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CLIMATE CO-BENEFITS: THE ROLE OF GLOBAL DECARBONISATION IN SOCIAL PROGRESS



BNP PARIBAS
ASSET MANAGEMENT

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INTRODUCTION

Climate action is widely recognised as essential for protecting the planet. Yet the conversation often overlooks the significant benefits it delivers to people as well. When implemented through Just Transition principles,¹ supported by robust impact assessments and appropriate safeguards,² climate action becomes intrinsically linked to social progress. These social outcomes are also often more immediate and tangible than the climate benefits themselves.

Take electric vehicles as an example. Beyond replacing fossil-fuelled transport, they reduce tailpipe emissions, improve air quality, and contribute to better physical and mental health outcomes. For context, air pollution is a material global health issue leading to seven million deaths a year, more than half of them caused by outdoor pollution resulting from transport, industry and power plants.³

This broader pattern extends beyond transport as climate action is now evolving on two key fronts. First, it is evolving from a narrow focus on clean energy generation to encompass the entire energy ecosystem, including grids, enablers of energy efficiency and renewable energy equipment. Second, it is increasingly visible in everyday life through solutions such as home insulation, energy storage and smart metering. Concordantly, the scope of associated social benefits is increasing. By recognising, researching and optimising for these, we can strengthen societal acceptance, policy support and financing for global decarbonisation efforts, driving positive outcomes for both people and the planet.

It is important to underline from the outset that the relationship between climate action and social progress is bi-directional: Climate inaction can undermine social outcomes, while insufficient social progress can, in turn, derail climate action.

1 [Guiding Principles for Just Transition](#) (2025)

2 As outlined in our Net Zero Roadmap, we strongly believe that the transition to a low-carbon economy will boost prosperity, but that this prosperity must be equitable and inclusive for workers, communities and affected stakeholders.

3 Pakistan Journal of Commerce and Social Sciences 2021, Vol. 15 (1), 58-93 Pak J Commer Soc Sci Renewable Energy Consumption and Health Outcomes: Evidence from Global Panel Data Analysis

DEEP DIVE

First, climate inaction exacerbates inequality and constrains social progress.

In its Sixth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) concludes that “existing vulnerabilities and inequalities intensify with adverse impacts of climate change. These impacts disproportionately affect marginalised groups, amplifying inequalities and undermining sustainable development... If future climate change under high emissions scenarios continues and increases risks... losses and damages will likely be concentrated among the poorest and most vulnerable populations.”⁴ Beyond physical climate impacts, status quo policies that allow greenhouse gas emissions to rise also tend to impose disproportionate costs on vulnerable groups. Poorly designed mitigation policies can themselves exacerbate social risks for these communities. Managing both long-term structural risks and acute shocks is therefore inseparable from efforts to reduce inequality and expand opportunities for social mobility.

Second, a failure to address inequality can directly undermine climate action.

When climate policies are perceived as unfair or regressive, they can provoke a social backlash that weakens political support for environmental ambition. One clear example was the 2018 Gilets Jaunes (Yellow Vests) movement in France, which was triggered by a carbon tax but quickly broadened into protests over fuel prices, cost-of-living pressures and economic inequality. More recently, farmers across several EU member states have protested volatile prices, rising input costs and reforms to the EU’s Common Agricultural Policy, which links subsidies to environmental conditions. In part as a response to these protests, the EU dropped its target to halve pesticide use by 2040, which had been a key element of its Green Deal climate framework.⁵

This paper explores the relationship between global decarbonisation and three pressing social challenges, as put forward by the UN’s Sustainable Development Goals (SDGs): Poverty (SDG 1, SDG 7*⁶), hunger (SDG 2) and health (SDG 3). We examine the causal pathways linking decarbonisation to social outcomes, highlight practical solutions that contribute to progress across these areas, and identify measurable impact indicators that support this connection.

4 [Chapter 8: Poverty, Livelihoods and Sustainable Development | Climate Change 2022: Impacts, Adaptation and Vulnerability](#) (2022)

5 Further reading: [Farmers’ Voices in European Protests: Diverse Complaints, Emotional Tones, and Policy Responses - ScienceDirect](#) (2026)

6 Referring to energy poverty

BNP Paribas Asset Management's Global Sustainability Strategy

This combined analysis of environmental and social factors forms a core pillar of the BNP Paribas Asset Management Global Sustainability Strategy (GSS), guiding our approach to integrating sustainability considerations into our investment decisions.

