CARBON IMPACT
REPORT 2023

Insta Innovation Center

Message from the CEO

As we unveil this year's Carbon Impact Report, our commitment to transparency and sustainability is clear. At InstaBuilt, we aim to reshape the construction industry with sustainable practices, anticipating future demands. This report highlights our efforts to reduce our environmental impact while delivering top-quality, sustainable modular homes.

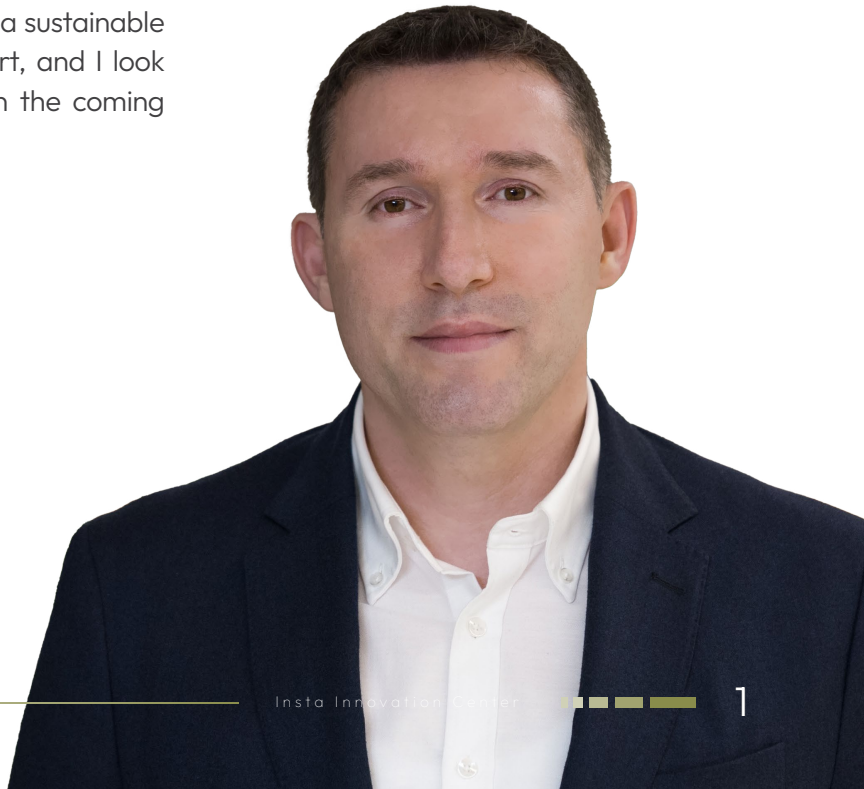
Over the past year, we've expanded operations while integrating green technology and minimizing our carbon footprint. Key to our strategy has been enhancing energy efficiency, reducing waste, and increasing renewable resource use. Our commitment extends beyond operations, engaging local communities and global partners in sustainability initiatives.

Our progress reflects significant achievements and upcoming challenges. We are confident in meeting these head-on. We're not just building homes; we're building a legacy of sustainability. Our ambitious plans include new projects with high environmental standards, pushing the boundaries of eco-friendly construction.

Looking ahead, we are excited about new technologies and methodologies to further our sustainability goals. Our research and development team leads these efforts, and we are strengthening partnerships with environmental experts to stay at the forefront of sustainable practices.

I want to extend my heartfelt thanks to every member of the InstaBuilt team, whose dedication and hard work make our achievements possible. I am also grateful to our clients and partners for their trust and commitment to joining us. Together, we are making a significant impact.

As we move forward, let us continue to lead with integrity and innovation. Let us build not just for today but for a sustainable tomorrow. Thank you for your continued support, and I look forward to what we will accomplish together in the coming years.



Mentor Pllana
CEO, InstaBuilt
Architect of 5P Business Strategy

Introduction

The 2023 Carbon Impact Report by the Insta Innovation Center highlights the organization's efforts to assess and reduce its carbon footprint. It covers energy consumption, CO2 emissions, water usage, waste management, and initiatives like sustainable lending and green finance.

The report details total energy consumption, showing a shift towards sustainable practices, and highlights the adoption of photovoltaic (PV) energy for efficiency. It also addresses vehicle energy management and fuel efficiency, reflecting a commitment to broader sustainability.

CO2 emissions data emphasize the need for ongoing efforts to combat climate change. Water usage and waste management sections showcase conservation and minimization strategies. The sustainable lending section underscores the organization's alignment with environmental sustainability goals.

Overall, the report narrates the organization's sustainability journey, reflecting achievements and challenges, and offers a comprehensive overview of its environmental impact and commitment to positive change.

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Our Impact on the Environment

InstaBuilt's unwavering commitment to sustainable construction is evident in the design and production of modular homes that adhere to high environmental standards. We meticulously evaluate the ecological effects of our operations based on materials and construction methods detailed in the provided reports, supplemented by general data on modular home production. This transparency is about building your confidence and inviting you to be part of our long-term vision for a sustainable future.
We categorized the environmental impacts into three scopes according to ISO 14064 (commonly referred to for greenhouse gas accounting). This categorization helps in systematically understanding the direct and indirect emission sources associated with the construction and operation of the homes.

Scope 1: **Direct Emissions**

Direct emissions come from sources that are owned or controlled by InstaBuilt. This could include:

- **Fuel Consumption:** Emissions from company-owned vehicles and machinery used in building materials' transportation and onsite assembly. This encompasses diesel generators, company trucks, and other heavy equipment directly used in production.

- **On-Site Processes:** Emissions from any chemical processes involved in material treatment or preservation that occur within InstaBuilt's operational boundaries, such as the onsite application of chemical sealants or treatments.

Scope 2: **Indirect Emissions from Purchased Electricity**

Scope 2 covers emissions from generating purchased electricity, heat, steam, and cooling that the company consumes as part of its operations. This includes:

- **Factory Operations:** The electricity used in the manufacturing facilities where modular components are assembled. This includes powering machinery, lighting, heating, and cooling systems within the factory settings.

- **Office Electricity Use:** Energy used in the offices for computer systems, lighting, and other electronic devices that support the design and administration of construction projects.

Scope 3: Other Indirect Emissions

Scope 3 includes all other indirect emissions in the company's value chain. For InstaBuilt, significant contributions might consist of:

- **Material Sourcing:** Emissions associated with producing materials used in the homes, such as the extraction, manufacturing, and transportation of ROCKWOOL Flexirock, and other construction materials.

- **End-of-Life Processing:** Emissions related to the disposal or recycling of construction materials once the homes are demolished or renovated.

- **Transportation of Modular Units:** Emissions from transporting the prefabricated units from the factory to building sites can include significant distances depending on the project location.

- **Operational Emissions from Built Homes:** Although not typically included directly under the company's scope 3, the energy used to heat, cool, and maintain the homes throughout their life contributes indirectly to the overall environmental footprint.

Breaking down the emissions into these scopes allows InstaBuilt to manage better and strategize its reduction efforts. It highlights the areas where sustainable practices can significantly impact the overall carbon footprint, such as optimizing material usage, enhancing energy efficiency in production, and choosing greener supply chain solutions. This structured approach aids in compliance with international standards and improves transparency in reporting environmental impacts.

1. Energy Efficiency and Thermal Performance

One key area of environmental impact assessment is the energy efficiency of the homes constructed. InstaBuilt uses materials that significantly improve thermal insulation, reducing the need for heating and cooling and thus lowering the homes' operational carbon footprint.

- **Basement Insulation (AD 1B CLT - Basamenti KfW 40):** The basement components, including extruded polystyrene and ROCKWOOL Flexirock, have a U-value of 0.18 W/(m²K), which is below the stringent requirements of the KfW 40 standard, ensuring minimal heat loss.

Interior Walls (Aster Domo): The interior walls' U-value of 0.34 W/(m²K), featuring a combination of Knauf Diamant and ROCKWOOL Flexirock 035, aids in maintaining consistent indoor temperatures with minimal energy loss.

These values indicate that InstaBuilt homes are built to retain heat during colder months and remain cool during warmer months, which is vital in reducing the energy required for climate control.

2. Material Use and Sustainability

The choice of materials significantly affects the sustainability of construction projects. At InstaBuilt, we are not just building homes, but we are innovating. We utilize various materials that provide excellent thermal insulation and have a reduced environmental impact, showcasing our forward-thinking approach to sustainable construction and inspiring others in the industry with our innovative material choices.

- Sustainable Material Sourcing:

InstaBuilt prioritizes materials that offer durability and moisture resistance, which are critical in preventing mold and structural degradation over time. The materials used are sourced with attention to reducing the environmental impact associated with their production and transportation.

- Greenhouse Gas Potential:

For instance, the construction materials used in the interior walls have a harmful greenhouse gas potential, indicating that their production pulls more carbon out of the atmosphere than it emits, a rare and significant achievement in modern building practices.

3. Construction Process and Its Environmental Impact

Modular construction itself presents several environmental benefits over traditional construction methods:

- **Reduced Waste:** InstaBuilt's factory-controlled environment allows for more precise building, significantly reducing the waste generated during construction compared to traditional site-built homes.

- **Efficiency in Construction:** The speed of modular construction means homes are completed faster, reducing the time spent on-site and the associated environmental impact from construction activities.

4. Long-Term Sustainability and Operational Impact

The long-term impact of InstaBuilt's homes is measured by their operational energy efficiency and the durability of the materials used. The excellent insulation properties of the materials help significantly reduce the homes' heating and cooling needs, thereby decreasing the long-term carbon footprint of these buildings.

- Lifecycle Analysis: Considering the entire lifecycle of the building materials, from production to disposal, InstaBuilt ensures that the materials chosen not only provide immediate benefits in terms of energy efficiency but also contribute to sustainability in the long run.

InstaBuilt's approach to modular construction significantly reduces the environmental impact typically associated with building homes. InstaBuilt addresses the immediate needs of housing and aligns with long-term environmental sustainability goals by focusing on energy efficiency, sustainable material use, and efficient construction processes. Therefore, building products and developing projects positively influence sustainability in the housing sector, setting a benchmark for the industry.

Internal Environmental Performance

Through an analytical lens, this section explores the intricate details of the organization's energy consumption, emission outputs, resource utilization, and waste management practices across its various operational regions, including Southeastern Europe, Eastern Europe, South America, and Germany. The insights drawn from a comprehensive evaluation of staff dynamics, energy efficiency initiatives, and sustainable operational practices underscore the organization's endeavors to not only minimize its ecological footprint but also set a benchmark for corporate environmental responsibility.

This section serves as a testament to the Insta Innovation Center's relentless pursuit of operational excellence that harmonizes with the principles of environmental sustainability, reflecting its proactive approach to addressing the global challenges of climate change and resource conservation.

Staff

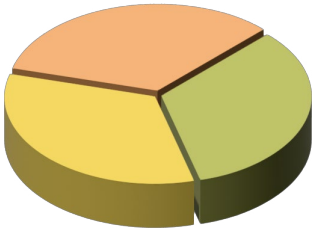
The average number of full-time employees (FTE) across Southeastern Europe, Eastern Europe, South America, and Germany over the years 2020, 2021, and 2022 reveals insightful trends in organizational dynamics and strategic decisions in these regions. In Southeastern Europe, we observe an initial growth in the workforce, followed by a sharp decrease, suggesting a reevaluation of operations or strategic downsizing.

