



Green  
Economy  
Financing  
Facility



**European Bank**  
for Reconstruction and Development

## Where finance and green technologies meet

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### New standards for the construction industry

The construction and development sector is preparing for new regulations to come into force. From 1 July, [minimum energy efficiency standards](#) will apply to all new buildings, regardless of the type of ownership. If a private or public building is larger than 50 square meters, it must meet minimum energy efficiency requirements.

The new regulations not only set parameters for the energy efficiency of buildings, but also determine the standards for installation of their engineering and technical systems. The goal is to improve energy efficiency and cost effectiveness, as well as reduce greenhouse

gas emissions (GHGs).

The new requirements will apply to both residential and non-residential buildings, such as administrative buildings, educational facilities, hotels, medical establishments, etc. Furthermore, they apply to all stages of construction, from the project development stage through to final utilisation.

The new set of requirements divides the country into three climatic zones, each with its own detailed, numerical requirements. First and foremost, the requirements define (1) the maximum thermal transmittance for various part of the structure. Generally, the lower the transmittance value, the less energy is needed to heat the place or keep it warm. For instance, the values for a building's outside walls are lower in the colder or more mountainous regions (Climatic zone 3) than in warmer regions (Zones 1 and 2).

The next set of requirements concerns parameters that ensure comfortable temperatures inside the building. Specific temperatures (in °C) are fixed that should be maintained to avoid condensation and freezing. A document detailing the regulations is available [online](#), but currently only in Georgian.

As already mentioned, each standard outlined in the new regulations, comes with fixed numerical values: requirements for shading and sun protection devices, all pumps and circulating devices, heating, cooling and water supply systems, ventilation, lighting and many more.

In order to make it easier to obtain a permit, the Ministry of Economy has developed a special software that helps identify whether construction materials and technologies are compatible with the new requirements. The software also enables the printing of a declaration of adherence, which can then be submitted to the regulatory body that issues the permits. Exactly when the software will be available for use is currently unclear.

The next stage in introducing minimum standards for the energy efficiency of buildings is the assignment of energy classes. The Ministry of Economy is already working on the list, which is expected to be ready by the end of the year. According to the Ministry, a building with minimum energy efficiency standards will be classified as 'D' in the future, while more efficient buildings will be assigned an A, B or C class. After the implementation of the changes, the presentation of the energy class certificate will be mandatory, particularly when selling/renting the building or premises.

While regulations provide a fundamental tool for creating better living and working conditions, they might pose some challenges in the short run. As the general director of

Archi, one of the largest developers in Georgia, states, the adoption of new regulations might result in construction costs rising by 3-5%. While this might inevitably cause home prices to rise, the long-term value provided by an energy-efficient home (utility costs savings, better standard of living, etc.), should offset this small increase.

The new regulations might also affect how banks do business. Financial institutions may have to update their procedures and only finance projects that have been granted a certificate. However, there could be an opportunity to offer better financing terms for A and B class buildings, thereby strengthening their commitment to sustainable banking practices. Favourable terms might also be extended to mortgage borrowers who choose to buy a more efficient home.

In general, however, these new construction regulations are clearly a favourable development. They are intended to protect the health, safety and welfare of building users. They are also designed to improve the conservation of resources, and are a great way to promote sustainable development.



## Visible effects of climate change in Georgia

Rain is generally a blessing, especially during the summer and during prolonged periods of drought, which are not uncommon in Georgia. Rain is needed for irrigation, filling lakes and streams, but excessive rainfall can sometimes do more harm than good.

Eight years ago, in 2015, a flood caused when the river Vere overflowed killed more than 20 people in Tbilisi and injured more than 1,000. About 200 families were left homeless,

and more than 281 animals were killed when the flood reached the zoo. The damage to infrastructure was enormous.

This June, most of Georgia has had rain almost every single day or night. While nothing of the scale described above, heavy rains, accompanied by strong winds, damaged a number of mobile properties in Tbilisi. In the regions, particularly Kakheti, the damage is far more serious. In Kvareli municipality, numerous homes were flooded and mobile property damaged when the river Patmasuri burst its banks. Another disaster occurred in Gurjaani, where the flood damaged a local agrarian market, affecting the livelihood of local farmers.

Heavy rains also hinder communication. Because of the heavy rains, the Rikoti pass that connects the West to the rest of Georgia was closed off, causing an range of issues from delayed supplies, to disrupting entire chains. Furthermore, heavy rain can damage crops, delay harvests, exacerbate soil erosion, damage machinery, etc.

Scientists believe that global warming induced by human activity is causing this increase in rainfall. As the United Nations' Intergovernmental Panel on Climate Change (IPCC) [synthesis report](#) claims, "evidence of observed changes in extremes, such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and in particular their attribution to human influence has further strengthened since 2014". The simple principle is that hotter air can retain more water vapor, which in turn means more water for rainfall or snow. According to the IPCCs synthesis report, "global surface temperature has increased faster since 1970 than any other 50-year period over at least the last 2,000 years".

