



# Project Information Document (PID)

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Concept Stage | Date Prepared/Updated: 13-Oct-2020 | Report No: PIDC30461

**BASIC INFORMATION****A. Basic Project Data**

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|------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------|
| Country<br>Romania                                   | Project ID<br>P175308                     | Parent Project ID (if any)                                | Project Name<br>Romania Safer, Inclusive and Sustainable Schools (P175308) |
| Region<br>EUROPE AND CENTRAL ASIA                    | Estimated Appraisal Date<br>Dec 15, 2020  | Estimated Board Date<br>Mar 29, 2021                      | Practice Area (Lead)<br>Urban, Resilience and Land                         |
| Financing Instrument<br>Investment Project Financing | Borrower(s)<br>Ministry of Public Finance | Implementing Agency<br>Ministry of Education and Research |                                                                            |

**Proposed Development Objective(s)**

The Project Development Objective is to facilitate access to safer, disaster resilient, inclusive, and sustainable schools for Romanian students and teachers of the Project participating schools.

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

|                           |        |
|---------------------------|--------|
| <b>Total Project Cost</b> | 118.61 |
| <b>Total Financing</b>    | 118.61 |
| <b>of which IBRD/IDA</b>  | 118.61 |
| <b>Financing Gap</b>      | 0.00   |

**DETAILS****World Bank Group Financing**

|                                                              |        |
|--------------------------------------------------------------|--------|
| International Bank for Reconstruction and Development (IBRD) | 118.61 |
|--------------------------------------------------------------|--------|

Environmental and Social Risk Classification  
Moderate

Concept Review Decision  
Track II-The review did authorize the preparation to continue



Other Decision (as needed)

## B. Introduction and Context

### Country Context

- Romania has enjoyed a decade of economic growth; however, the protracted COVID-19 pandemic crisis has affected Romania's economic activity and household incomes.** The economy contracted by 4.7 percent in the first half of 2020, driven by a steep decline of 10.5 percent in the second quarter. Exports of goods and services fell by 15.1 percent in the first half of 2020, as European trading partners were significantly impacted by the crisis. Imports' contraction was less pronounced (-9.4 percent), leading to a 21 percent increase in the trade deficit in the first half of 2020, further impacting growth. The weakening of external demand from Europe alongside pandemic related restrictions caused the contraction of industry by 14.1 percent in the first half of 2020. The sharp decline in output led to deteriorating labor market conditions, increased unemployment leading to lower household incomes, and rise in food insecurity among vulnerable populations.<sup>1</sup> The government provided a fiscal stimulus to address the consequences of the COVID-19 pandemic on the economy and further support is envisaged. However, the pro-cyclical fiscal trajectory before the COVID-19 pandemic added to the fiscal space constraints limiting the ability of the government to respond. The fiscal deficit widened to 4.2 percent of the gross domestic product (GDP) in the first half of 2020 reflecting lower revenues and higher expenditures due to the COVID-19 outbreak.
- Despite recent growth, inequality is persistent and increasing, with further negative effects expected to the COVID-19 pandemic.** Romania has the second-highest urban-rural income gap in the EU: the mean urban income is almost 50 percent higher than the mean rural income.<sup>2</sup> Throughout the country, many communities have no access to basic services such as piped water, sanitation, internet or electricity; many of them Roma. In the short-run, poverty is projected to increase on the back of lower incomes facing poorer segments of the population due to the COVID-19 crisis, the impact of the poor agricultural year, and declining remittance incomes. Poor and vulnerable households are anticipated to have been less supported by the fiscal response measures, which extended more directly to those in formal employment structures. The upper middle-income country poverty rate (measured at US\$5.50 (2011 purchasing power parity) is projected to increase from 10.2 percent in 2019 to 12.3 percent in 2020. The economic recovery is expected curve down the poverty rate to an estimated 11.8 percent in 2021 and 11.4 percent in 2022.
- Romania's future socio-economic development and the overarching objective of converging with EU wealth and quality of life levels depend to a great degree on the quality of its human capital.** Romania ranks 67<sup>th</sup> – behind its EU neighbors – in the Bank's Human Capital Index (HCI), alongside countries with much lower per capita income, such as Ukraine (50<sup>th</sup>), Albania (56<sup>th</sup>), and Georgia (61<sup>st</sup>). Romania's score of 0.58 means that children born in Romania today will be 58 percent as productive when they grow up as they could be if they enjoyed complete education and full health, according to a 2020 World Bank report on human capital. Worryingly, between 2010 and 2020, Romania's HCI value decreased from 0.63 to 0.58 on the productivity potential, which puts Romania below the average of 0.69 for the Europe and Central Asia region. Romania's HCI ranking draws attention to the urgent need to invest in children's health and education, and accelerate progress so that all children can expect to receive quality learning in the classrooms or online and can enter the job market as healthy, skilled, and a productive adults.