Eastern Europe mirrors this pattern on a smaller scale, indicating possible regional challenges or strategic shifts away from these areas. In contrast, South America experienced consistent growth, highlighting an expanding operational focus or increased market engagement in this region, which points to a positive strategic investment and confidence in its market potential. Germany, however, stands out with a slight decrease in employee numbers followed by a dramatic increase, marking a significant strategic shift or expansion, possibly positioning it as a central hub or a key market for the organization. These changes reflect the organization's responsive adaptation to external and internal factors, showcasing a complex interplay between market conditions, strategic focus, and operational decisions across different geographical landscapes.

The average number of FTE has experienced a change of 6.9%, which is not a very significant change, and means there has been a slight increase in the number of staff of 6.9% over the 2020 to 2022 period.

Staff1 No.

Total 2020 Total 2021 Total 2022

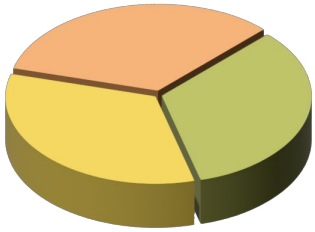


Total energy consumption

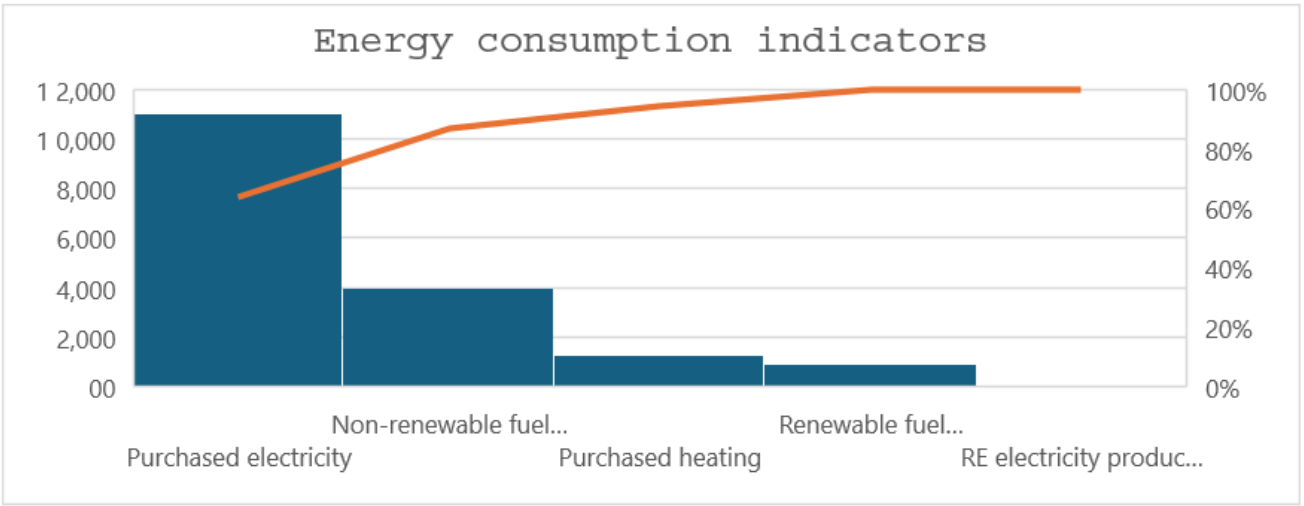
The following chart presents the total energy consumption within an organization across the four mentioned regions for the years 2020, 2021, and 2022. In Southeastern Europe, the energy consumption was 10,059.165 MWh in 2020, increased slightly to 10,408.4 MWh in 2021, and then decreased to 9,625.305 MWh in 2022. Eastern Europe saw a consumption of 4,684.765 MWh in 2020, rose to 4,992 MWh in 2021, and dropped to 4,506.631 MWh in 2022. In South America, the consumption decreased over the three years from 747.075 MWh in 2020 to 688.237 MWh in 2021, and further down to 551.985 MWh in 2022. Germany's consumption was 1,734.7 MWh in 2020, increased to 2,439.575 MWh in 2021, and then decreased to 1,773.704 MWh in 2022. Across all regions, the total energy consumption increased from 17,225.719 MWh in 2020 to 18,528.157 MWh in 2021, before decreasing to 16,457.625 MWh in 2022. **This indicates an overall rise in energy consumption from 2020 to 2021, followed by a decrease from 2021 to 2022, with a total change of approximately -11.18% from 2021 to 2022.**

Total energy consumption within organisation MWh

Total 2020 Total 2021 Total 2022



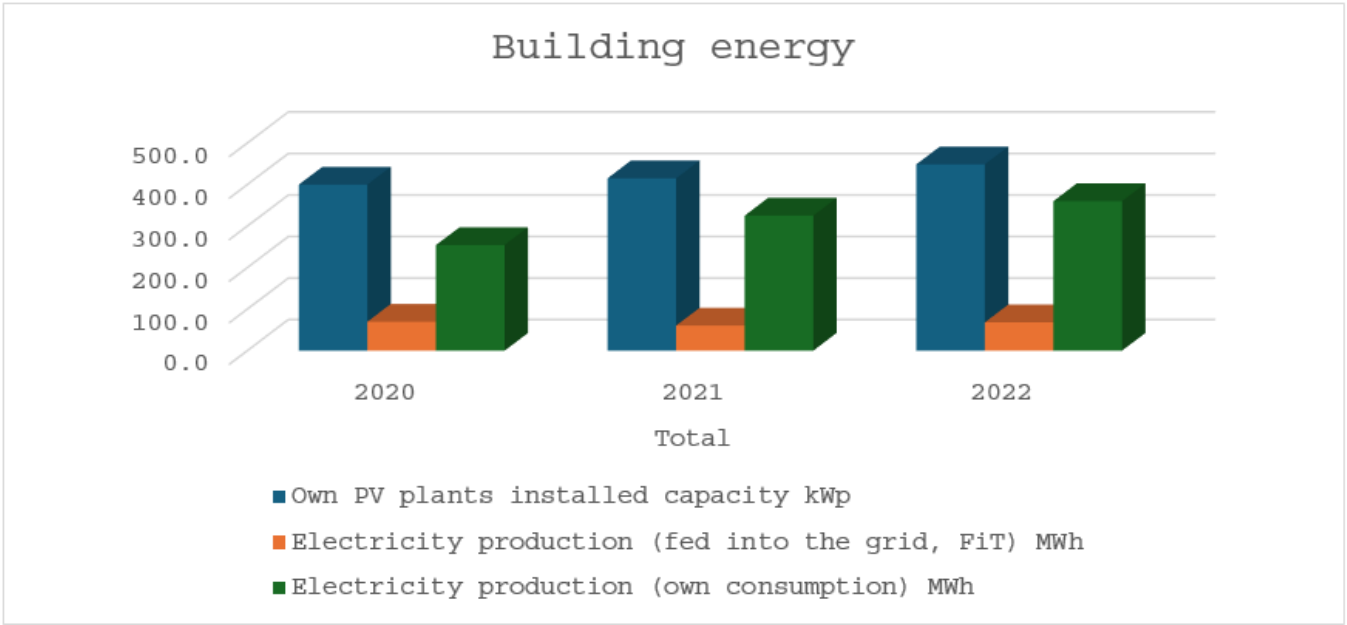
The following chart presents the energy consumption through non-renewable fuel, renewable fuel, purchased electricity, purchased heating, and RE electricity produced and sold across Southeastern Europe, Eastern Europe, South America, and Germany for the years 2020, 2021, and 2022.



Building energy

Key indicators tracked include the installed capacity of own photovoltaic (PV) plants, electricity production fed into the grid, and electricity produced for own consumption. A notable increase is observed in the installed PV capacity, growing from 399.78 kWp in 2020 to 448.58 kWp in 2022, reflecting an 8.12% increase in the final year. Electricity production for own consumption shows a significant rise, from 254.25 MWh in 2020 to 360.10 MWh in 2022, indicating a 10.74% jump from 2021 to 2022. Meanwhile, electricity production fed into the grid remains relatively stable, with a slight increase to 68.06 MWh in 2022, showcasing 12.59% growth compared to the previous year.

These figures underline the growing adoption and usage of photovoltaic energy in these regions, highlighting a trend towards more sustainable energy consumption practices in buildings. The increase in both the capacity for solar energy production and the actual production of electricity for use suggests a positive shift towards renewable energy sources.



Transport

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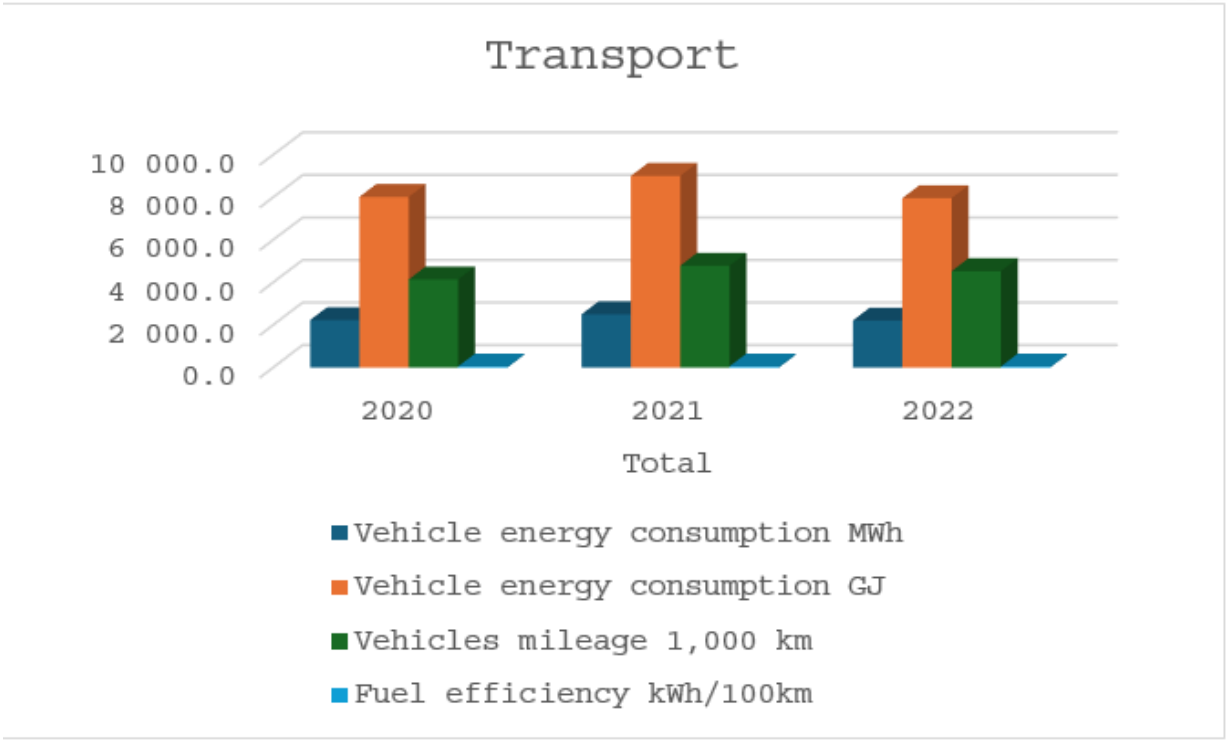
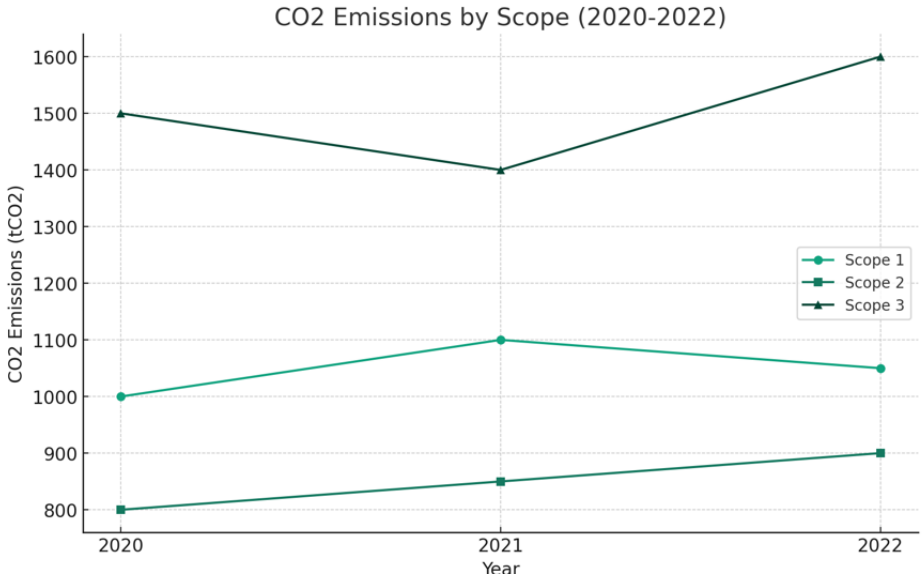
4. Long-Term Sustainability and Operational Impact



