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# **“De-Risking and Scaling-up Investment in Energy Efficient Building Retrofits” project proposal**

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**Local Project Appraisal Committee  
UN House Conference Hall  
Yerevan, Armenia  
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# Local Project Appraisal Committee

## Present the to the stakeholders parties

- Project's objectives
- Activities envisaged and results expected
- Cooperation framework
- Account for the recommendations within activity planning and consider comments in the proposal



# Green Climate Fund

- Established by the decision 1/CP.16 of CoP of UNFCCC held in 2010 to provide finance for greenhouse gases emissions reduction and to implement climate change adaptation measures in developing countries
- Reports to the CoP of UNFCCC, is managed by its Board that consists of 18 members selected by the Parties to UNFCCC and of the same number of alternative members
- The Secretariat of the GCF is palced in Songdo, Incheon, Republic of Korea.



## Green Climate Fund

- As of May 2015, about 10.2 billion USD was pledged to GCF from 33 countries, including 8 developed
- It is envisaged that after 2020 annual mobilization will reach to about 100 billion USD
- As of 2015, 20 partner institutions, including UNDP have become accredited entities to the GCF
- First GCF project applications shall be discussed at the session to be held in Zambia in this November

# “De-Risking and Scaling-up Investment in Energy Efficient Building Retrofits” project proposal

**The project environment objective is to** achieve reduction of greenhouse gas emissions,

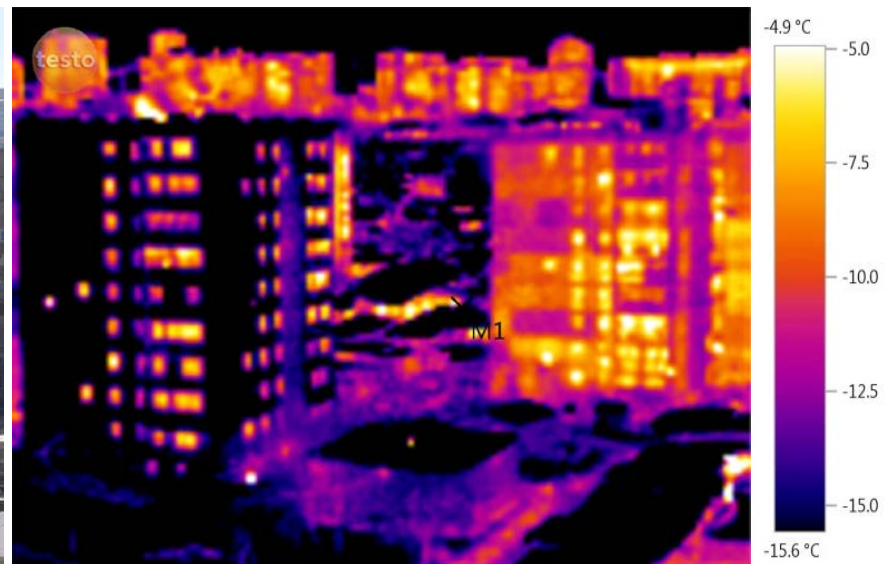
**Where:** residential and public buildings,

**How:** thermal insulation and improved energy efficiency

**Toolkit:** complex measures including legal, organizational, combination of grant and loan financial resources, active involvement of municipalities and private sector

# Why in Buildings

- In Armenia, about 24% of total greenhouse gas emissions originates from energy use in buildings
- About 30% of Armenian residents are considered in energy poverty,
- More than half of energy consumed in buildings comes from imported fuel
- Thermal insulation in buildings can ensure about 50% energy saving in energy consumption



# Activities performed in the preparatory phase

- Current trends in energy consumption and associated greenhouse gas emissions in public and private buildings are assessed
- Regulatory framework of the sector, its institutional capacities were assessed, needs and stakeholder parties were identified and participation plan was developed
- The project's framework, activities, target buildings, expected outputs were defined, energy saving potential was assessed

## Activities performed in the preparatory phase

- The project concept received non-objection from NDA, consent on cooperation from the sector's responsible ministries and Yerevan city municipality to initiate preliminary consultations with GCF and European Investment Bank
- Project concept was communicated to the GCF
- In close cooperation and financial support from UNDP headquarter, an international expert was involved, with whose assistance the Project Document and Logical Framework were developed