- Our GSS outlines three preconditions for a sustainable economy: A successful Energy transition, healthy Ecosystems, and greater Equality in our societies – our '3Es'. Taken together, these form a pathway to economic sustainability that will enable us to safeguard long-term returns for our clients. In 2021, we detailed our strategy and commitments related to healthy ecosystems in our Biodiversity Roadmap, and in 2022 we addressed our approach to supporting a successful energy transition in our Net Zero Roadmap⁷
- Our Equality roadmap (2024) defines our holistic view of inequality and links it to both social and environmental risks. Our conviction is that social issues are financially material, and inequality presents both systemic risks to diversified portfolios and company-level risks to our investees.

SDG 1 - POVERTY

Energy Poverty

Energy poverty, defined as “a lack of access to modern energy services, including electricity and clean cooking facilities,”⁸ is a major barrier to sustainable development. Its nature varies by context: In low-income countries, the challenge is primarily one of access, while in developed economies it is increasingly an issue of affordability.

In the UK, for example, National Energy Action estimates that as of April 2025, approximately 6.1 million households are living in fuel poverty.⁹ Frequently neglected, these households often face a 'poverty premium', paying disproportionately more for energy while also living in poorly insulated homes with inefficient heating systems.¹⁰ As a result, maintaining safe indoor temperatures becomes difficult without incurring high costs, with low-income households often spending 10–20% more on a relative basis on fuel and electricity.¹¹

These financial pressures have been intensified by rising energy prices and broader cost-of-living challenges, which can lead to:

- a. Distorted household budgeting decisions, often described as 'eating or heating' trade-offs, where families are forced to prioritise immediate food needs over adequate energy consumption¹²

7 [940B42EF-AFFF-4C89-8C32-D9BFBA72BF24](#) (2021) & [F5EE3377-26CE-4DFD-B770-DBD29323D78B](#) (2022)

8 [Addressing energy poverty: Regional trends and examples of best practice - ScienceDirect](#) (2025)

9 [From Data to Impact: Tackling Fuel Poverty with Aico - Aico](#) (2025)

10 [Measuring the energy poverty premium in Great Britain and identifying its main drivers based on longitudinal household survey data - ScienceDirect](#) (2024)

11 [Measuring the energy poverty premium in Great Britain and identifying its main drivers based on longitudinal household survey data - ScienceDirect](#) (2024)

12 [Measuring the energy poverty premium in Great Britain and identifying its main drivers based on longitudinal household survey data - ScienceDirect](#) (2024)

- b. Severe health and mortality risks, as some households respond to high costs by self-rationing heating, increasing exposure to cold and contributing to excess deaths during colder periods.

Energy poverty can result in a continued reliance on traditional, inefficient energy sources. In many contexts, households depend on biomass fuels (such as wood, dung, or crop residues), alongside kerosene or candles, to meet basic energy needs. This reliance reflects limited access to reliable, modern energy services and results in multiple downstream impacts:

- c. Insufficient lighting, which constrains the ability to study, work or engage in income-generating activities during evening hours, thereby reinforcing educational and economic disadvantages
- d. Insufficient heating, leading to reduced household comfort and increased vulnerability to cold-related illnesses, particularly among children, older adults and those with pre-existing health conditions
- e. Indoor burning of dirty fuels without proper ventilation can expose households to particulate emissions which can have many long-term negative health impacts.

Studies suggest that \$26 trillion would be required to reduce energy poverty and sustain growth and development.¹³ Renewable energy and energy efficiency technologies will play a key role.¹⁴ In fact, the International Renewable Energy Agency (IRENA) reported that decentralised renewable energy systems can lower energy costs by up to 50% compared to conventional fossil fuel sources, making energy more affordable for low-income households.¹⁵

Here are some examples of the role of renewables in energy poverty alleviation:¹⁶

Renewable Energy Source	Poverty Reduction Mechanism	Example
Solar	Household electrification, productive use, job creation	Solar home systems in rural India provide lighting and power for small businesses.
Wind	Large-scale power generation, grid connection, industrial development	Wind farms in Brazil supply electricity to the grid and create jobs in manufacturing and maintenance.
Hydro	Water management, irrigation, power generation, infrastructure development	Micro-hydro projects in Nepal provide electricity for rural communities and support agricultural activities.