It is clear that cutting down on greenhouse gas emissions is crucial. Switching to technologies in manufacturing that use less energy will in turn decrease the overall level of CO<sub>2</sub> emissions – as was the case of [AMB alloys](#), which purchased an energy-efficient furnace. [JSC Graali-92](#), is another great example of a business switching to renewable sources of energy, thereby not only contributing less to global warming, but decreasing their monthly utility costs. The construction industry, one of the largest contributors to global emissions, can also greatly improve its impact by incorporating energy efficient technologies and materials in its projects.

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## GEFF's new green mortgage initiative

Construction projects make up a large portion of the GEFF portfolio in Georgia. Since 2019, GEFF has financed several residential and office buildings, as well as hotels and

guesthouses across the country. Financing via the GEFf implies a minimum 20% improvement in energy efficiency, thanks to the high-performance technologies used in GEFf-financed construction projects.

Now, GEFf in Georgia is giving development companies the opportunity to show their commitment to sustainability while attracting environmentally conscious tenants, investors and partners.

From May 2023, the Facility is issuing building assessment documents to all construction projects that meet pre-defined GEFf criteria. The methodology was developed by GEFf engineers who analysed the current and anticipated requirements for construction projects in Georgia. The assessment takes into account the U-values (rate of transfer of heat through a structure) for walls, floors, roofs, windows and doors, and is adapted to Georgia's three climatic zones.

**Benefits for developers.** Obtaining an assessment that shows adherence to energy efficiency standards demonstrates a company's commitment to sustainability and environmental responsibility, thus improving its public image and reputation. In an era where consumers are likely to prioritise eco-friendly businesses, this can be a crucial competitive advantage, attracting environmentally conscious clients and partners.

Another boost for a company's reputation is having a certified assessment from a well-established institution that aims to "green" the majority of its business by 2025. EBRD has long committed to greening its portfolio and continues to provide financing for environmentally friendly technologies and green projects throughout the world. A GEFf assessment is one of the ways the EBRD ensures that financed buildings meet its rigorous environmental standards.

Unlike many others, a GEFf assessment is **free of charge**. Expert engineers evaluate the whole building, looking at various parameters, and calculate its energy consumption along with the energy-efficiency class it falls under.

**Benefits for building users.** Living and working in energy-efficient buildings has many advantages. An energy-efficient heating and/or cooling system consumes less energy, triple glazed windows ensure no heat escapes in winter, and the building stays cool in the summer. All of this results in lower utility charges each month, decreasing the overall cost of living or working – translating to long-term financial savings and improved affordability.

Furthermore, energy-efficient buildings often improve indoor air quality and occupant comfort by means of efficient ventilation systems, natural lighting and the use of low-

toxicity materials. This creates a healthier and more comfortable living or working environment, enhancing productivity and overall well-being.

Lastly, the resale value of an energy efficient home is higher than its traditional, inefficient equivalents.

For details on GEF's new green mortgage initiative, please feel free to [contact](#) our team.



### **EBRD board of directors visit Georgia**

Representatives of the EBRD's Board of Directors, who represent the Bank's shareholders, visited Georgia on 19-23 June to meet with government, businesses and civil society representatives.

Thursday, 22 June, Georgian President Salome Zourabichvili discussed the bank's support in Georgia's European integration with the members of the Board of Directors. According to the President's press office, the meeting covered Georgia's European integration path and challenges in the region, as well as the EBRD's role in enhancing the nation's function as a connecting link between Europe and Asia.

Another meeting took place with the Prime Minister of Georgia, Irakli Gharibashvili. The Government of Georgia praised the 283 projects financed by the EBRD and expressed the hope that productive cooperation will continue well into the future. The dignitaries also spoke about large infrastructure projects that are being implemented in the country to increase Georgia's level of energy security and energy independence.

The delegation also had the opportunity to travel to regions outside the capital, visiting

several projects financed by the Bank. The trip gave the Directors an opportunity to see the impact of EBRD investments first hand.

### Featured technology:

#### Biomass boilers

Biomass boilers are a low-carbon, renewable energy source which burns plant material to generate heat and electricity. A biomass boiler can burn pellets, logs, wood chips or other biomass fuels and can be connected to a central heating system. This technology is a great way to not only eliminate agricultural waste, but use it to create energy and save on costs.

See which energy-efficient technology suppliers are available on the Georgian market in the [Green Technology Selector](#)

## Success story



Shtori Ltd is a local company actively involved in the agriculture business.

The company owns large areas of corn growing land in the east of Georgia and in 2023, it decided to invest in a pivot irrigation system that will supply water to an area of 170 hectares.

View more success stories on our [website](#).

#### Investor

Shtori LTD

#### Location

Pshaveli, Kakheti

#### Investment

Pivot irrigation system

#### Investment size

US\$ 62,000

#### Energy savings

247 MWh per year

### CO<sub>2</sub> savings

100 tonnes per year

### Cost saving

US\$ 30,000 per year

### Impact

Soil preservation, efficient use of resources

### Donor

GCF, BMF

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