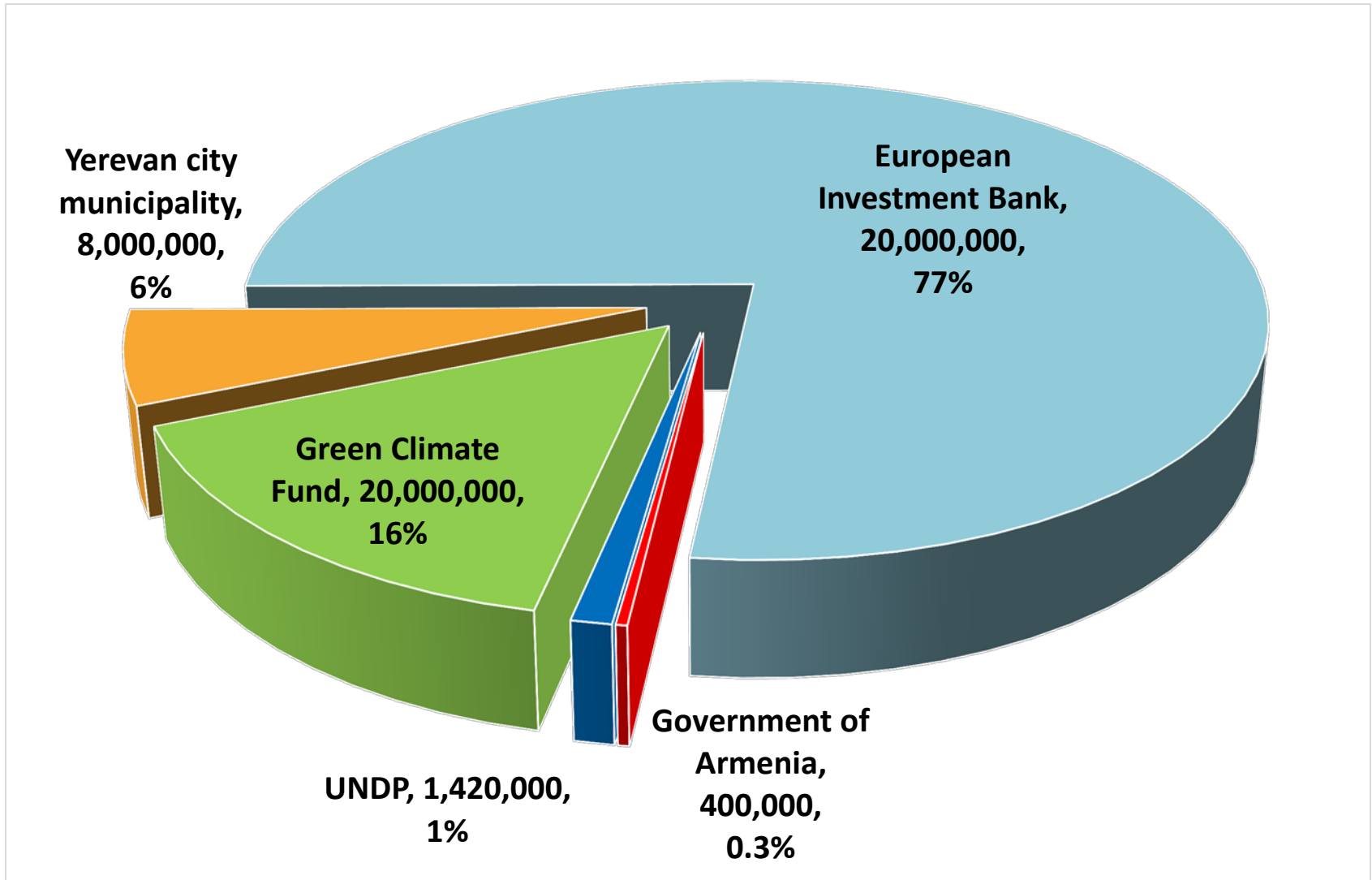
# Basic Data

<b>GCF Implementation Agency</b>	UN Development Programme
<b>National Executing Entity</b>	Ministry of Nature Protection of the RA
<b>Principal Partner / Beneficiary</b>	Municipality of Yerevan and other cities
<b>Partners</b>	Ministry of Urban Development Ministry of Energy and Natural Resources Ministry of Territorial Administration and Emergency Situations
<b>Duration</b>	6 years (2016 to 2021)