13 [Addressing energy poverty: Regional trends and examples of best practice - ScienceDirect](#) (2024)

14 significant regional heterogeneity exists in the relationship between renewable energy and poverty alleviation. Only in European countries can increased renewable energy significantly reduce energy poverty;

15 [The Role Of Renewable Energy In Mitigating Energy Poverty • Eeco.co.za](#) (2025)

16 [How Can Renewable Energy Reduce Poverty? Question](#) (2025)



A CASE STUDY IN CHINA¹⁷

In Gansu – the region with the lowest GDP – a sweeping renewable energy-driven poverty-alleviation plan is already taking shape. The programme hinges on a two-track strategy: Boosting household welfare while spurring provincial economic growth via clean power. To front-load the effort, the government subsidises solar-panel installations for largely low-income families. Households use the electricity for their own needs and sell any excess to the grid, securing a guaranteed payment of roughly 3,000 yuan (\approx US \$420) per year for the next 20 years.

Poverty (general)

Aside from improving accessibility and affordability of power, renewable energy can contribute to local economic growth through new job opportunities and economic productivity.

Job Opportunities

There is worry about the impact of the energy transition on employment. Yet, renewable energy firms are increasingly important employers, and the overall number of energy jobs is steadily rising. In 2023, there were 16.2 million global renewable energy jobs, up from 13.7 million in 2022. Almost half of them were in China, followed by the European Union, Brazil, the United States and India, which had between one and two million renewable energy jobs each.

There could be 43 million jobs in the renewable energy sector by 2050, more than the current levels of employment related directly to fossil fuels and outweighing expected job losses across all net zero scenarios. While these numbers do not address important distributional aspects of a Just Transition, they are nonetheless clear. Renewable energy jobs in a zero-carbon economy will be more abundant than fossil fuel jobs are in a business-as-usual scenario.¹⁸

Clean Energy Jobs in South Africa (2024/25)

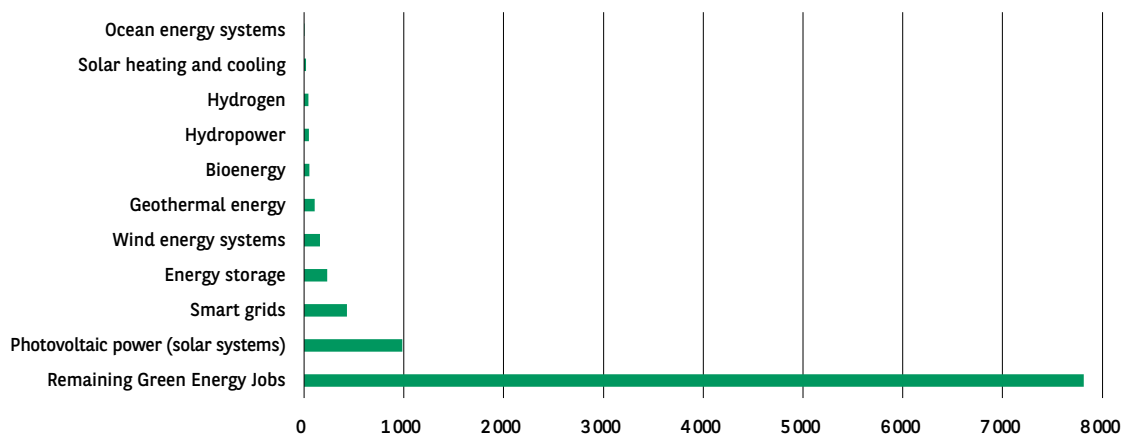


Image Source: [The-economic-benefits-of-renewable-energy-and-how-to-share-them.pdf](#) (2025)

17 [\[Blog\] Harnessing renewable energy for poverty alleviation: lessons from China | United Nations Economic Commission for Africa](#) (2025)

18 [The-economic-benefits-of-renewable-energy-and-how-to-share-them.pdf](#)



CASE STUDY: FUJIYAMA POWER SYSTEMS (UTL SOLAR)

Fujiyama Power Systems Ltd. is an India-based company engaged in the design, manufacturing and sale of solar energy and power-backup solutions. Its product portfolio includes solar panels, solar inverters, converters and UPS systems, solar batteries, and electric rickshaw chargers, which are used primarily in residential, commercial, institutional and off-grid applications.