CO2 emissions

This part outlines the total CO2 equivalent emissions in tons (tCO2) for each region and year, alongside other metrics like emissions intensity. In 2020, the combined CO2 emissions from these regions totaled 5,470.72 tCO2, which slightly increased to 5,511.85 tCO2 in 2021. A significant jump was observed in 2022, with emissions soaring to 7,191.18 tCO2. The incremental change from 2020 to 2021 was minimal, at just 41.13 tCO2, representing a mere 0.75% increase. However, from 2021 to 2022, the emissions skyrocketed by 1,679.33 tCO2, marking a substantial 30.47% rise. This dramatic increase in emissions between 2021 and 2022 indicates a significant escalation in CO2-emitting activities or a reduction in carbon absorption capabilities across the mentioned regions, highlighting a critical environmental concern that warrants further investigation and action to mitigate CO2 emissions and combat climate change effectively.

The following graph illustrates hypothetical CO2 emissions for Scope 1, Scope 2, and Scope 3 over the years 2020, 2021, and 2022. In this scenario, Scope 1 emissions show a slight increase in emissions from boilers, furnaces, vehicles, and other equipment from 2020 to 2021, followed by a minor decrease in 2022. Scope 2 emissions progressively rise each year, indicating an upward trend in emissions from purchased electricity and heat. Scope 3 emissions, which include all other indirect emissions that occur in a company's value chain, demonstrate a decrease from 2020 to 2021 but then increase significantly in 2022, surpassing the previous years. This graph serves as a visualization for understanding the trends in different scopes of CO2 emissions over the given period.



Water

In this report, we categorize water usage into total water consumption, indoor water consumption, and outdoor water use (primarily for irrigation), across different geographical regions (Water Conservation Council, 2023) including South Eastern Europe, Eastern Europe, South America, and Germany.

The water consumption data across South Eastern Europe, Eastern Europe, South America, and Germany from 2020 to 2022 reveals distinct regional trends, with variations in total, indoor, and outdoor (irrigation) water use. South Eastern Europe experienced a continuous increase in water consumption over the three years, starting from 13,489.53 m^3 in 2020 and rising to 22,235 m^3 by 2022.

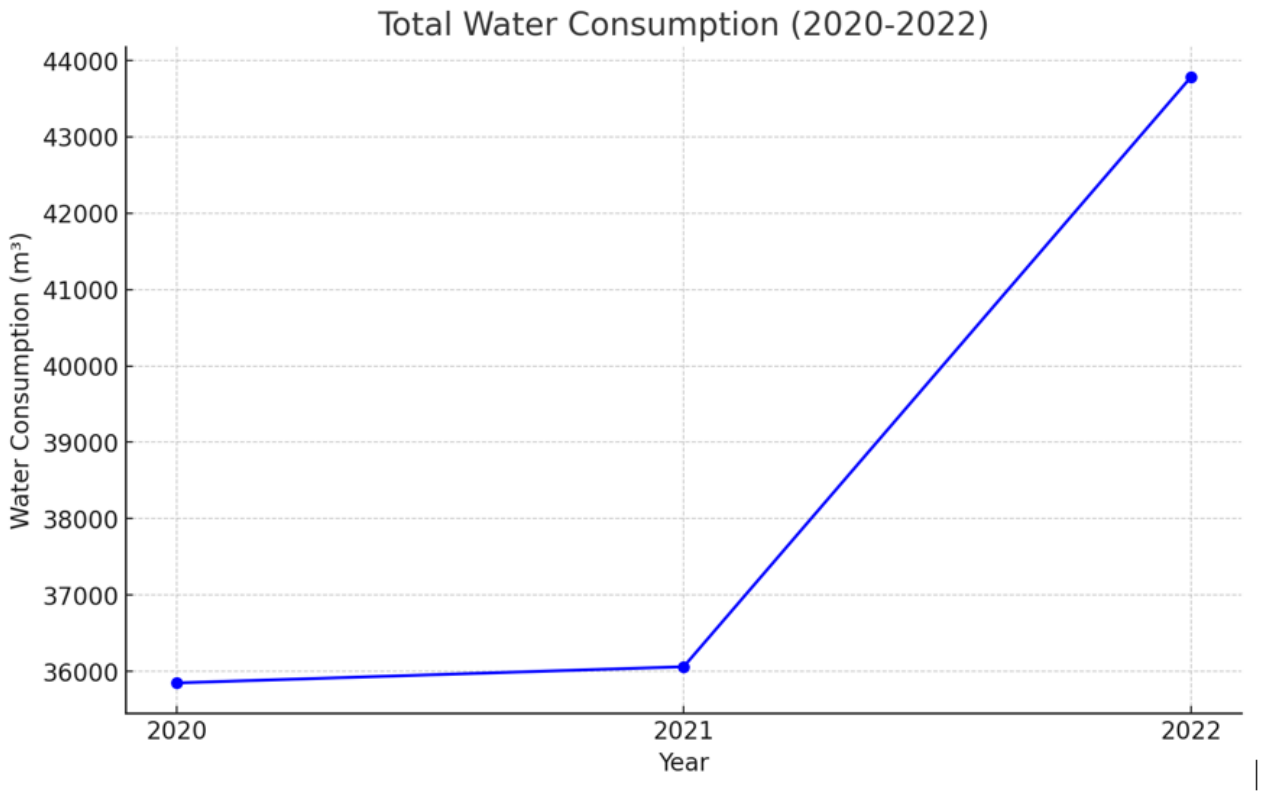
This increase was driven largely by indoor water use, which saw a significant jump, while outdoor use also increased, albeit to a lesser extent. Eastern Europe, on the other hand, saw a consistent decrease in its water consumption, moving from 11,267.14 m^3 in 2020 down to 6,612.74 m^3 in 2022.

Both indoor and outdoor water use contributed to this decline, with outdoor use seeing a dramatic drop, suggesting a notable reduction in irrigation or other outdoor activities requiring water. In contrast, South America showed a fluctuating pattern, with total water consumption slightly decreasing in 2021 before rising again in 2022. The region's outdoor water consumption remained unchanged across the years, indicating a stable demand for irrigation water, while variations were observed in indoor water use.

Germany's water consumption trended upwards throughout the period, growing from 7,913.29 m³ in 2020 to 11,368.17 m³ in 2022. The rise was predominantly attributed to an increase in indoor water use, with outdoor water consumption decreasing, possibly reflecting enhanced water efficiency or shifts in outdoor water usage practices.

The following chart illustrates the total water consumption across all analyzed regions from 2020 to 2022. It shows a relatively stable trend from 2020 to 2021, with water consumption figures hovering around 35,847.96 m³ and 36,060.04 m³, respectively. However, there is a notable increase in water consumption in 2022, where it jumps to 43,782.23 m³.

This significant rise highlights a growing water demand, underscoring the importance of sustainable water management practices to meet the needs of the future. This change signifies a substantial growth in water usage, approximately a 21.4% increase from 2021 to 2022, suggesting evolving water consumption patterns.



Printing paper

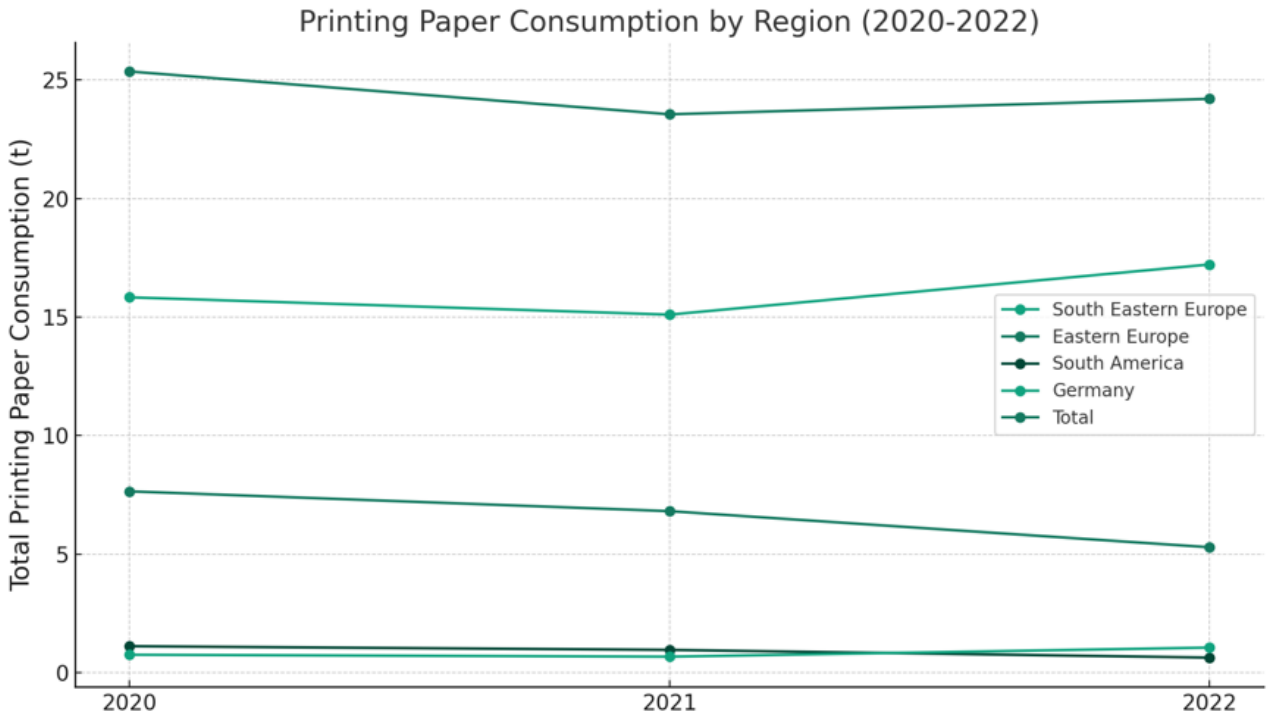
The following chart displays the total printing paper consumption across different regions from 2020 to 2022. The observation include:

• **South Eastern Europe** shows an initial decrease in paper consumption from 2020 to 2021, followed by an increase in 2022, indicating a rebound in consumption.

