GEFF Green Economy Financing Facility

European Bank for Reconstruction and Development

Where finance and green technologies meet

GEFF in Armenia Newsletter N15: Q3, 2022

Key results as of September 30, 2022

- GEFF in Armenia has financed 328 projects worth EUR 27.78 million through four Partner Financial Institutions (PFIs), thus reducing primary energy usage by 126,762 MWh/year, saving 29,353 tonnes of CO_2 annually and 5,653 m³/year of water.
- 44.59 MW installed capacity of renewable energy projects makes it possible to avoid 24,907 tonnes of CO_2 annually.
- 1,342 EE and RE technologies provided by 177 vendors from 21 sites around Armenia are made accessible through the Green Technology Selector.

New climate governance network for businesses in Armenia, Georgia and Ukraine. What are the benefits?

The EBRD is backing the establishment of a new chapter within the Climate Governance Initiative partnership. The aim is to promote understanding and adoption of effective climate governance.

Board members and executives of financial and non-financial corporations from Armenia, Ukraine and Georgia can now join a new chapter of a global network promoting the understanding and adoption of effective climate governance.

The new chapter will help business leaders from Ukraine and the Caucasus region to share knowledge and exchange experience on climate-related risks, governance, and disclosure frameworks, as well as ways in which they can shape their corporate strategy and investments as businesses move strategically towards a net-zero economy.

Ukrainian, Armenian and Georgian companies that are able to demonstrate that they follow sustainable business practices already attract foreign investment more easily. Chapter Zero Ukraine & Caucasus will focus on spreading this practical knowledge and expertise on climate governance to connect businesses in these countries more strongly to international markets and capital.

Karina Litvack, Chairman of the Climate Governance Initiative, said: “Chapter Zero Ukraine & Caucasus is a vital resource to enable directors to acquire the competencies they need to place the climate transition at the heart of board strategy, culture and routine decision-making. By joining, they will access an instant fellowship of like-minded directors, as well as experts in key areas of strategy, risk management, audit, remuneration and reporting.”

The EBRD supports the establishment of this new chapter as part of a partnership with CGI to enhance boards' understanding of how climate risks could affect their business in key regions of focus for the Bank.

Read the full article, here.

Three ways good design leads to well-being in the workplace

In conducting their internal research, the American Society of Interior Designers (ASID) found that well-being in the workplace stems from good design. After moving to a new office certified by WELL (International WELL Building Institute certification) and LEED (Leadership in Energy and Environmental Design certification), the ASID made it a mission to find out how the design of the new workplace affected its workers.

Overall, the new space, which achieved "Platinum" ratings under both LEED for Commercial Interiors and the WELL Building Standard, showed immense improvements (acoustics improved by 50%, lighting by 63%, and ventilation by 158%).

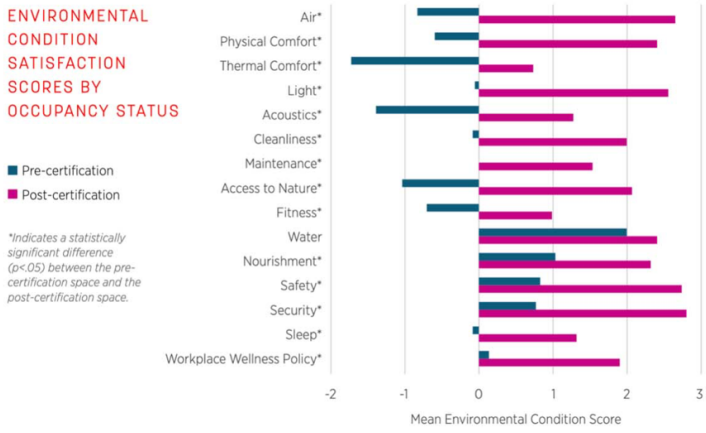

Photo: American Society of Interior Designers

The ASID implemented an **air filtration design that purifies outdoor air and recirculated air,** as well as a ventilation design that regulates the ventilation rate of outdoor air to keep carbon dioxide (CO_2) levels in the space low. Indoor air circulation is an important issue when it comes to the interior climate.