Fujiyama Power Systems has established a complete ecosystem in the rooftop solar industry, integrating innovation, manufacturing, distribution and customer service to provide reliable solar energy solutions and promote renewable energy adoption through an extensive distribution network, including UTL Shoppe, which also empowers local entrepreneurs.

In the three financial years and three months ending June 30, 2025, **UTL Solar sold 1,727,114 solar panels (757.37MW), 662,393 solar inverters (1,544.09 MW), and 925,776 batteries (1,875.10 MWh), contributing to over 1 GW+ of off-grid, on-grid and hybrid solar rooftop installations across India.**

Source: Net Purpose (2026)

SPOTLIGHT ON GENDER INEQUALITY, POVERTY AND ENERGY¹⁹

The role of energy in achieving gender equality is still relatively unaddressed as most studies focus on “households” in general. This notion is supported by the SDGs: SDG 7 is one of the few that has no gender indicators. This means there is less data and fewer indicators available to measure impacts and guide programme design.

The missing link here is problematic, as the energy access deficit has profound gender implications. In particular, the care responsibilities of women and girls are directly impacted by energy deficits - from the time spent gathering fuel to the challenges of cooking, cleaning and caring without modern appliances or lighting.

These are more pronounced in the clean cooking sector, where lack of access places a particular burden on women who bear the primary responsibility for cooking, gathering fuelwood, collecting water and delivering childcare. In addition to direct exposure to air pollution, reliance on fuelwood is a major consequence of reliance on traditional fuels and technologies.

Additionally, electricity is a cornerstone of women seeking to pursue micro-enterprise opportunities, so when electricity is lacking, such opportunities are lost. Access to communication technologies is underpinned by electricity, particularly mobile phones and broadband. Providing women access to communications is essential to reverse the ‘digital gender divide’.

SDG 3 - HEALTH

Energy and Health

Energy isn't just a technical resource, it's a foundation for public health as, for example: 1) when integrated in everyday life, it directly improves living conditions; 2) energy security ensures access to quality medical care by providing, for example, reliability in performing various diagnostic procedures; 3) a constant energy supply is required to preserve medicines, blood and vaccines.

Energy enables the following, which are each fundamentally linked to improvements in global health:

Heating	Cooling	Education
Prevents illness and excess mortality	Reduces heat stress and death	Improves long-term health outcomes
Access to reliable, affordable heating protects people from cold-related health risks	Energy enables cooling systems like fans or air conditioning, which are critical as temperatures rise.	Energy powers lighting, digital tools and school infrastructure.
<p>Health link: Cold homes increase the risk of respiratory infections, cardiovascular strain and hypothermia</p> <p>Explanation: In low-income households, switching from intermittent or unaffordable heating to consistent central heating reduces hospital admissions for conditions like asthma and pneumonia, especially among older adults</p> <p>Research: In the UK in February 2026, the government issued its first Cold Mortality Report, which showed that 2,544 deaths in England were associated with cold weather across three cold episodes recorded between November 2024 and January 2025. Older people were most affected, with the risk rising steeply with age, especially in those aged 85 and over.²⁰</p>	<p>Health link: Extreme heat can cause dehydration, heat exhaustion and heatstroke, and worsens chronic conditions</p> <p>Explanation: During heatwaves, access to air conditioning significantly lowers mortality rates</p> <p>Research: In Spain, the Environmental Ministry declared that a two-month heatwave in summer 2025 caused 1,180 deaths in Spain. The vast majority of people who died were over 65 and more than half were women.²¹</p>	<p>Health link: Education is strongly linked to better health literacy, healthier behaviours and higher income (which improves access to care and nutrition)</p> <p>Explanation: Schools running on electricity can provide evening classes and digital learning programmes, increasing literacy rates and enabling people to better understand hygiene, disease prevention and medical advice</p> <p>Research: A 2019 study by Zajacova and Lawrence highlighted that more educated adults live healthier and longer lives compared to their less educated peers and the disparities are large and widening.²²</p>

