

[View this email in your browser](#)



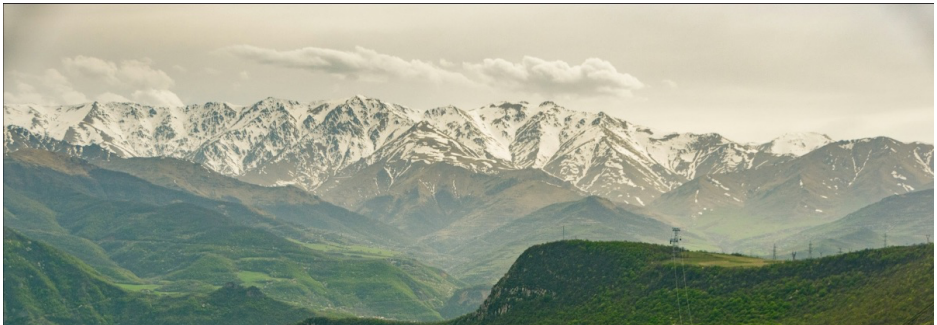
Where finance and green technologies meet

GEFF in Armenia Newsletter N20: Q4, 2023

Key results as of 31 December 2023

- GEFF in Armenia has financed **353 projects worth €30.59 million** through five Partner Financial Institutions (PFIs), thus reducing primary energy usage by **148,774 MWh/year**, saving **34,266 tonnes of CO₂ annually** and **5,653 m³/year of water savings**.
- **46.32 MW installed capacity** of renewable energy projects makes it **possible to avoid a further 26,572 tonnes of CO₂ annually**.
- **1,266 EE and RE technologies provided by 182 vendors from 21 sites** throughout Armenia are now available via [Green Technology Selector](#).

GEFF in Armenia celebrates 5 years of environmental triumphs and economic contributions





Over the past five years, the Green Economy Financing Facility (GEFF) by the European Bank for Reconstruction and Development (EBRD) has played a pivotal role in Armenia's journey towards a sustainable green economy. At the forefront of this transformation are the remarkable achievements that have not only bolstered environmental sustainability but also made significant economic contributions. The success story is a testament to the collaborative efforts of a dedicated team of consultants, comprising local and international experts, engineers, finance specialists and marketing professionals as well as strong interest and commitment from the local Partner Financial Institutions (PFIs).

Through its financed projects, GEFF in Armenia has achieved a reduction in primary energy usage of 148,774 MWh/year and a saving of 34,266 tonnes of CO₂ annually, which is the equivalent of almost 8,000 fossil fuel-powered cars not being driven for one year, thus saving 5,653 m³/year of water.

One of GEFF's standout accomplishments is its pioneering role in the development of the Solar PV market in Armenia. GEFF was the first mover in this sector, spearheading initiatives that have had a transformative impact. Notably, the share of net-metering solar PV stations financed by GEFF in Armenia is now an impressive 18% of the total installed capacity in Armenia of the same kind, with 283 projects financed and a total installed capacity of 46.32 MW. This success spans various sectors including agriculture, manufacturing, wholesale and retail trade, food processing, tourism and real estate. The results also showcase GEFF's regional outreach in fostering sustainable energy solutions, as 62% of these projects were implemented in rural Armenia.

Highlighting the breadth of impact, GEFF's portfolio boasts a diverse range of projects, with the smallest loan standing at €2,500 and the largest at €860,000. This significant range underscores GEFF's commitment to inclusivity, ensuring that projects of all sizes contribute

to the broader goal of transitioning to a green economy. The success of GEF in Armenia is not confined to the financial realm but is deeply rooted in tangible, on-the-ground impact.

Beyond financial support, GEF has been instrumental in creating knowledge products that raise awareness and promote sustainable practices and the use of high-performance technologies. Through case studies, workshops, training sessions, educational videos and events, GEF has fostered a culture of environmental responsibility and green innovation.

A noteworthy aspect of GEF's impact is its dedication to inclusive green finance. By specifically targeting women in business and addressing their unique needs, GEF has played a crucial role in empowering women entrepreneurs. An online conference with over 200 attendees was organised for Women in Business in Armenia, a series of training events with over 60 women learning about green finance and how it can help their businesses, followed by one-on-one coaching sessions and energy audits for select participants. This approach not only contributes to gender equality but also enhances the overall impact of green finance on the community.