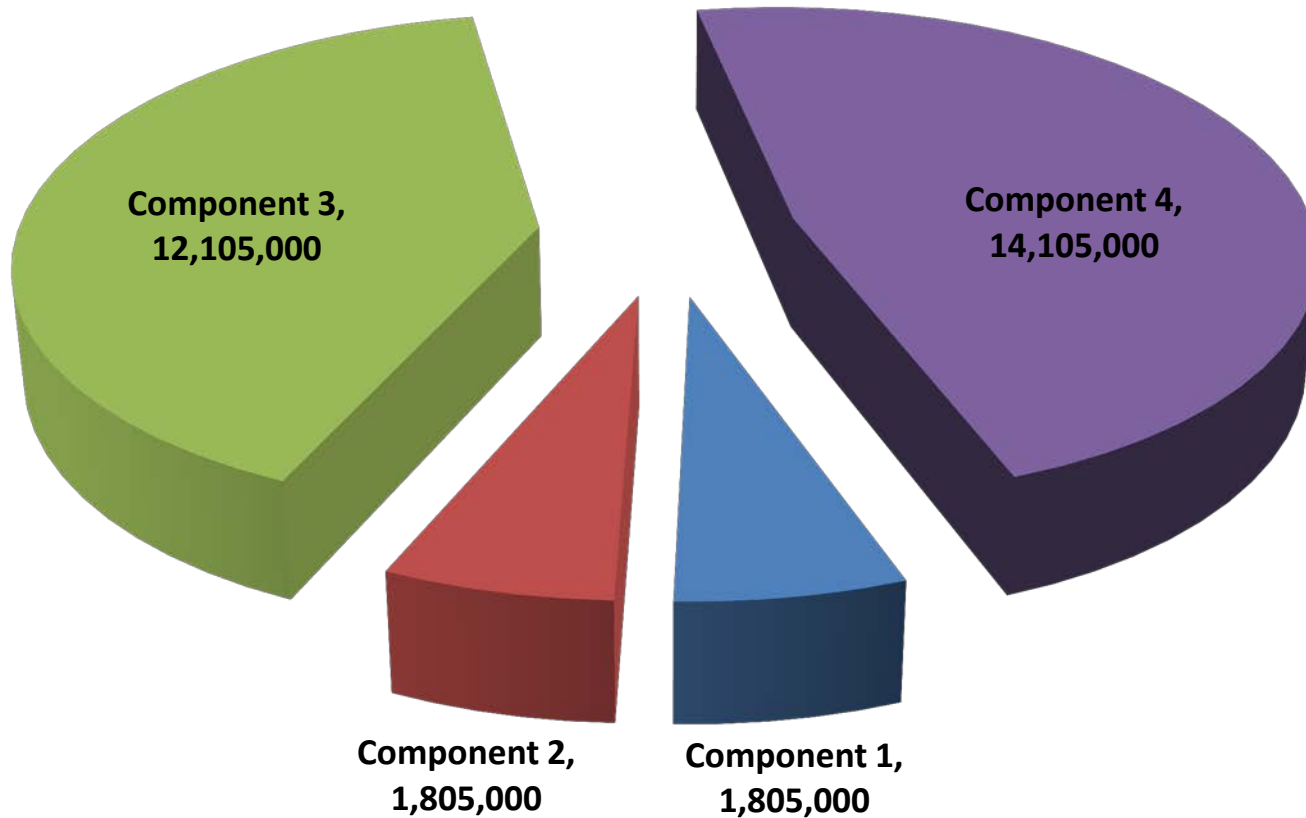
# Basic Data

<b>Funding</b>	<b>US dollar</b>
GCF: grant	20,000,000
UNDP: grant	420,000
European Investment Bank: loan	100,000,000
<b>Co-financing</b>	<b>US dollar</b>
Yerevan city municipality	8,000,000
Government of Armenia (in kind)	400,000
UNDP (in kind)	1,000,000

# The Budget by Funding Source (in USD)



# The Budget by Component (in USD)



*Total budget without the loan component: 29,820,000 USD*

# Components of the Project

## Component 1: Establishment of building sector Measurement, Reporting and Verification (MRV) and knowledge management

- ***Aims to establish robust MRV for the building sector to enable monitoring of energy use in buildings, identification of buildings to prioritise for energy efficient retrofit, and quantification and monetisation of the resulting energy savings.***

# Components of the Project

## Component 2: Policy de-risking

- ***Aim to mitigate investment risks of commercial lenders for energy efficient retrofit via support to national, sub-national and local authorities to adopt and implement an enabling policy framework for energy efficiency retrofits***

# Components of the Project

## Component 3: Financial de-risking

- ***Aims to ensure access to affordable capital for energy efficiency retrofits via partnering with EIB, the R2E2 fund, local banks and other relevant national and international financial institutions.***

