoc*, *27*(), 85–99. https://doi.org/

Viganò, F. (2024). La riscoperta delle aree interne (, Ill.). In *Manuale di Scienze sociali per il Turismo* (pp. 218–220). Wolters Kluwer. https://doi.org/

Tanghetti, J., & Viganò, F. (2024). Creative work, precarity and Covid 19 (, Ill.). In *Creative work: Conditions, Contexts and Practices* (pp. 241–254). Routledge. https://doi.org/10.4324/9781003402688-19

### **Funding partners**

The Competence Center of Sustainability extends its gratitude to our core funders, who support full professorships and other major initiatives.

- Alperia
- Stiftung Sparkasse
- Sparkasse