In celebrating five years of environmental triumphs and economic contributions, GEF in Armenia stands as a shining example of how concerted efforts, strategic investments and a commitment to sustainability can lead to transformative change. As the region continues to benefit from GEF's initiatives, it is clear that the success of the past five years is a stepping stone toward a greener and more sustainable future for Armenia.

Armenia's National Sustainable Finance Roadmap unveiled



The Central Bank of Armenia (CBA) introduced a National Sustainable Finance Roadmap in October 2023, underlining a strategic commitment to sustainability in the financial sector through four key pillars. Governor Martin Galstyan emphasised the pivotal role of sustainable finance in supporting Armenia’s economic growth, reducing environmental pressures, and enhancing social and governance factors. Acknowledging positive momentum from commercial banks, there is a realisation that the entire financial system must contribute to steering the country towards sustainable growth.

The call for a sustainable finance framework addresses a substantial funding gap for sustainable development. Challenges include complexities in estimating the funding shortfall due to taxonomy, methodology, and data issues. Addressing this, the roadmap outlines a blueprint for the CBA’s expectations, emphasising the incorporation of environmental, climate, social, and governance risks by Financial Market Participants (FMPs) into their core processes.

The roadmap’s four pillars—MOBILISE sustainable finance and funding, ENHANCE Markets, EMBED Sustainable Finance, and BUILD awareness, capacity, and knowledge—capture key initiatives for achieving sustainable finance objectives.

MOBILISE focuses on facilitating capital flow aligned with low-carbon ambitions, introducing innovative financial instruments like Green, Blue, Social, Sustainability, and Sustainability-linked loans and bonds. ENHANCE Markets aims to create a Central Sustainable Finance Database and design progress tracking frameworks. EMBED Sustainable Finance concentrates on establishing a robust supervisory framework within the CBA, guiding FMPs in integrating ESG factors. The fourth pillar, BUILD awareness, capacity, and knowledge, focuses on raising awareness and enhancing knowledge on sustainability risks and opportunities.

Collectively, the roadmap and its pillars signify a comprehensive approach, ensuring ESG considerations are at the core of financial decision-making. The CBA encourages financial market participants to actively engage in this journey, reflecting Armenia's commitment to sustainable practices. For further details, access the document [here](#).

Armenia joins International Solar Alliance

On 16 November 2023, a significant step towards sustainable and renewable energy development was taken as Armenia officially joined the International Solar Alliance. The official signing ceremony of the Framework Agreement on the Establishment of the International Solar Alliance by Armenia took place at the Ministry of Foreign Affairs in Yerevan.

The ceremony was graced by the presence of Gnel Sanosyan, Minister of Territorial Administration and Infrastructure of the Republic of Armenia, alongside the Ambassadors of the co-founding countries of the International Solar Alliance—Ambassador of France Olivier Decottignies and Ambassador of India Nilakshi Saha Sinha.

Armenia's accession to the International Solar Alliance holds immense significance, marking a decisive move in the global effort to combat climate change, develop renewable and green energy resources, and enhance energy access and security.

The International Solar Alliance, conceived in 2015 during the 21st Conference of the

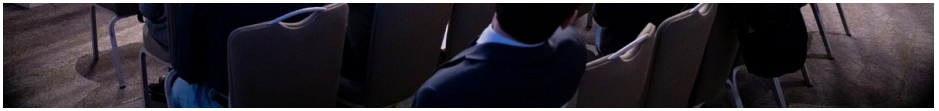
United Nations Framework Convention on Climate Change (COP21) in Paris, is a collaborative initiative between India and France. In 2020, amendments to the Framework Agreement opened the opportunity for all UN member states to join the Alliance. Presently, 116 states have signed the Framework Agreement, with 94 submitting ratification documents to become full members. The Assembly, consisting of relevant ministers from member states, serves as the decision-making body, convening annually. The Alliance's headquarters are situated in India.

Renewable energy, particularly solar energy, is a pivotal focus in Armenia's energy system development. Currently, more than 5% of the total electricity generated in Armenia is derived from solar plants, and the country's strategic energy development program aims to increase the share of solar energy to 15% by 2030. Armenia's proactive involvement in the International Solar Alliance aligns with its commitment to a sustainable and greener energy future.

GEFF in Armenia has contributed to developing the solar energy market significantly during the last 5 years by financing over 280 solar PV projects.

Highlights from Armenia's Energy Week 2023





Armenia's Energy Week 2023 concluded with resounding success, leaving a mark on the nation's sustainable energy landscape. Spanning from 28 November to 2 December, this year's forum expanded its reach, hosting events across four cities: Yerevan, Tsaghkadzor, Dilijan, and Gyumri. Organised by USAID and the R2E2 Fund, the week-long initiative showcased a diverse and comprehensive agenda tailored to regional nuances. The GEFF in Armenia team actively engaged in the Yerevan event on 28 November.