If the budget allows (and with the new office buildings being developed by larger construction companies, it should), developers should go for a more sophisticated ventilation system that ensures a **good balance of air-in, air-out and heat recovery**. In order to keep the energy use of ventilation systems low, developers might opt for an electric motor, which is at least 20% more efficient than its standard counterpart.

The dramatic improvement in thermal comfort is also worth mentioning. The ASID reported that compared to their previous office, the temperature was increased from 23.2 to 23.8°C. It may not seem like much, but even a difference of 0.6 degrees can have a significant impact on the environment as a whole. First and foremost, installing a heating/cooling system means that the indoor temperature can be controlled. There is no need to open the windows when it gets too hot, thus causing heating energy loss, or close them when it gets too cold, leaving the indoor workspace without ventilation.

The third thing to consider is **lighting**. In an ideal world, **lighting should replicate the natural daylight cycle, which is warmer in the morning and cooler in the afternoons and evenings**. Today's LED lighting systems can change colour as the day progresses.

Offices no longer have to be associated with uncomfortable fluorescent lighting. Incidentally, a quarter of the employees at the ASID claimed that better lighting during the day at their new workplace improved their sleep quality at night.

In the research conducted by the ASID the positive response was overwhelming:

- Collaboration improved, with 71% of employees agreeing with the statement, “My workplace helps facilitate communication between employees.”
- Absenteeism dropped dramatically, from a score of –0.025 (indicating employees were working 2.5% less than expected) to a score of 0.16 (employees were working 16% more than expected).
- “Presenteeism,” a self-assessment of productivity, increased 16%.

The impact of the design is intangible and has more to do with the experience that people have in the space. Thoughtful design can support organisational priorities such as employee health, productivity, and financial return. A well-designed and equipped workplace might even contribute positively to employee retention, which is crucial in today’s economy, where professionals are hard to find.

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11 new solar power plants are financed in Armenia

US$ 37 million are committed to finance the construction of 11 solar power plants with a

total capacity of up to 65 MW in the Gegharkunik and Aragatsotn Regions of Armenia by the Eurasian Development Bank (EDB). All facilities are scheduled to be commissioned this year.

Developing renewable energy (RE) sources is a priority of the Armenian government's energy strategy and is enshrined in the nation's 2021–2040 Energy Strategy.

The potential of solar power plants in Armenia is estimated at 8 GW. The average annual sunshine is 2,700 hours while the average annual solar radiation falling on a horizontal surface is about 1,720 kWh per m^2 (the European average is 1,000 kWh per m^2). A quarter of the country is endowed with solar energy resources of 1,850 kWh per m^2per year.

"Today, Armenia's energy system is based on thermal, nuclear and hydroelectric power. Natural gas remains the largest source of total energy supply and the main energy carrier in total final consumption. According to our strategy in Armenia, the EDB focuses on distributed solar power projects and the construction and modernisation of hydropower facilities. The Bank's objective until 2026 is to help diversify the country's sources of electricity generation. In doing so, we not only increase the reliability of the energy system, but also significantly improve the environment by reducing carbon emissions," said Nikolai Podguzov, Chairman of the EDB Management Board.

The development of these solar projects should allow Armenia to be both more independent and more energy efficient.

Featured technology:

Heating systems

Heating is not only important for keeping the indoor climate of a building warm, but also protects building structures from premature aging due to excessive humidity. Winter is associated with higher utility bills, but there are ways to reduce this expense. Investing in a quality heating system can save costs in the short-term and long-term alike.

See which energy efficient technology suppliers are available on the Armenian

market through the Green Technology Selector.

Success story

Photo by Erwan Hesry on Unsplash

Nairi Land LLC produces more than 15 varieties of ice cream, as well as chocolate dragées and chocolate paste. To expand its product range, the company decided to equip the chocolate workshop with a line for the production of chocolates and bars.

View more success stories on our website.

Investor

Nairi Land LLC

Location

Aragatsotn region

Investment

Production line for chocolates and bars

Investment size

US$ 108,350

Energy savings

8.3 MWh/year

CO_2 savings

2.04 tCO_2/year

Impact

Increasing the range and quality of products

Donors

GCF, CIF

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