<sup>1</sup> World Bank. 2020. *Pulse Survey on the impacts of COVID on vulnerable groups in Romania*. Series of Rapid Assessments.

<sup>2</sup> IBRD, IFC and MIGA (2018) *Country Partnership Framework for Romania For the Period FY19-FY23*.



- 4. Geophysical and climate-related disasters pose a considerable threat for Romania's poverty alleviation efforts and its sustainable economic growth.** From 1970 to 2016, 85 catastrophic events were recorded in Romania, including 47 floods, 4 earthquakes and 2 droughts, which resulted in over US\$6 billion of losses and damages<sup>3</sup> and affected almost two million people. At the same time, disaster impacts are increasing, including due to: (i) concentration of people and economic assets, (ii) insufficient funding for risk reduction, and (iii) climate change effects. Beyond impacts on assets, disasters also affect people's well-being. Forthcoming World Bank analysis shows that a 200-year earthquake in Bucharest-Ifov could push some 168,000 residents of the capital into transient consumption poverty (7 percent of the regional population, or a threefold increase in the local poverty rate) due to reconstruction costs and access to savings.<sup>4</sup>

#### Sectoral and Institutional Context

- 5. There is an urgent need to invest in safer, inclusive, modern and sustainable school infrastructure in Romania.** Romania has a high proportion of school buildings that fail to meet safety, basic sanitary, and energy efficiency standards, which pose a substantial risk to lives and the economy in the context of a future earthquake, in the current COVID-19 pandemic, and as the climate warms.<sup>5</sup> Access to quality school infrastructure is key to improving education outcomes, increasing enrollment, integrating different student populations, and in Romania there is an urgent need to improve educational outcomes, especially against key metrics such as reduction in absenteeism and improvement in student retention and attainment. Moreover, Romania needs to demonstrate progress towards ensuring sustainability in public buildings, especially in areas of energy efficiency and uptake of renewable energy sources, aligning with national and EU strategies on climate change adaptation and mitigation.
- 6. The COVID-19 pandemic has highlighted the importance of equal access to water, sanitation, sewerage installations, information technology (IT) infrastructure, and spatial flexibility in schools.** The pandemic has underlined the challenge of double and triple shift schools in many urban areas that prohibits the application of social distancing. Schools have unevenly applied mitigation strategies due to lack of resources, guidance and capacity from staff. The pandemic has highlighted the negative effects on vulnerable groups' access to schooling, particularly Roma. There are severe disparities in funding school infrastructure and teacher quality which leads to further socio-economic inequality, segregation, and contributes to increased early school leavers. As social segregation increases, poorer students attend lower quality schools. The uneven quality of education risks perpetuating social and income divides and undermines Romania's future economic growth.
- 7. In Romania, school buildings are owned and maintained by local governments.** Local governments seldom have sufficient access to capital investment funds to undertake urgent interventions and improve the safety and quality of school buildings, even when the risks facing students and staff, and the likely negative education outcomes associated with substandard facilities are well documented and understood. Almost half of each local budget comes from personal income tax and taxes on local companies. Therefore, the financial performance of local administrations in Romania is closely linked to the performance of the local private sector. Given the impacts of the current COVID-19 pandemic on municipal finances, the ability of the municipalities to invest in school infrastructure is further constrained.

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<sup>3</sup> EM-DAT 1900-2017.

<sup>4</sup> Walsh, Brian, Stephane Hallegatte, and Yann Kerblat. (Forthcoming). *Socioeconomic Resilience to Disasters in Romania. Assessment of Natural Disasters' Impact on Poverty and Well-being*.

<sup>5</sup> Preliminary analysis conducted by the World Bank (see Annex 1) indicates that ~1,000 schools are high risk of serious damage and/or collapse in an earthquake, and that many of these buildings also need substantial investment in energy efficiency, sanitation and modernization. Moreover, many other schools in Romania urgently need updating and modernization.