• **Eastern Europe** experiences a consistent decrease in paper consumption over the three years, suggesting a shift towards digital alternatives or efficiency improvements.

• **South America and Germany** both show significant decreases in consumption across the period, with South America, in particular, showing a steep decline.

• **The Total consumption** across all regions decreases slightly from 2020 to 2021, then increases in 2022, albeit not to the 2020 level, indicating a possible stabilization after initial declines.



The total printing paper consumption and its intensity varied across four above-mentioned regions between 2020 and 2022. In South Eastern Europe, consumption increased from 15.83 tons in 2020 to 17.22 tons in 2022, with a slight decrease to 15.1 tons in 2021. Eastern Europe saw a consistent decrease from 7.65 tons in 2020 to 5.29 tons in 2022. South America's consumption decreased from 1.12 tons in 2020 to 0.64 tons in 2022. In Germany, consumption slightly increased from 0.67 tons in 2021 to 1.06 tons in 2022 after a decrease from 2020.

The intensity of printing paper usage, measured in kg/FTE, also reflected these trends with varying figures for each region across the years. Overall, from 2020 to 2022, total printing paper consumption saw a slight increase of 2.765% from 2021 to 2022, despite fluctuations in individual regions, with the total consumption being 25.36 tons in 2020, decreasing to 23.55 tons in 2021, and then slightly increasing to 24.20 tons in 2022.

The data suggests a trend towards reduced printing paper consumption in most regions, potentially due to increased digitalization and environmental sustainability efforts. However, the rebound in some areas in 2022 may indicate fluctuating demands influenced by economic activities, policy changes, or other factors.

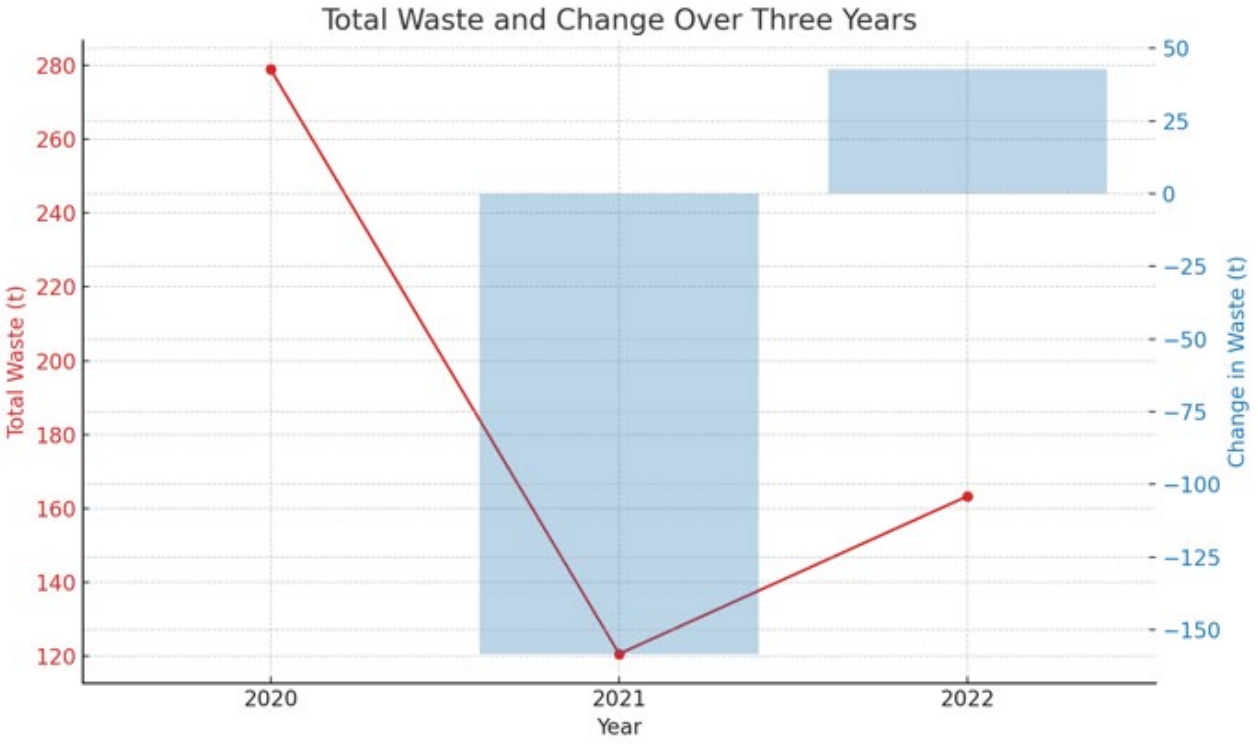
Waste

The waste indicators include total waste, total waste intensity, total paper waste, the percentage of paper waste recycled, total electronic waste, the percentage of electronic waste recycled, total plastic waste, and total other waste. The data also encompasses a total for all regions combined and a change metric comparing 2020 to 2022.

In Southeastern Europe, the total waste generated showed fluctuations, starting at approximately 189,309 tons in 2020, significantly decreasing in 2021 to about 61,282 tons, and then slightly increasing in 2022 to around 75,596 tons. The total waste intensity followed a similar pattern, with a peak in 2020 at 111.1 kg/FTE, a sharp decline in 2021 to 37.08 kg/FTE, and a slight rise in 2022 to 43.08 kg/FTE. Eastern Europe exhibited a decreasing trend in total waste, starting at around 45,812 tons in 2020, decreasing to 33,333 tons in 2021, and further down to 19,076 tons in 2022.

Waste intensity in this region showed an initial increase from 66.5 kg/FTE in 2020 to 46.44 kg/FTE in 2021, before dropping to a negligible 0.027 kg/FTE in 2022. In South America, the total waste generated was lower than in the European regions, with a gradual increase from 7,691 tons in 2020 to 11,158 tons in 2022. The waste intensity started at 30.92 kg/FTE in 2020, increased to 42.6 kg/FTE in 2021, and slightly decreased to 41.12 kg/FTE in 2022. Germany's data indicate a notable variation in total waste, starting at 36,070 tons in 2020, significantly reducing to an estimated 15,500 tons in 2021, and increasing to 57,516 tons in 2022. The waste intensity in Germany also showed significant fluctuations, beginning at 72.26 kg/FTE in 2020, decreasing to an estimated 28.7 kg/FTE in 2021, and increasing to 91.22 kg/FTE in 2022.

The red line in the following chart represents the total waste in tons for each year, while the blue bars indicate the change in waste from the previous year. As seen, there is a notable decrease in total waste from 2020 to 2021, followed by an increase from 2021 to 2022. The changes between years provide a clear picture of how waste management has evolved over this period.

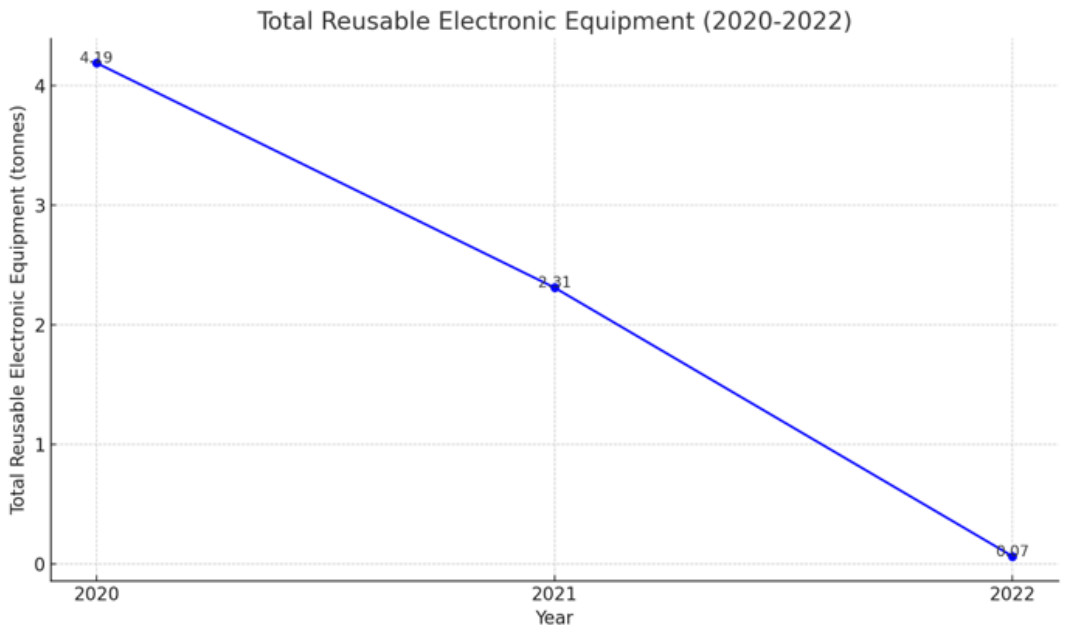


Reusable electronic equipment

For Southeastern Europe, the data shows a decline of the total reusable electronic equipment from 3.961 tons in 2020 to 2.24 tons in 2021, eventually dropping to zero by 2022. Eastern Europe and South America both recorded no reusable electronic equipment across all three years, indicating a lack of activity or data collection in this specific domain. In contrast, Germany's figures, though small, demonstrate a slight decrease from 0.22764 tons in 2020 to 0.07112 tons in 2021, and further to 0.0659 tons in 2022.

The overall total for reusable electronic equipment across all regions combined followed a declining trend: starting at 4.18864 tons in 2020, decreasing to 2.31112 tons in 2021, and plummeting to a mere 0.0659 tons by 2022. This change represents a significant reduction in reusable electronic equipment over the observed period, highlighted by a change metric of -0.971486 from 2021 to 2022, indicating a sharp decline in the last year.

The following chart represents this trend visually and depicts the stark decrease in total reusable electronic equipment over the years, with a notable decline from 2021 to 2022, accentuating the drastic reduction in such equipment's availability or utilization in the mentioned regions during the given timeframe.



Sustainable lending

Environmental and social risk management

Environmental and Social Risk Management (ESRM) is a strategic framework designed to identify, assess, and mitigate the environmental and social risks associated with business operations and investments.