20 [UKHSA publishes first Cold Mortality Report - GOV.UK](#) (2026)

21 [Heatwaves in Spain caused 1,180 deaths in past two months, ministry says | Reuters](#) (2025)

22 [The relationship between education and health: reducing disparities through a contextual approach - PMC](#) (2019)

Mobility Expands access to healthcare and opportunity	Nutrition Supports food safety and quality
Energy fuels transportation systems - public transit, ambulances and personal mobility	Energy is essential for cooking, refrigeration and food supply chains
Health link: Mobility allows people to reach healthcare services, jobs and social support networks	Health link: Safe food storage prevents spoilage and foodborne illness; clean cooking reduces indoor air pollution
Explanation: Reliable fuel/ electricity or public transport enables a pregnant woman in a rural area to reach a clinic in time for safe delivery, reducing maternal and infant mortality	Example: Access to electricity for refrigeration allows households to store fresh foods like vegetables, dairy and meat, improving diet quality and reducing malnutrition.
Research: An AIDATA study (2024) highlighted that a 1-standard deviation reduction in travel time translates to 9.3 fewer deaths per 1,000 live births. ²³	Research: The cold chain is the key to tackling the loss of perishable produce. In this regard, it is estimated that around a quarter of total food wastage in developing countries could be eliminated if these countries adopted the same level of refrigeration equipment as that in developed economies. ²⁴

The Effect of Fossil Fuel Generation on Climate Change & Health

Despite global climate and energy targets, fossil fuels still account for around 80% of the global energy mix.²⁵ The combustion of fossil fuels releases toxic pollutants that drive environmental degradation, ecosystem damage and water contamination. It also contributes to climate change, air pollution, acid rain, ozone depletion and deforestation, collectively exacerbating public health risks and increasing the burden of disease.²⁶

More specifically, exposure to these pollutants is associated with a wide range of adverse health outcomes, including respiratory and lung diseases, skin conditions, cardiovascular disease, increased morbidity, higher cancer incidence and premature mortality.

Climate change further compounds these risks through both direct and indirect pathways. Direct health impacts - such as heat-related illness during heatwaves - have been discussed

23 https://docs.aiddata.org/ad4/pdfs/WPS128_Transportation_infrastructure_and_child_mortality_Subnational_evidence_for_22_developing_countries.pdf (2024)

24 [How access to energy can influence food losses - A brief overview](#) (2016)

25 [Energy Mix - Our World in Data, Fossil fuel emissions rise again - but renewables boom offers hope for climate - BBC News](#) (2025) - although demand is expected to peak and potentially begin to decline in the near term.

26 [\(PDF\) Renewable Energy Consumption and Health Outcomes: Evidence from Global Panel Data Analysis](#) (2021)

above. Indirect impacts arise from broader ecological and societal disruptions, including food and water insecurity, the spread of climate-sensitive infectious diseases, population displacement, and reduced access to health services. Overall, climate change is projected to cause around 250,000 additional deaths annually between 2030 and 2050, largely due to malaria, diarrhoeal disease, heat stress and under-nutrition.²⁷

Taken together, this highlights the clear trade-off inherent in fossil fuel-based energy systems between the benefits of energy access and their substantial environmental and health costs.

The role of renewables in improving human health

Renewables preserve the benefits of energy provision while avoiding the severe health impacts associated with fossil fuel combustion. Unlike fossil fuels, renewable electricity generation emits no pollutant particulate matter (PM2.5), nitrogen oxides, or sulphur dioxide at the point of use.

Renewables also uniquely enable health-critical cooling without exacerbating pollution or climate risks. As heatwaves intensify, renewable-powered electricity allows cooling – such as air conditioning and hospital climate control – to expand without increasing local air pollution or greenhouse gas emissions, avoiding the feedback loop whereby fossil-fuel-based cooling worsens heat-related cardiovascular and respiratory health risks.^{28,29}

Empirical evidence from 155 economies (1990–2018) shows that higher renewable energy consumption is ultimately associated with higher life expectancy, lower mortality and reduced incidence of respiratory diseases such as tuberculosis, reflecting sustained improvements in ambient air quality rather than short-term emissions controls.^{30, 31}