8. **There have been significant challenges associated with investment of government and EU funds in safer, inclusive and sustainable infrastructure.** Implementation of government funds towards safer and modern infrastructure have faced significant delay (in some cases by years) due to unpredictable funding allocations, lack of multi-annual budgets, procurement and permitting delays and challenges associated with managing renovations of historical buildings, with € millions left unspent at the end of each financial year. Moreover, investments typically deal with a single issue – energy efficiency, addition of sanitary connections, or painting – and do not provide a comprehensive and integrated solution for safer, inclusive and sustainable schools that meet modern safety and functionality requirements. The EU funds are available currently for only specific interventions (such as energy efficiency or external improvements), in certain school levels (such as a focus on preschool), and follow application processes that pose a challenge, especially for lower-capacity municipalities. As the priorities for the 2021-2027 EU funds cycle – particularly the regional operational programs - and the Resilience and Recovery Facility programs – are being designed, there is a unique opportunity to ensure that comprehensive and integrated investments in school infrastructure are eligible expenses as well as to lay the foundations for successful implementation of further investments in school infrastructure.

#### Disaster Risk Management and Climate Change

9. **Romania is one of the countries in the EU most at risk from earthquakes, with hundreds of lives lost and tens of thousands of buildings damaged in earthquakes in the last 200 years.** In the last five centuries, there have been on average two magnitude 7+ earthquakes each century, with five earthquakes since 1802 with magnitudes higher than 7.5.<sup>3</sup> Moreover, seismic experts consider an 8.1 magnitude earthquake possible. Bucharest rates as one of the 10 cities in the world most vulnerable to earthquakes. In 1977, a magnitude 7.2 earthquake caused more than 1,500 fatalities, left 11,321 injured, and collapsed or severely damaged 156,000 residential apartments. More than 2,274 schools and 459 hospitals were severely damaged. In 1978, a World Bank report estimated a total loss of US\$2 billion in 1978 dollars, with Bucharest accounting for 70 percent of the total (approximately US\$1.4 billion). Scientists and engineers estimate that a similar event today would have direct damage costs of €7-11 billion, with economic losses exceeding €25 billion.
10. **Romania is one of the most flood-prone countries in Europe<sup>6</sup> with significant damage from hydro-meteorological hazards occurring several times per decade.** Extreme heat and cold, drought, storms and landslides also threaten lives, livelihoods and infrastructure. For example, Bucharest currently ranks as the fifth fastest-warming city in the world. The frequency of wildfire events doubled from ~175 per year (1956-2005) to ~341 events per year in the last decade, with 25 percent increase in burn area per event.<sup>6</sup> While snowfall has decreased overall across the country, snowfall events are becoming more intense, such as the 2014 event. Considering the change in socio-economic and climate conditions and depending on the mitigation pathway selected, by 2080, GDP losses from floods may quadruple.
11. **Romania's vulnerability to natural hazards will be further exacerbated by climate change.** Romania's climate is predicted to change considerably over the next 50 to 100 years. Expected increases in air temperature vary between climate models but increases in the annual average temperature are expected to be in the range of 0.5°C to 1.5°C by 2029, and 2.0°C to 5.0°C by 2099. This is expected to lead to more frequent and persistent heat waves and more spatially extended droughts. Depending on the climate model scenario and geography within Romania, the total amount of annual precipitation is projected to decrease by about 10 to 20 percent by the end of the century. Precipitation patterns are also expected to become more irregular, with flood risk increasing as intense localized rainfall events turn out to be more frequent (though shorter in duration). Observed and anticipated climate change

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<sup>6</sup> European Spatial Planning Observation Network 2004: From 1987 to 2002, Romania had the greatest area in the EU impacted by repeated floods.



impacts include more frequent severe inland flooding, more frequent flash floods, more intense and more frequent droughts and extreme heat events, and a higher risk of soil erosion and desertification.