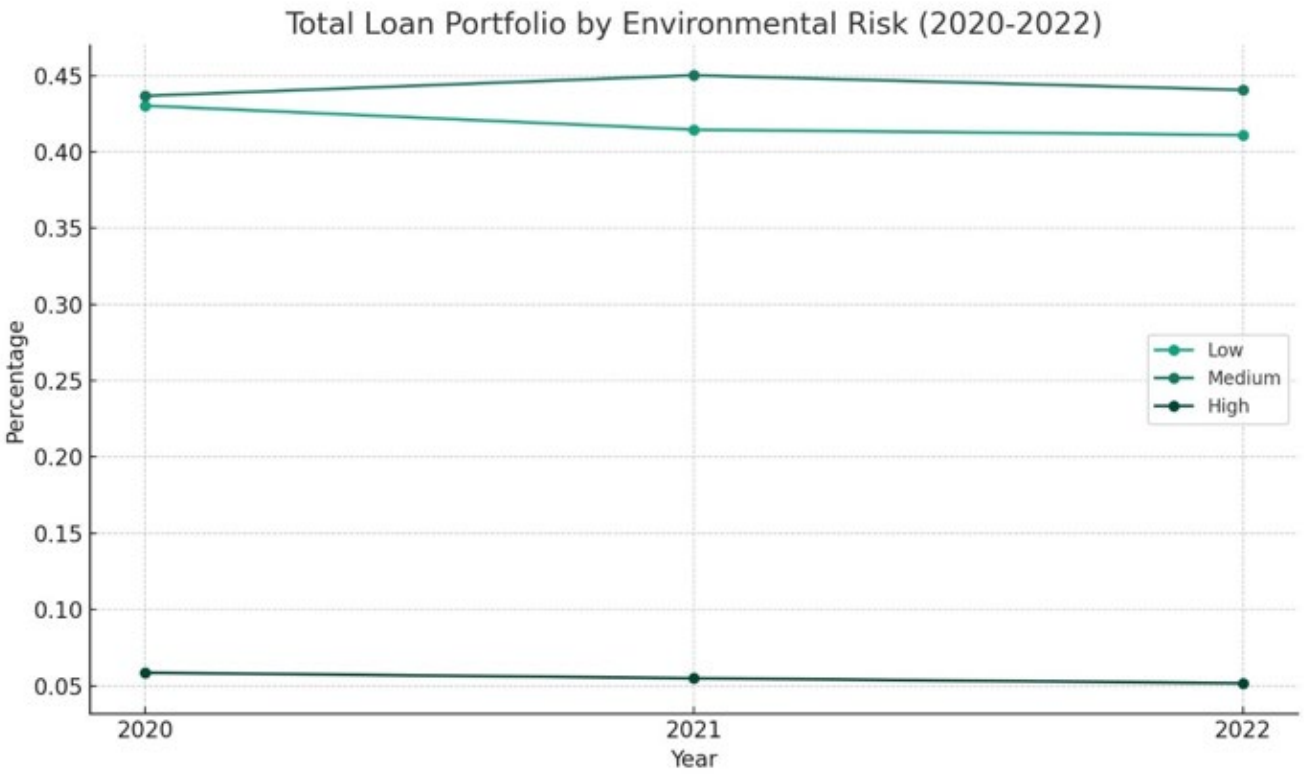
By integrating sustainability principles into decision-making processes, ESRM helps organizations navigate the complex interplay between environmental stewardship, social responsibility, and economic objectives. This approach not only aims to minimize negative impacts on the environment and communities but also seeks to promote positive change, ensuring long-term resilience and contributing to sustainable development goals

Waste intensity in this region showed an initial increase from 66.5 kg/FTE in 2020 to 46.44 kg/FTE in 2021, before dropping to a negligible 0.027 kg/FTE in 2022. In South America, the total waste generated was lower than in the European regions, with a gradual increase from 7,691 tons in 2020 to 11,158 tons in 2022. The waste intensity started at 30.92 kg/FTE in 2020, increased to 42.6 kg/FTE in 2021, and slightly decreased to 41.12 kg/FTE in 2022. Germany's data indicate a notable variation in total waste, starting at 36,070 tons in 2020, significantly reducing to an estimated 15,500 tons in 2021, and increasing to 57,516 tons in 2022. The waste intensity in Germany also showed significant fluctuations, beginning at 72.26 kg/FTE in 2020, decreasing to an estimated 28.7 kg/FTE in 2021, and increasing to 91.22 kg/FTE in 2022.

In South America, the proportion of loans in the low-risk category increased from 56.04% in 2020 to 55.10% in 2022, while the medium risk category saw a slight increase from 28.72% in 2020 to 29.33% in 2022. The high-risk category decreased from 11.04% in 2020 to 7.07% in 2022. Germany showed a notable shift with the medium risk category increasing significantly from 63.93% in 2020 to 78.03% in 2022, while the low-risk category decreased from 36.04% in 2020 to 26.59% in 2022. The high-risk category remained at 0% throughout the observed period.

Overall, across the regions and years, there was a noticeable shift in the loan portfolios from low to medium risk categories, with a varied change in the high-risk category.

This indicates a dynamic approach to environmental and social risk management, reflecting changes in environmental risk assessments, regulations, and perhaps shifts in the regions' economic activities influencing these risk categories.

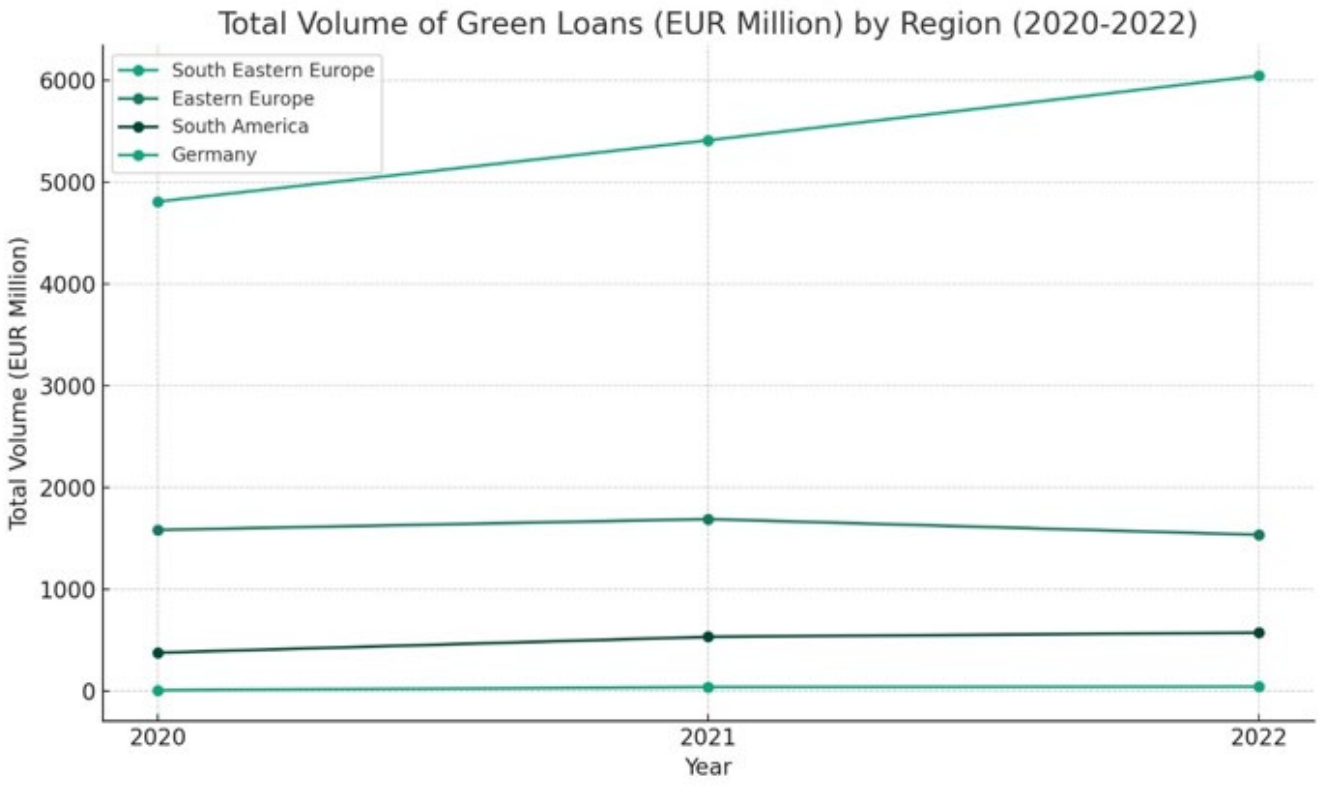


Green finance (Green loan portfolio)

Green finance focuses on the volume of green loans to business clients (in EUR million), the number of green loans to business clients, the volume of green loans to private clients (in EUR million), and the number of green loans to private clients culminating in the total volume and number of green loans across all regions for the given years (Green Finance Institute, 2023).

In South Eastern Europe, the volume of green loans to business clients saw an increase from 722.7 million EUR in 2020 to 896.9 million EUR in 2022. Private client loans in this region also rose from 17.1 million EUR in 2020 to 48.7 million EUR in 2022.
Eastern Europe experienced a slight fluctuation in the business sector, starting with 189.3 million EUR in 2020, peaking at 204.1 million EUR in 2021, and then dropping to 181.0 million EUR in 2022. However, the volume of green loans to private clients gradually increased from 0.8 million EUR in 2020 to 1.7 million EUR in 2022.
South America saw a consistent increase in the volume of green loans to business clients, from 49.4 million EUR in 2020 to 74.5 million EUR in 2022. The volume of loans to private clients also increased significantly, from 3.2 million EUR in 2020 to 15.9 million EUR in 2022.
In Germany, the volume of green loans to business clients experienced a significant increase from

Overall, the total volume of green loans across all regions increased from 963.8 million EUR in 2020 to 1,164.8 million EUR in 2022, indicating a positive trend towards green financing.



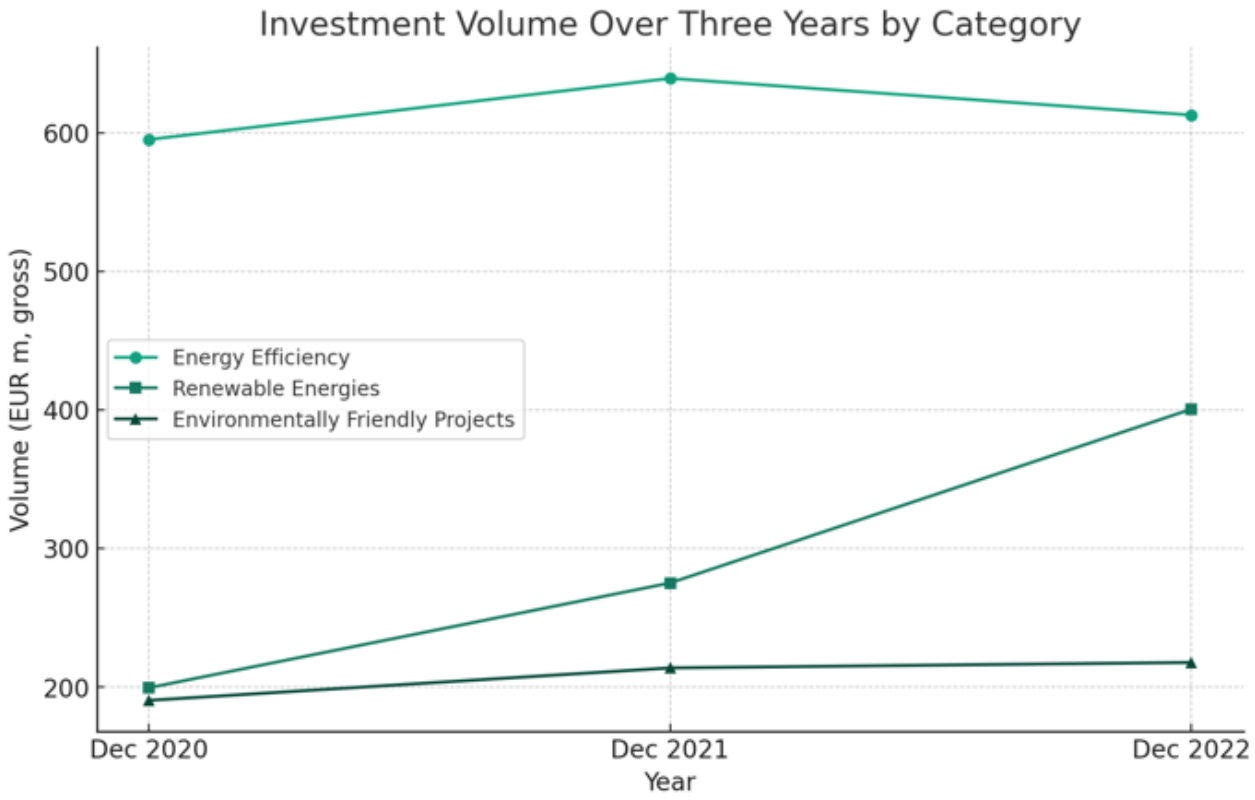
Green loan portfolio by investment category

This part provides detailed information on the green loan portfolio by investment category across different regions (Southeastern Europe, Eastern Europe, South America, and Germany) for the years 2020, 2021, and 2022. The data includes indicators such as "Energy efficiency", along with metrics like volume (in EUR million, gross) and the number of loans.