Drawing awareness to these benefits improves public sentiment towards renewables adoption: Survey evidence from Saudi Arabia shows over 60% of respondents link renewables to lower respiratory illness, and over 90% associate them with reduced pollution-related healthcare costs, positioning renewable energy as a structural public health investment rather than a downstream mitigation tool.³²

27 [\(PDF\) Renewable Energy Consumption and Health Outcomes: Evidence from Global Panel Data Analysis\(2021\)](#)

28 [Knowledge and awareness towards the role of renewable energy in the prevention of disease: a cross-sectional study | Discover Public Health | Springer Nature Link \(2025\)](#)

29 [The interplay between energy technologies and human health: Implications for energy transition - ScienceDirect \(2023\)](#)

30 [\(PDF\) Renewable Energy Consumption and Health Outcomes: Evidence from Global Panel Data Analysis \(2021\)](#)

31 [The health benefits of solar power generation: Evidence from Chile - ScienceDirect \(2024\)](#)

32 [Knowledge and awareness towards the role of renewable energy in the prevention of disease: a cross-sectional study | Discover Public Health | Springer Nature Link \(2025\)](#)



CASE STUDY: NEXTPOWER

Nextpower Inc. develops and sells integrated solar tracker and software solutions used in utility-scale and distributed generation solar projects around the world. According to our impact data provider Net Purpose, the company enabled an estimated 57,318,063 MWh of renewable energy or electricity, which facilitated the potential avoidance of 16,966,147 metric tonnes of CO₂e. This coincidentally avoided 11,727 metric tonnes of NO_x emissions, 607 metric tonnes of PM_{2.5} emissions and 15,968 of SO₂ emissions. Cumulatively this contributed to the following social impact:



Health and wellbeing

Hospital visits avoided

182 units

Change vs prior year:
+29.23% YoY

Lives extended

973 units

Change vs prior year:
+29.23% YoY

Sick days avoided

97,306 units

Change vs prior year:
+29.23% YoY

Image and Data Source: Net Purpose (2026)

SDG 2 – ZERO HUNGER

Renewable energy offers a transformative pathway toward achieving Zero Hunger by strengthening agricultural productivity and enhancing the efficiency of food-value chains. At its core, the integration of renewable power into farming activities expands the capacity to produce food in several concrete ways:

1. Reliable, low-cost electricity enables the expansion of irrigation schemes that are no longer constrained by the intermittency or expense of diesel-driven pumps
2. It also makes it feasible to capture and reuse waste heat from processing facilities, turning what would otherwise be a loss into a source of thermal energy for drying crops or maintaining optimal temperatures in livestock housing. Moreover, agricultural residues and by-products from food processing – such as straw, husks, and peels – can be converted into bioenergy, providing a sustainable alternative to fossil fuels while simultaneously reducing waste
3. The adoption of LED lighting and the deployment of solar-powered greenhouse structures further extend the growing season and improve crop yields by delivering consistent, plant-friendly illumination and climate control, even in regions with limited sunlight or harsh weather conditions

4. Agrivoltaic systems give farmers a supplementary revenue stream, either by leasing land to solar-PV operators or by lowering cultivation costs when they retain the land for farming. These arrangements secure a predictable income and eliminate the need for farmers to finance the solar installations themselves
5. The shade created by solar panels shields crops, livestock and wild fauna from extreme heat and drought, while also reducing water-loss through evaporation. In aquaculture settings, elevated panels cool the water, leading to noticeably higher yields of species such as shrimp and sea cucumber.

Beyond production, renewable energy enhances the overall efficiency of food supply chains:

1. Electrified transport fleets reduce dependence on petroleum, lowering operating costs and emissions while improving the reliability of food distribution to remote markets
2. Processing facilities powered by on-site clean energy experience fewer interruptions, leading to higher throughput and better product quality
3. In cold-chain logistics, renewable-driven refrigeration preserves the nutritional value and safety of perishable goods, diminishing post-harvest losses that often exacerbate food insecurity.

Despite these benefits, several barriers impede the widescale adoption of renewable technologies in agriculture.