The forum boasted a distinguished lineup of 35 speakers, a dynamic five-day programme, and a turnout of 250 attendees. Day 1 in Yerevan set the tone, focusing on Armenia's renewable energy sources and energy efficiency development perspectives, with insightful discussions on fundamental reforms in Armenia's new law on electricity. A panel discussion on green finance market development delved into the associated challenges, needs, and opportunities, further enhanced by a session on reliability assessments for potential wind power electricity generation projects in Armenia.

The following two days in Tsaghkadzor were dedicated to the sustainable development of local communities. Discussions centred on the vast opportunities and potential for renewable energy and energy efficiency in communities. Delving into climate policy planning at the community level, the sessions provided a deeper understanding of Armenia's non-conventional solar power resources. Special case studies highlighted solar energy projects and public infrastructure initiatives, including energy-efficient buildings and circular economy projects. The day concluded with presentations on co-financing opportunities for communities, including the R2E2 Fund's community grant programme.

Day 4, held in Dilijan, continued the momentum with follow-up discussions on reforms and the new law on electricity, renewable energy and energy efficiency. During the course of the day valuable feedback was collected from participants.

The grand finale unfolded in Gyumri, featuring a hackathon, masterclasses, and mentorship opportunities. The week culminated in an award ceremony recognising outstanding contributions and innovative ideas.

Through presentations, panel discussions, and working sessions, participants cultivated a collective understanding of innovative financing and business models, considering both environmental and social impact. Mr Gernot Kuhlisch, Project Manager of GEFF Caucasus, emphasised this as a crucial step towards catalysing resources for sustainable infrastructure development in the region.

These industry events serve as crucial platforms for innovation, idea exchange, and heightened awareness, contributing significantly to the transition towards a green economy. GEFF in Armenia, a consistent and active participant, plays a pivotal role in shaping the discourse and fostering sustainable practices within the nation's energy sector. The success of Energy Week 2023 reflects not only on the event's organisers but also on the collective dedication towards a more sustainable and environmentally conscious Armenia.

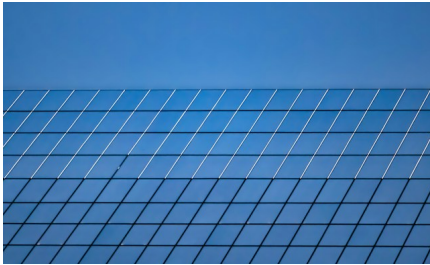
Featured technology:

Fuel cell CHP

Fuel cell combined heat and power (CHP) systems represent a cutting-edge technology revolutionising energy production and efficiency. These systems seamlessly integrate electrochemical processes to convert fuel, such as hydrogen or natural gas, into electricity, heat, and usable thermal energy. By harnessing the power of fuel cells, CHP setups boast exceptional efficiency levels, often exceeding 80% of total efficiency, far surpassing conventional power plants. Their decentralised nature enables them to be deployed across diverse settings, from residential homes to industrial complexes, offering the dual benefit of generating electricity while capturing and utilising the generated thermal energy for various heating needs. This symbiotic energy production not only reduces carbon emissions significantly but also demonstrates a compelling step toward sustainable, decentralised energy solutions for a greener future. In recent years, fuel cell CHP technologies have been most widely developed for home use, where using natural gas or biogas it is possible to produce electricity and thermal energy simultaneously.

Please browse our the [Green Technology Selector](#) to find different models of fuel cell CHPs.

Success story



Established in November 2003, VEGA company is the largest retail network in Armenia, selling electronics, household and computer equipment, high-quality furniture, textile products, tools, home

accessories, as well as bicycles, stationery and toys. It has 21 hypermarkets and stores, 8 of them in Yerevan. Demonstrating their commitment to sustainability, the management has made a forward-thinking decision to invest in a 341 kW rooftop solar photovoltaic station to meet internal energy needs.

Investor

Vega World LLC

Location

Yerevan, Armenia

Investment

Solar PV Station

Investment size

US\$ 90,000

Payback period

3 years

Energy savings

637.84 MWh/year

CO₂ savings

101.6 t/year

Impact

Energy savings

Donors

GCF, CIF

Supported by:





Copyright © 2024 GEFF in Armenia, All rights reserved.

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe from this list](#).