The green loan portfolio across Southeastern Europe, Eastern Europe, South America, and Germany for the years 2020, 2021, and 2022 is categorized into energy efficiency, renewable energies, and environmentally friendly projects.

In Southeastern Europe, the focus on energy efficiency saw volumes of 437.3, 447.8, and 430.1 million EUR from 2020 to 2022, with an increasing number of loans indicating growing interest and investment in this category.

Renewable energies and environmentally friendly projects also saw a significant increase in both volume and the number of loans over these years, highlighting a strong emphasis on green investments in the region.



Eastern Europe's green loan portfolio was smaller in volume compared to Southeastern Europe but showed a consistent interest in energy efficiency, with slight fluctuations in investment volumes over the years. Renewable energies and environmentally friendly projects had relatively lower volumes and numbers of loans, but there was still a consistent investment in these areas.

In South America, energy efficiency projects received increasing volumes of investment from 37.5 million EUR in 2020 to 68.1 million EUR in 2022, alongside a rise in the number of loans. Investments in renewable energies and environmentally friendly projects were considerably lower but showed a steady commitment to these areas, with slight increases in investment volumes and loan numbers over the three years.

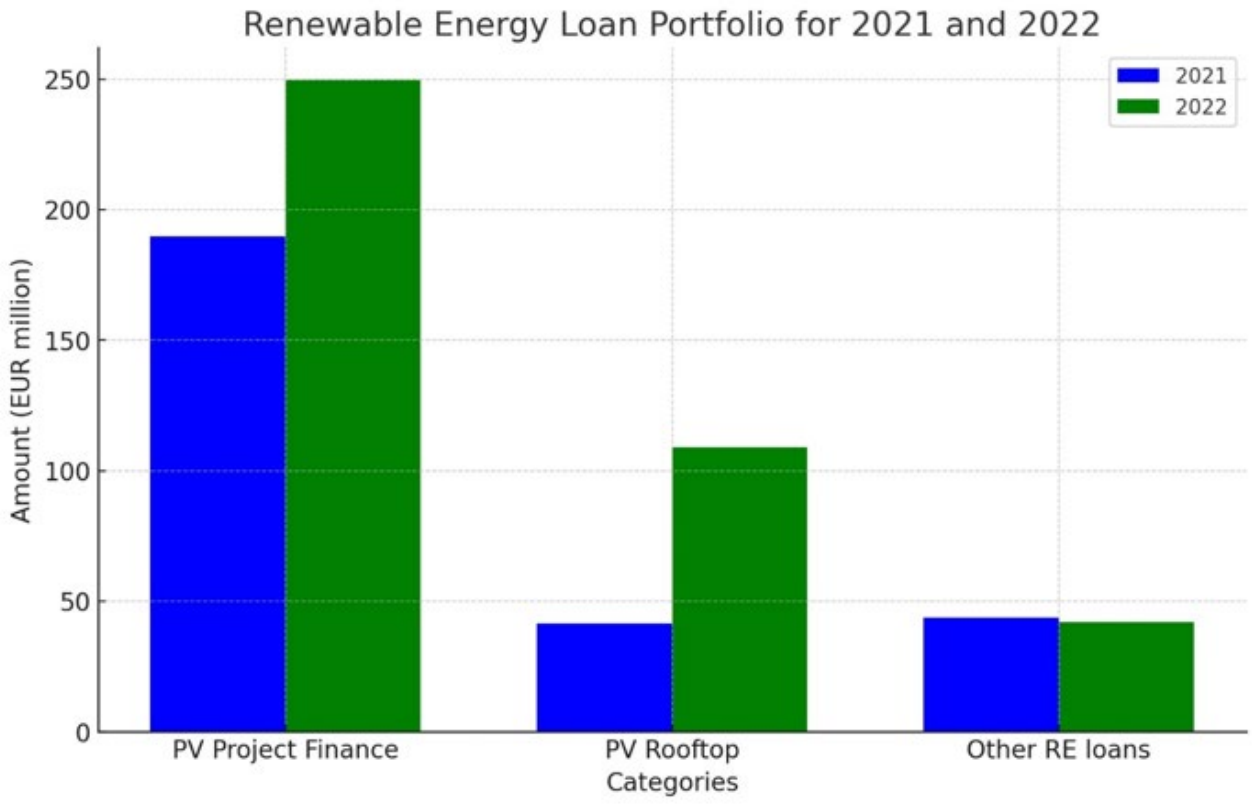
Germany showed a focused but smaller-scale investment in energy efficiency, with volumes decreasing from 2.4 million EUR in 2020 to 0.46 million EUR in 2022. Remarkably, there was a significant investment in renewable energies in 2021 and 2022 after no investments were recorded in this category in 2020. Environmentally friendly projects did not see any investments in the years covered.

In general, there is a diversified and growing commitment to green finance across different regions, with a noticeable emphasis on energy efficiency, renewable energies, and environmentally friendly projects.

Breakdown of the renewable energy loan portfolio

In 2021, the renewable energy loan portfolio included €189.83 million for PV project finance, €41.48 million for PV rooftop, and €43.76 million for other renewable energy loans. The capacity installed for PV project finance was 402.33 MWp.

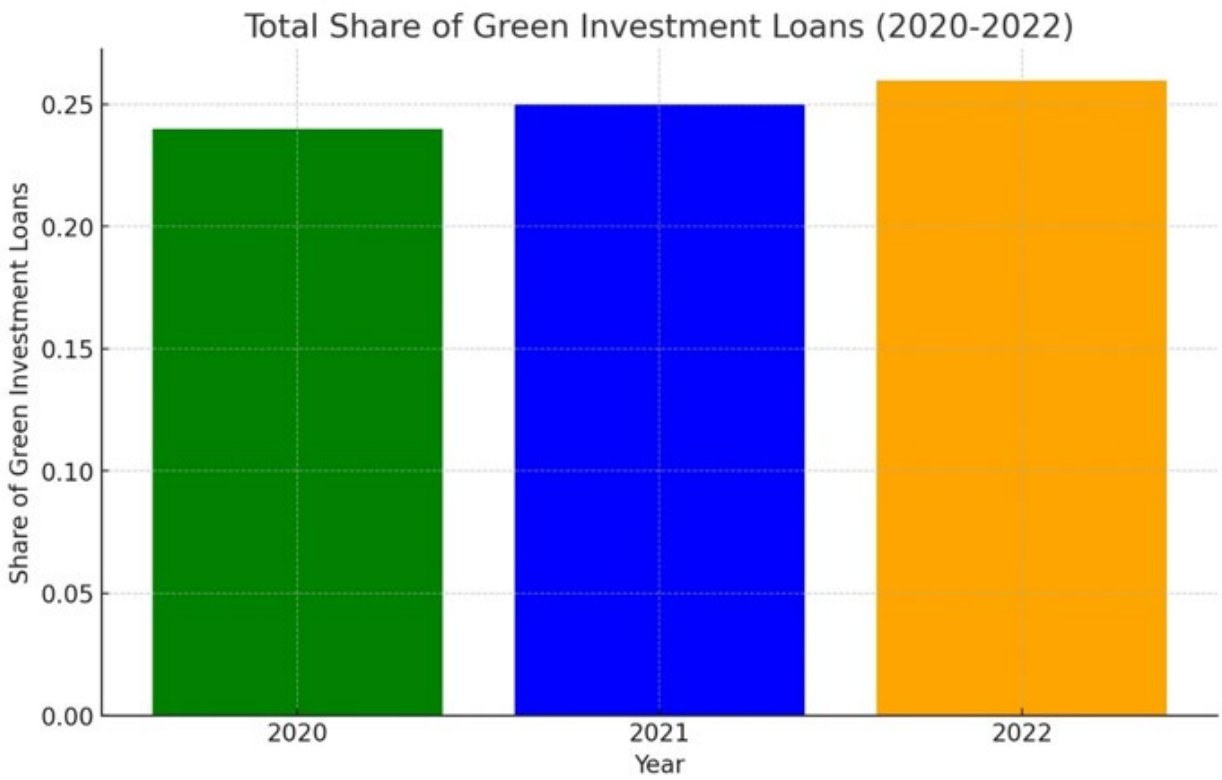
In 2022, the loan amounts increased to €249.55 million for PV project finance and €109.05 million for PV rooftop, while other renewable energy loans slightly decreased to €41.93 million. The installed capacity for PV project finance also rose to 546.20 MWp for that year.



Share of green investment loans in total investment loans

The share of green investment loans in total investment loans across different regions for the years 2020, 2021, and 2022 demonstrates varying trends of growth and stability. In Southeastern Europe, the share remained constant at 25% in both 2020 and 2021 before increasing slightly to 27.07% in 2022. Eastern Europe saw a small decrease, starting at 26% in 2020, dropping to 24% in 2021, and marginally recovering to 24.168% in 2022. South America's share started at 18% in 2020, rose to 22% in 2021, and then adjusted to 20.3927% in 2022. Germany exhibited a significant jump, from a low of 5% in 2020, to 27% in 2021, and further up to 28.6853% in 2022. Overall, across the covered regions, the share increased from 24% in 2020 to 25% in 2021, reaching 25.9633% by 2022.

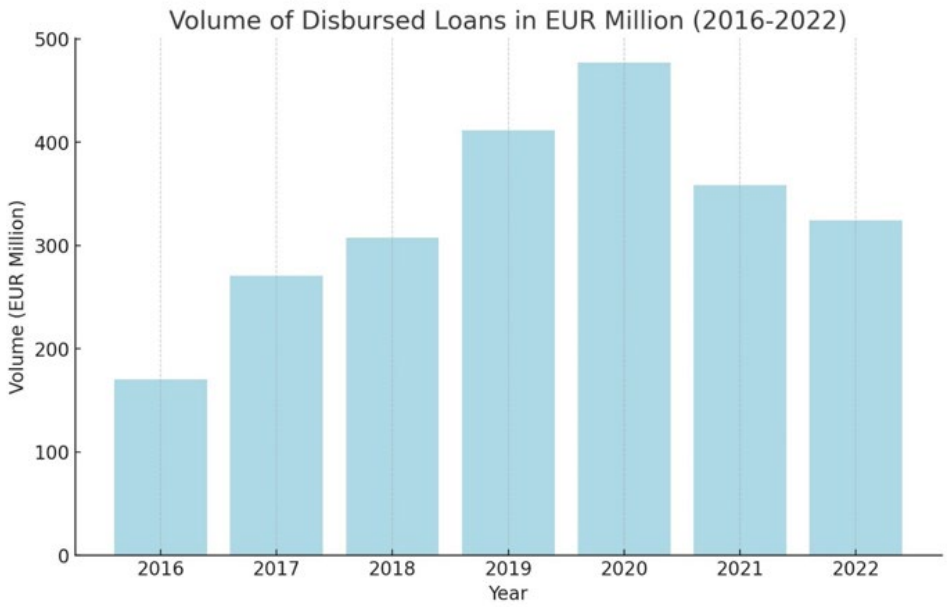
This progression underscores a gradual, albeit inconsistent, shift towards green investment across the regions.