12. **As an EU member state and signatory of the Paris Agreement, Romania is a party to the mitigation and adaptation commitments made in the EU's collective National Determined Contribution (NDC).**<sup>7</sup> Romania adopted a National Climate Change Strategy for 2013-2020 in 2013, followed by the National Climate Change and Low Carbon Green Growth Strategy for 2016-2030 and the associated Action Plan on Climate Change for 2016-2020 in 2015. Each of these documents establishes sectoral priorities for responding to climate change, including energy, transport, agriculture and rural development, forests, biodiversity, urban development, and water and waste management. Greater disaster preparedness, improved response capabilities, and specific investment and development actions to reduce hydro-meteorological disasters are critical to the short and long-term management of climate risks.
13. **Institutionally, the disaster risk management system (DRM) is increasingly decentralized.** Specific roles and responsibility are held at the national, Bucharest municipality, county and local levels, with actions administered by Emergency Situation Committees or the professional community public services for emergency situations (County Inspectorates for Emergency Situations). At the national level, the General Inspectorate for Emergency Situations (GIES), under the Department of Emergency Situations (DES) within the Ministry of Internal Affairs (MoIA), is responsible for the overall coordination of DRM public policy and response. The GIES also coordinates with other line ministries with functions under the DRM Law such as Ministry of Public Works, Development and Administration (MPWDA), for seismic and landslide risks, Ministry of Environment and Climate Change for flood, Ministry of Agriculture and Rural Development for drought, Ministry of Health (MoH) for biological and pandemic risk, and mass casualty events, Ministry of Education and Research (MoER) for education and emergency shelters, Ministry of Economy, and the Ministry of Public Finance (MoPF) on financial resilience. GIES is also responsible for prevention and management of disasters, fire safety, and operates the National Operational Center.
14. **There is a momentum towards building resilience in Romania.** Until recently, there had been limited traction in national approaches to risk reduction, particularly for seismic risk in public buildings that provide vital public services and are critical for rapid recovery in the event of a disaster. Since 2018, the government has prioritized urgent investments to reduce the substantial seismic risk in public buildings critical for emergency response, such as through the World Bank Series of Projects (SoPs) (P166302, P168119, P168120). In parallel, there is a commitment to advance DRM policy reforms and implement specific actions that build resilience under the legislation, such as developing a national earthquake risk reduction strategy, increasing public awareness and engagement with civil society and strengthening government capacity to manage the fiscal impacts of natural disasters. Several of these reforms are supported by the Bank's Development Policy Loan with a Catastrophe Draw Down Option (P166303)<sup>8</sup>. Further investments in safe public buildings, particularly schools, primary health facilities, public administration buildings etc., as well as key transport routes and bridges and resilient lifelines (e.g., water, communications, energy), still need to be systematically addressed. The proposed Safer, Inclusive and Sustainable Schools Project will be the fourth Project in the DRM SoPs.
15. **The proposed Project builds on the momentum and demand from the government to invest in disaster and climate resilience by addressing urgent needs in safer school infrastructure.** In addition to ensuring the safety of students, teachers and administrative staff in fires and disasters, schools play a critical role during emergencies as evacuation centers. Moreover, schools play an important role in raising disaster and climate change risks awareness and improving emergency preparedness. Investments in earthquake risk reduction and energy efficiency are in line with proposed strategies of the MPWDA on the built environment strategy for energy efficiency and the forthcoming strategy on seismic risk reduction. The Project would also support government actions in the Covid-19 crisis to

<sup>7</sup> Nationally Determined Contribution of the EU and its Member States, 2015, [Weblink](#).

<sup>8</sup> The Cat-DDO disbursed urgently needed funds during the early months of the COVID-19 Pandemic in February and March 2020.



support schools to function with enhanced safety and sanitary standards, in line with the National Investment and Economic Recovery Plan launched by the government in July 2020.

## Education

16. **Romanian Government's spending on education is the lowest among EU countries, with expenditure relative to Romania's GDP of 3.2 percent.**<sup>9</sup> This is compared to an EU member state average of 4.6 percent, with 3.5 percent in Bulgaria and 5 percent in Poland, for example. Romania's low spending levels negatively impact the quality of education and outcomes. For example, expected years of school in Romania have declined in the past decade from 12.7 to 11.8 years<sup>10</sup>. Research shows that the quality of the education infrastructure directly affects student learning. Well-designed learning spaces have a positive impact on student focus, active involvement and social learning. In particular, the impact of learning environment has been estimated to explain 16 percent of the variation in students' outcomes, by factors like naturalness, individualization, and stimulation. Modern learning principles require a conducive natural environment (light, acoustic, temperature, and air quality) and infrastructure that allows for the individualization of classroom space and provides an appropriate level of ambient stimulation.
17. **While progress has been made in expanding access to education and improving teacher training, there is no integrated approach to prioritize investments in education infrastructure.** Decisions to construct, rehabilitate, modernize and expand education infrastructure are taken at different administration levels, generating risks in terms of coordination, financing, and regulation. Most of the national funding for education is earmarked for teacher salaries and maintenance costs, leaving little for infrastructure investments that could help to improve learning outcomes. Related to education infrastructure works, Romania spends around US\$116 million on average for the entire country per year, serving 2.8 million students enrolled in about 6,500 schools. In 2019, although the investments increased, US\$89 was spent per student to improve access to quality infrastructure. Romania has also made progress in optimizing school networks in the context of rapidly declining demographic trends in some areas, with 25.7 percent of legal entity schools and 26.2 percent of satellite schools closed between 2010 and 2020.
18. **The COVID-19 pandemic has required decision-makers at all levels to make decisions for the provision of learning based on their specific country, city and rural situations.** In Romania, decisions about school openings have been made at the local level with guidance from the central level. These decisions have taken into account the readiness of schools to open safely, including: (i) extra space capacity to allow for physical distancing and sufficient staff, (ii) health and improved sanitary measures, (iii) internet connectivity and digital access for students and teachers, and (iv) skills readiness for online classes. The Romanian education system faces considerable challenges to safe operation, including: (i) lack of adequate sanitation, (ii) access for disabled students, (iii) minimum quality standards in rural schools, where dropout rates are also highest; and (iv) overcrowding in schools and classrooms in urban areas as well as operation of multiple schooling shifts which creates significant difficulties for physical distancing.