Technical and economic analysis has been performed for different categories of buildings to estimate the amount of “financial incentive/grants” that is required to stimulate the market and is requested to be funded from GCF

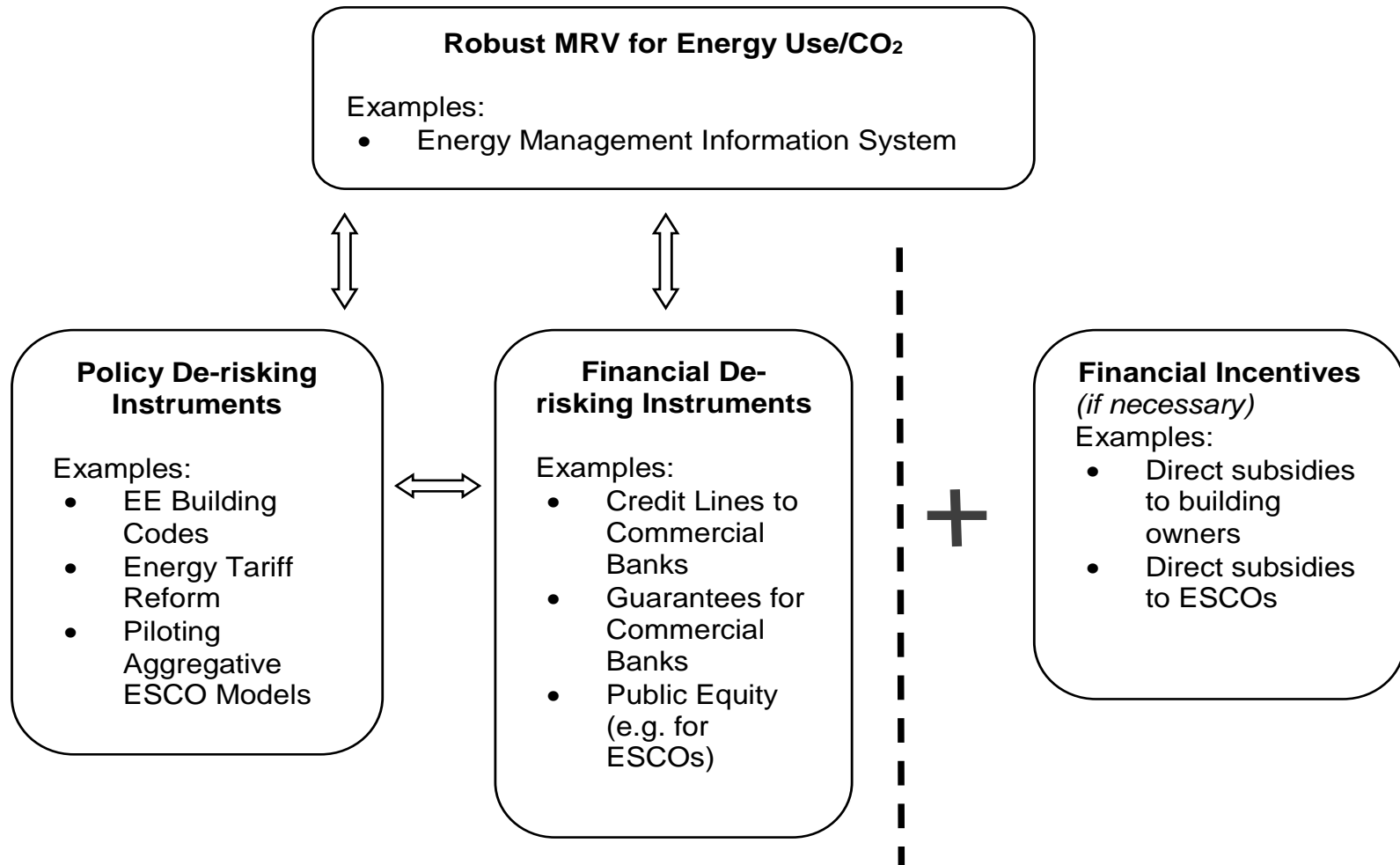
# Components of the Project

## Component 4: Financial incentives

- ***Aims to ensure that the most vulnerable households can afford the costs of energy efficiency retrofits via providing targeted financial incentives and offer them to building/apartment owners, or the ESCOs serving these clients.***