Disbursed green loans

The data reveals a progression in the volume of disbursed green loans (measured in EUR million) from 2016 through 2022. Starting in 2016, the volume was 170.5 million euros and showed an upward trend in the following years, reaching 270.3 million euros in 2017 and further increasing to 307.7 million euros in 2018. The growth continued in 2019, with the volume rising to 411.6 million euros, followed by a significant increase to 477 million euros in 2020. However, after reaching its peak in 2020, there was a decrease in the subsequent years, with the volume dropping to 358.34 million euros in 2021 and further declining to 324.2 million euros in 2022.

The following chart indicates an initial phase of strong growth in green loan disbursement, reaching its highest point in 2020, followed by a reduction in the volume of loans disbursed in the last two years of the period.



Portfolio quality indicators for green loan portfolio

The following trend presents the share of defaulted loans across various regions over three consecutive years:

- Southeastern Europe saw a gradual increase in the share of defaulted loans, starting from 0.3% in December 2020, to 0.6% in December 2021, and reaching 0.9% by December 2022.

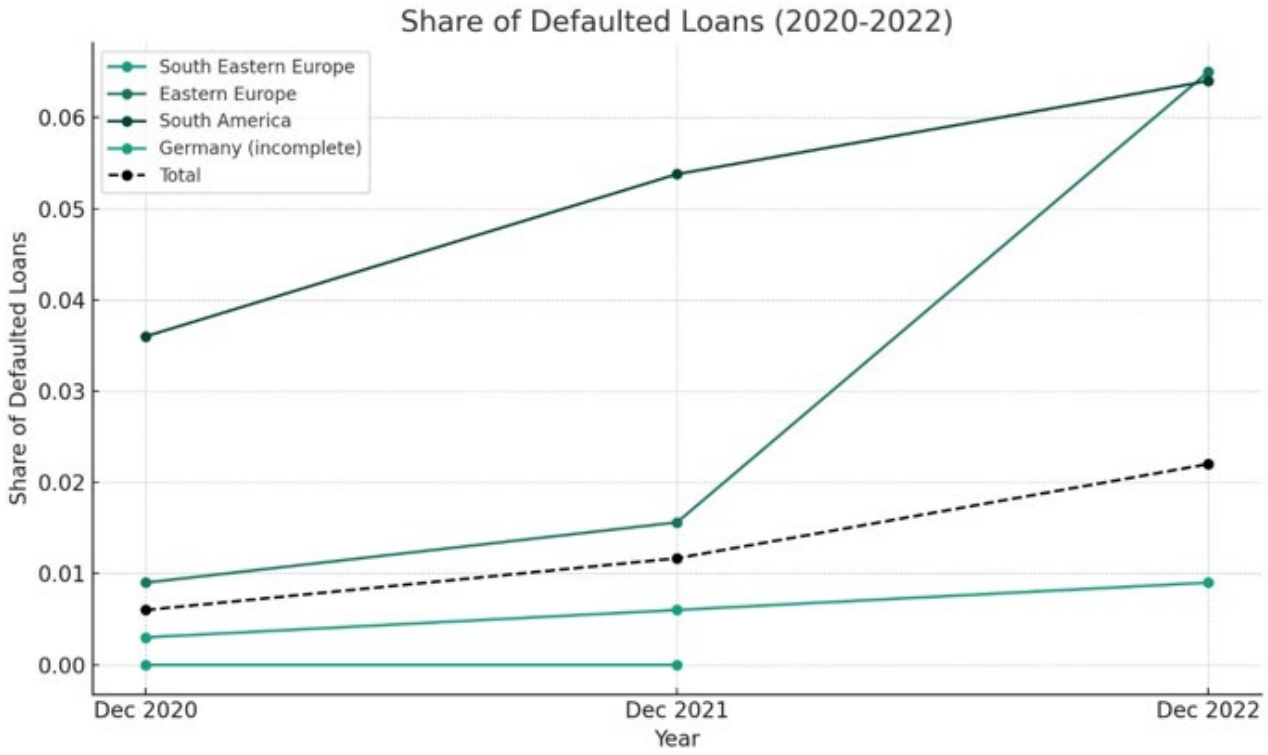
- Eastern Europe also experienced an upward trend, with the share rising from 0.9% in December 2020, to about 1.56% in December 2021, and significantly increasing to 6.5% in December 2022.

- South America had a notable rise in defaulted loans, beginning with 3.6% in December 2020, escalating to approximately 5.38% in December 2021, and then jumping to 6.4% by December 2022.

- Germany remained stable with a share of defaulted loans reported as 0% for December 2020 and December 2021.

- On a total level across the mentioned regions and possibly others included in the portfolio, the share of defaulted loans was 0.6% in December 2020, increased slightly to about 1.17% in December 2021, and then almost doubled to 2.2% by December 2022.

There is a general trend of increasing defaulted loans over the three years across the mentioned regions, with significant variances in the rate of increase among them.



Impact of financed renewable energy projects in operation

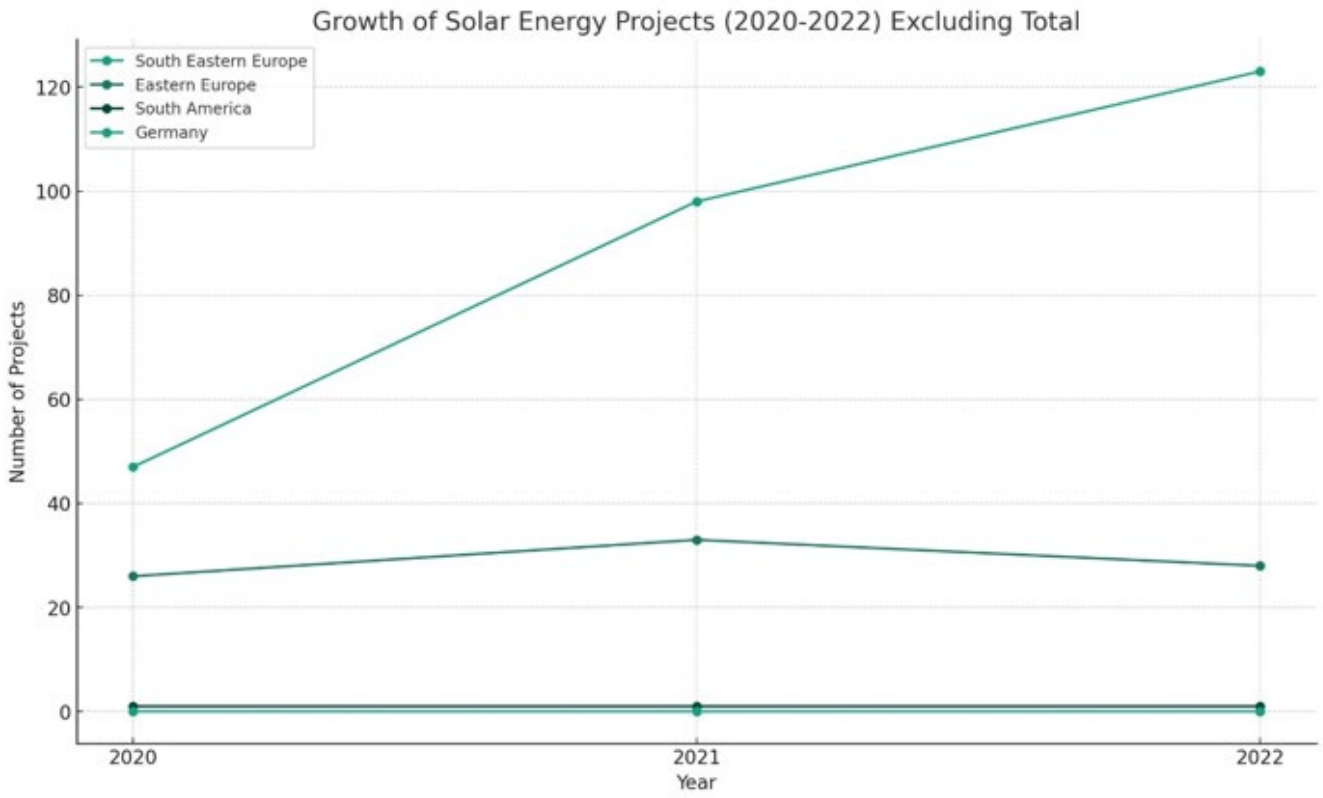
The analysis of the impact of financed renewable energy (RE) projects in operation across Southeastern Europe, Eastern Europe, South America, and Germany, from 2020 to 2022, shows a clear trajectory of growth and environmental impact in the renewable energy sector. The data encompasses various indicators such as the number of renewable energy projects, installed capacity, electricity generated, and tCO2 emissions avoided across solar, hydro, and biomass energy projects.

In Southeastern Europe, there was a notable increase in solar energy projects, from 47 projects in 2020 to 123 by 2022, indicating a vibrant expansion in solar energy investment. Hydro and biomass projects saw more modest changes. Eastern Europe also experienced growth in solar projects, though on a smaller scale, with a rise from 26 projects in 2020 to 28 by 2022.

The hydro and biomass sectors in Eastern Europe saw minimal to no change in the number of projects over the same period. South America and Germany presented a different picture, with very limited activity in terms of new renewable energy projects. South America saw only a handful of solar and biomass projects, with hydro projects remaining unchanged. Germany did not report any new renewable energy projects across solar, hydro, and biomass in the timeframe.

The total across all regions indicates a positive trend in the adoption of renewable energy projects, particularly in solar energy, with the total number of solar projects increasing from 74 in 2020 to 152 by 2022. Hydro and biomass projects experienced smaller increases in their numbers. This growth reflects an increased recognition of the importance of transitioning to renewable energy sources to combat climate change and reduce carbon emissions.

The installed capacity, electricity generated, and tCO2 emissions avoided through these projects further underscore the significant benefits of investing in renewable energy. As these projects come online and expand, they contribute to reducing reliance on fossil fuels, lowering greenhouse gas emissions, and promoting sustainable development across these regions.