- The initial capital outlay for solar panels or bioenergy installations can be prohibitive for smallholder farmers, especially where credit markets are underdeveloped
- Policy environments are frequently fragmented, with energy, agriculture, climate and water regulations operating in silos, which creates uncertainty and discourages investment
- Limited financial support mechanisms, coupled with insufficient awareness and technical expertise among farmers and local service providers, further slow progress
- Additionally, large renewable-energy projects can unintentionally compete with productive land if they are not planned with an integrated land-use perspective, a concern that is especially acute in regions where arable land is scarce.

Addressing these challenges demands coordinated spatial planning, supportive policy frameworks, and capacity-building initiatives that empower agricultural communities to harness clean energy responsibly and effectively.



Solar photovoltaic panels rise above an aquaculture farm in Dongying City, Shandong Province, China. The panels, which not only produce enough energy to power 113,000 houses, help cool waters which has helped to boost shrimp and sea cucumber yields by 50%.



Livestock are shaded by the solar panels installed above this livestock grazing project in Inner Mongolia, China. Dividends from power sale revenue and the land leased to the livestock company have provided income to the herders and the local community.



CASE STUDY

Lineage is the world's leading provider of cold storage or temperature-controlled warehouses, offering secure storage and handling for goods that require or benefit from refrigeration or freezing, particularly food products.

The lack of effective refrigeration led to the loss of approximately 526 million tonnes of food in 2017, accounting for 12% of global food production. Only about 45% of the food that required refrigeration worldwide was refrigerated, and the emissions from food loss and waste due to lack of refrigeration totalled an estimated 1 gigatonne of carbon dioxide CO₂e in 2017. Adopting the cold chain, an uninterrupted system of temperature-controlled transport and storage for refrigerated food from producers to consumers, can significantly reduce these emissions while preserving product quality and safety.

An improved food cold chain can enhance food access and availability for human consumption, potentially redistributing food to combat global hunger while also reducing CO₂e emissions from food loss and waste. However, according to the UN, expanding cold chains using conventional fossil fuel-based technologies could significantly increase cooling emissions, offsetting the benefits of reducing food loss-related emissions. Therefore, while cold chains could help meet the challenge of feeding an additional two billion people by 2050, adopting sustainable cold chain solutions is recommended to ensure a holistic contribution to the SDGs.



Circular economy

Food waste or loss avoided:

4,888,797
metric tonnes

Change vs prior year: 0.0% YoY

Image Source: Net Purpose (2026)

CONCLUSION

Global decarbonisation is not only an environmental imperative but a powerful catalyst for social progress when designed and implemented through a Just Transition lens. Across energy poverty, health and food security, this paper has shown that clean energy systems can deliver faster, more tangible benefits for people than climate outcomes alone – improving living conditions, reducing mortality, strengthening food systems and expanding economic opportunity.

At the same time, the analysis makes clear that these benefits are neither automatic nor evenly distributed: Poorly designed climate policies risk exacerbating inequality, while persistent social fractures can undermine political and societal support for climate ambition.

Unlocking the full potential of global decarbonisation therefore requires an integrated approach that recognises social outcomes as both a driver and a prerequisite of climate success. For investors, policymakers and companies alike, aligning decarbonisation strategies with measurable social impact is not only essential for legitimacy and resilience, but central to delivering a sustainable economy that works for both people and planet.

About the authors



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Alexandra is the Environmental Analyst in the Environmental Strategies group with responsibility for the investment groups environmental reporting and part of the steering-group of the firms work and innovation on environmental issues, regulation and policy in collaboration with the firm's sustainability centre. Having a keen interest in the natural environment, Alexandra worked in Fiji as an assistant marine researcher in 2018 and later joined Magellan Advisory Partners (2020) and was an ESG analyst at Acasta and Gneiss Energy (2022). She holds an MSc in Environmental Economics and Environmental Management from University of York.



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Sindhu has extensive experience in driving sustainable performance in the private sector, leading ESG research and developing partnerships with NGOs. In 2020, he co-founded Refugee Integration Insights (RII), the first specialised provider of private sector refugee data and insights. Through RII he facilitated sustainable solutions to the growing refugee crisis by providing investors and other organisations with the information needed to track and assess corporate refugee action using quantitative & qualitative metrics. Prior to RII, Sindhu was a Senior Associate with PwC Advisory Financial Services where he executed large-scale technology change programs for financial services clients.

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April 2026 - Design: CREATIVE SERVICES BNPP AM - P260404

VIEWPOINT



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