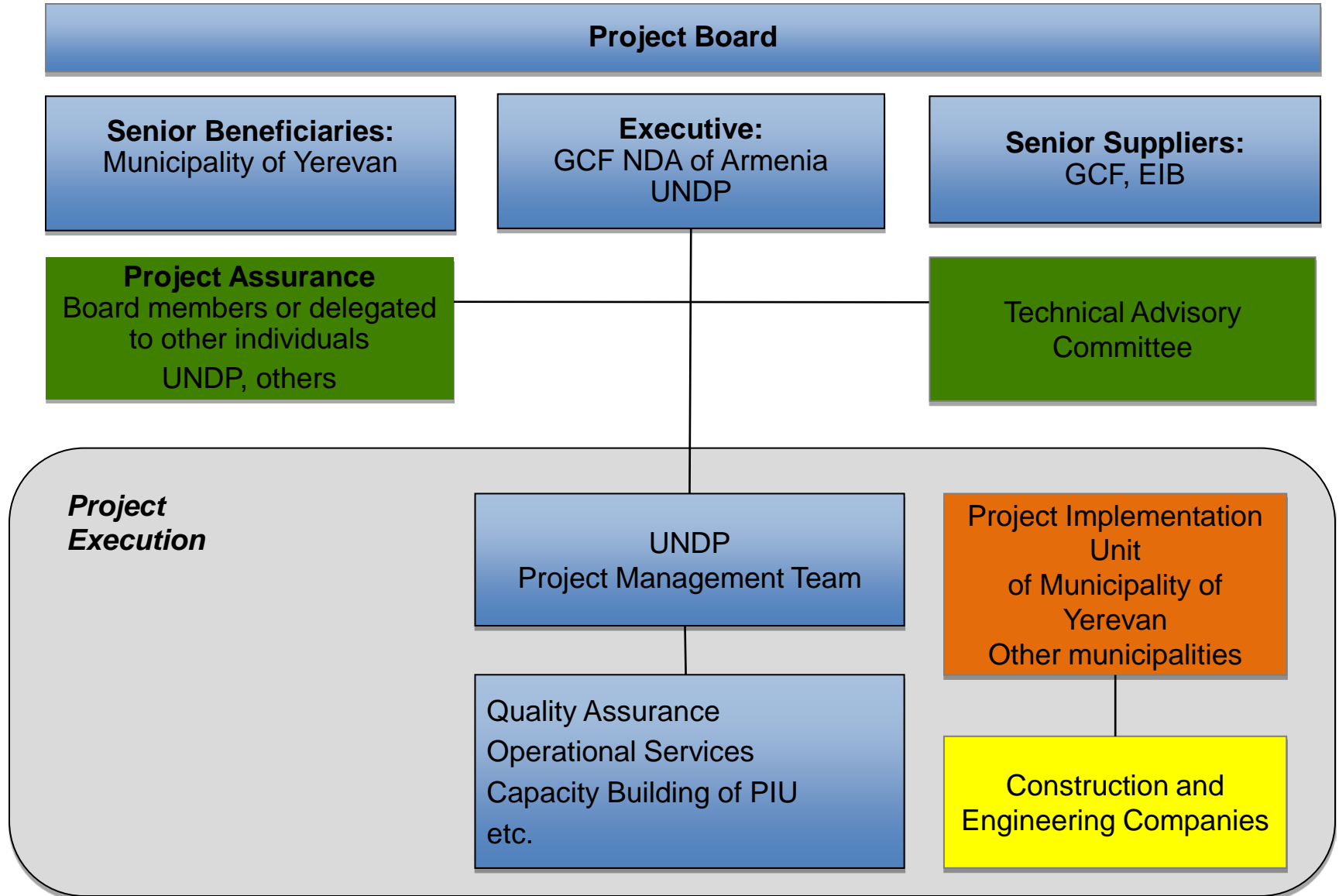
# De-risking approach for energy efficiency building retrofits



# Expected Outcomes

- CO2 emissions reduction: **55,000 ton per year**
- Energy Savings: **210 GWh per year**
- Beneficiaries: **200,000 persons**
- Thermally retrofitted buildings:
  - Detached homes: **6,000**
  - Multi-apartment: **290**
  - Public: **170**

# Implementation Structure



## Further Actions

- The package on the project proposal to be submitted to the GCF before this July 31,
- Technical assessment will be performed by GCF professional team,
- Clarifications/amendments to be provided before this October, if requested,
- The project application to be considered at GCF Board meeting in November 2015.

# Thank you!

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