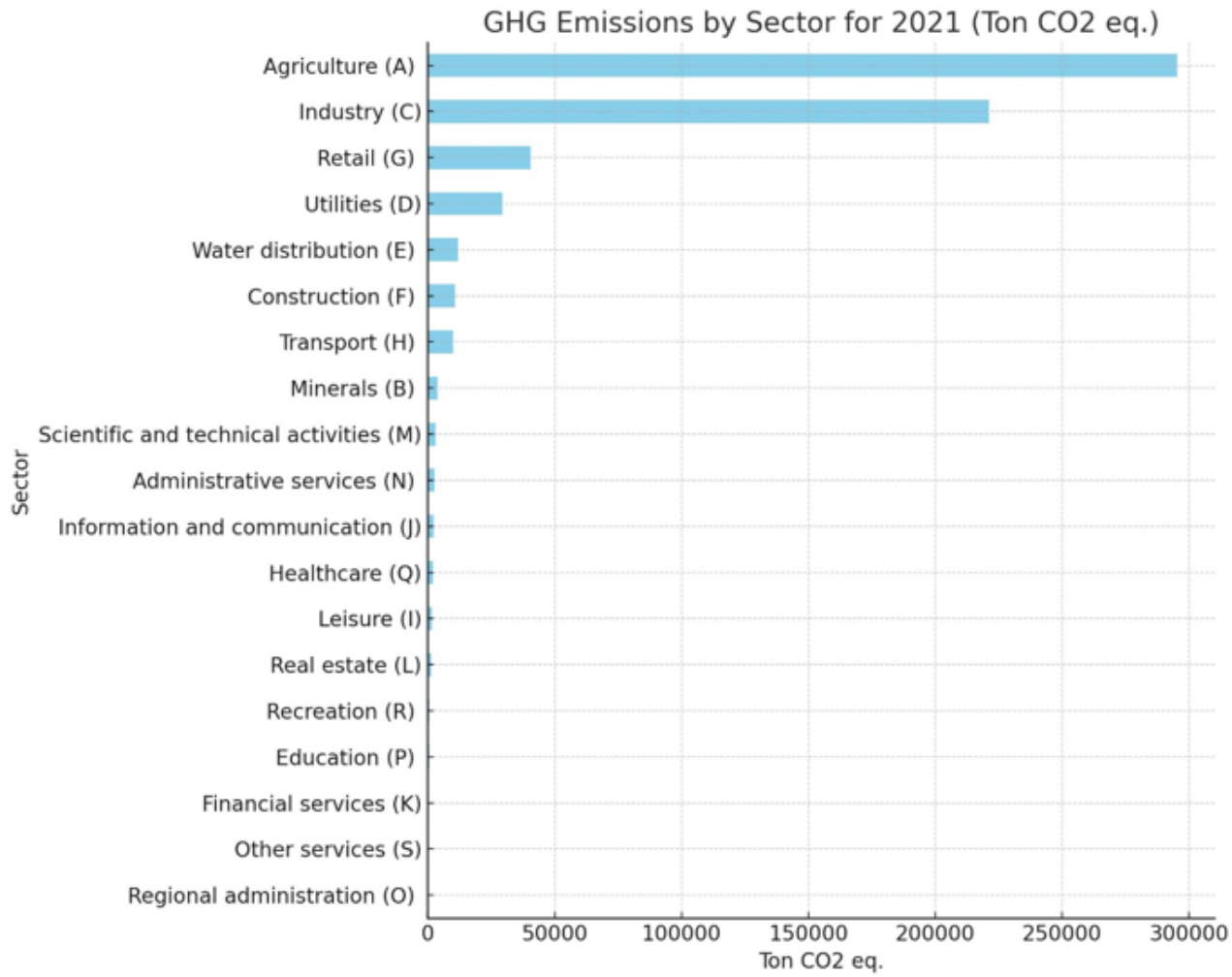


GHG emissions of lending portfolio by sector

The following chapter presents GHG emissions data from a lending portfolio across various regions, detailing differences between December 2021 and December 2022. In Southeastern Europe, business loans had a significant increase in outstanding amounts from 433 million EUR to 3,424 million EUR, with attributed emissions rising from 642 tons to 563,689 tons of CO2eq. Mortgages and motor vehicle loans show a smaller footprint, with motor vehicle loans accounting for 159 tons of CO2eq in December 2022. Eastern Europe's data shows an outstanding amount of 1,053 million EUR for business loans in December 2022 with 186,132 tons of CO2eq attributed emissions.

In South America, the outstanding amount for business loans in December 2022 is noted at 167 million EUR with attributed emissions of 200 tons of CO2eq. Germany presents a large outstanding amount of 4,800 million EUR for business loans with attributed emissions of 769,527 tons of CO2eq in December 2022. Mortgages are also significant, with 262 million EUR outstanding and 3,774 tons of CO2eq attributed emissions.

The overall portfolio indicates a substantial increase in outstanding amounts and attributed emissions in business loans from 4,772 million EUR and 638,545 tons of CO2eq in December 2021 to 4,800 million EUR and 769,527 tons of CO2eq in December 2022.



In examining GHG emissions attributable to a lending portfolio for 2021, the sectors of Agriculture and Industry emerge as the foremost contributors to carbon dioxide equivalent emissions (CO2 eq), signifying a substantial environmental impact within this financial framework. Specifically, the Agriculture sector accounts for emissions totaling approximately 295,455 tons of CO2eq, thereby denoting the highest emitter amongst the analyzed sectors. This is closely followed by the industry sector, which is responsible for approximately 221,291 tons of CO2eq of emissions. Additionally, the Retail sector is identified as a significant emitter, contributing over 40,514 tons CO2eq to the portfolio's GHG footprint. Lesser, yet notable contributions are made by the Utilities and Water Distribution sectors, with emissions estimated at around 29,503 and 12,060 tons of CO2 eq, respectively.

By focusing on these primary sectors, particularly Agriculture and Industry, stakeholders and policymakers can effectively address a significant portion of the portfolio's environmental impact, fostering a more sustainable financial and ecological future.

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Supply chain

Each of the following indicators provides valuable insights into the sustainability practices and trends within the supply chain across different regions, highlighting areas of progress as well as those that may require further attention or action to promote sustainability. Sustainable suppliers within the supply chain across various regions present the following indicators:

1. **Total number of sustainable suppliers:** This indicates the actual number of suppliers in a region that meets certain sustainability criteria. For example, in Southeastern Europe, the total number of sustainable suppliers increased from 340 in 2020 to 482 in 2022, showing a positive trend towards sustainability.
2. **Share of sustainable suppliers (%):** This represents the percentage of suppliers that are considered sustainable out of the total number of suppliers. In Germany, this percentage increased from 48.8% in 2020 to 47.9% in 2022, indicating a slight decrease in the proportion of sustainable suppliers over the years.
3. **Share by turnover (%):** This metric shows the percentage of turnover that can be attributed to sustainable suppliers. In the Eastern Europe region, the share by turnover increased from an unspecified figure in 2020 to 19.6% in 2022, highlighting the growing economic significance of sustainable suppliers.

For the aggregate total across all regions, the figures indicate a comprehensive improvement in sustainability metrics over the three years:

•The total number of sustainable suppliers grew from 642 in 2020 to 916 in 2022.

•The share of sustainable suppliers as a percentage increased marginally from 37.6% in 2020 to 38.5% in 2022.

•The share by turnover saw a more significant rise, from an unspecified figure in 2020 to 73.8% in 2022, suggesting that sustainable suppliers are occupying an increasingly larger portion of the market share in terms of revenue.

Sustainability context

The analysis provides a comprehensive look at various sustainability indicators across a selection of countries and regions, including Albania, Bosnia & Herzegovina, Bulgaria, Ecuador, Georgia, Kosovo, North Macedonia, Moldova, Romania, Serbia, Ukraine EU 28, and Germany. These indicators cover a wide range of topics, from air pollution and energy use to gender equality and economic performance. Here we present a breakdown of what each indicator means and how it reflects on the sustainability context of each country:

1. **Air Pollution:** Measured by the population-weighted average concentration of PM2.5 (fine particulate matter) in 2021. Lower values indicate better air quality. For instance, Ecuador has a lower value (8.4), suggesting better air quality compared to Bosnia & Herzegovina with 27.8.
2. **Climate Vulnerability vs. Adaptation Readiness:** This index compares a country's vulnerability to climate change against its readiness to adapt, based on various factors. Higher values indicate greater readiness or lower vulnerability. Georgia scores 57.8, suggesting a relatively better stance on climate adaptation compared to other nations.
3. **CO2 Emissions per Unit of GDP:** This measures the kg of CO2 emitted per 2015 USD of GDP, highlighting the carbon intensity of economic activities. Lower values indicate more efficient use of energy in terms of emissions, with Ecuador at 0.32 showing high efficiency.
4. **Energy Intensity:** Energy consumption per GDP over time, with a focus on the years 2000, 2005, 2010, 2015, and 2021. Decreasing numbers over time suggest improvements in energy efficiency. Germany shows a significant decrease from 4.4 in 2000 to 3.04 in 2021.

These indicators together provide a multifaceted view of the sustainability challenges and achievements of each country, such as environmental concerns like air pollution and CO2 emissions.

Reccomandation

The 2023 Carbon Impact Report, stands as a testament to the company's environmental diligence, capturing its endeavors and challenges across energy consumption, CO2 emissions, water usage, waste management, and sustainable lending. This report underscores InstaBuilt's engagement with innovative practices, notably through the tokenization of products to enable smart contract-based house sales, showcasing a commitment to utilizing technology for environmental sustainability.

In alignment with InstaBuilt's forward-thinking initiatives, a pivotal recommendation emerges: the institutions should embrace carbon tokenization. This approach promises to revolutionize carbon accounting, trading, and offsetting, offering a transparent, secure, and efficient mechanism for managing carbon credits through blockchain technology. Carbon tokenization would convert carbon emission reductions into digital tokens, facilitating their use in offsetting carbon footprints, thereby enhancing transparency, increasing market participation, and incentivizing carbon reduction efforts (Brody, 2023)
For InstaBuilt, implementing carbon tokenization could entail developing a comprehensive framework in collaboration with experts and regulatory bodies, initiating pilot projects to tokenize carbon offsets, forging partnerships to widen the carbon token market, and engaging in awareness campaigns about carbon offsetting benefits. Regular impact assessments would ensure the initiative's alignment with environmental goals.

Thus, adopting carbon tokenization aligns with InstaBuilt's trajectory towards integrating technological innovation with ecological responsibility, potentially setting a new benchmark for sustainability within the construction and real estate sectors. This move not only reaffirms InstaBuilt's environmental commitment but also positions it as a vanguard in harnessing technology for sustainable development.

Conclusion

This report meticulously encapsulates our comprehensive efforts to assess and reduce our carbon footprint across various operational facets, from energy consumption and CO2 emissions to water usage, waste management, and sustainable financing.

Our endeavors in 2023 stand as a testament to the potential of integrating sustainable practices into the core of business operations, highlighting significant progress and yet underscoring the ongoing challenges that lie ahead. The data presented in the report, ranging from energy consumption shifts towards renewable sources, reductions in CO2 emissions, to the adoption of green finance initiatives, all contribute to a broader narrative of change and adaptation in the face of environmental imperatives.

Key findings from the report, such as the increased adoption of photovoltaic (PV) energy, a decrease in overall energy consumption, and the significant growth in the volume of green loans, underscore our commitment to not only mitigate our environmental impact but also to foster a culture of sustainability within and beyond our operations. The fluctuating trends in water usage, paper consumption, and waste generation remind us of the complexity of our environmental challenges and the need for continuous improvement and innovation in our strategies and practices.

The report's insights into sustainable lending and green finance illuminate our role in supporting projects and initiatives that have a positive environmental impact, aligning financial services with broader sustainability goals. This alignment is crucial for the transition towards a low-carbon, sustainable economy, demonstrating our leadership in fostering green investments and emphasizing the importance of environmental and social risk management in financial decision-making. As we look towards the future, it is clear that the path towards sustainability is both challenging and rewarding. The report not only provides a comprehensive overview of our environmental footprint but also sets the stage for ongoing efforts to enhance our sustainability practices. It highlights the importance of innovation, collaboration, and transparency in driving positive environmental change, underscoring our commitment to contributing to a sustainable future for all.

In this light, the 2023 Carbon Impact Report is a call to action for continued progress, innovation, and partnership in our journey towards sustainability. It underscores the critical role of corporate environmental responsibility in addressing the pressing challenges of our time, and it reaffirms our dedication to making a meaningful impact on the planet. As we move forward, we remain committed to the principles of sustainability, driven by a vision of a more resilient and environmentally harmonious world.

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