## Local Governments and Municipal Infrastructure

19. **Local governments in Romania are responsible for more than 40 percent of public sector capital expenditure.** On average, that represents 12 -15 percent of the annual local budgets and is mostly aimed at buildings, roads, housing works, and upgrading of water/sewerage infrastructure. Buildings are owned by the municipality and used for education, health, sport and recreation, public purposes, emergency response, transport facilities, and social

<sup>9</sup> Eurostat Data, 2018.

<sup>10</sup> See Annex for more information on expected years of learning.



services. There is a heavy reliance on EU and national funds for capital investments, with limited commercial financing opportunities subject to central government approval.

20. **The capacity of local governments to plan strategically and coordinate and cooperate efficiently is limited, preventing them from fully exploiting development and financing opportunities.** In smaller localities, the scale is an additional challenge, both in terms of administrative capacity and the potential for efficient public service provision. The absorption rate of the EU funds has been disappointing and is attributed to low institutional capacity, poor planning, prioritization and interinstitutional coordination. The ability of local governments to engage in large and complex capital projects is limited and the administrative capacity to ensure sustainable financial management in the medium- to long-term varies greatly across towns and cities, with a few clear leaders in absorption and implementation rates. The cost of maintenance following the completion of investment projects is not adequately considered, and many Romanian cities lack reliable data on capital asset management and maintenance costs.
21. **While some of the larger and more dynamic cities deal with challenges similar to those of large cities in advanced economies (e.g. pollution, congestion, sprawl), many smaller towns and rural areas still have basic infrastructure needs.** The ongoing COVID-19 pandemic will have a significant impact on revenue streams and public services delivery at the local level. Important budgetary and planning adjustments will be required depending on the severity and duration of the pandemic, as well as the strength of the post-pandemic economic recovery. The realization of capital investment plans at the local level will depend to an even greater extent on the successful uptake of the EU funds. Through a process of prioritization, these investments should be oriented towards the most pressing local needs. In a recent survey<sup>11</sup> of towns and cities (with responses from over 260 local governments), investment in education was consistently mentioned as one of the most pressing infrastructure needs. Disaster and climate resilience, inclusiveness and addressing urban/ rural disparities, and improving local capacities in fulfilling their roles for providing quality public services are some of the key challenges that the proposed Project will contribute to.

### Energy Efficiency and Renewable Energy

22. **Priorities in the energy sector are aligned with the EU Clean Energy Package, which includes improvements in the energy performance in buildings, promotes renewable energy and energy efficiency<sup>12</sup>.** The European Green Deal is expected to bring transformational changes to the sector which aims for the EU to have zero net emissions of greenhouse gases by 2050. In January 2020, the European Green Deal Investment Plan and the Just Transition Mechanism were approved as the investment pillars of the Green Deal. Romania's Energy Strategy for 2016–2030 and the draft National Energy and Climate Plan for 2021-2030 (NECP) provide the overarching policy framework for the sector. Priorities include: (i) decarbonization, (ii) energy efficiency, (iii) energy security, (iv) internal energy markets, and (v) research, innovation and competitiveness. Romania's 2030 target of 30.7 percent of the overall renewable energy contributions in final gross consumptions remains below the renewable share of at least 34 percent in 2030<sup>13</sup>. The projections for the year 2030 show an increase in wind capacity up to 5,255 MW and photovoltaic capacity up to approximately 5,054 MW, yet Romania still lacks a strategy and institutional framework to further develop prosumers and renewable distributed energy generation options, such as rooftop solar photovoltaic and other comparable technologies.
23. **Implementation of energy efficiency measures in buildings could account for a large share of EU targets in energy consumption savings.** Romania reduction in overall energy consumption is modest, reaching only about 56 percent of its 2020 energy savings target in the last decade. To increase its share, several challenges, such as institutional

<sup>11</sup> World Bank 2020. Romania Urban Policy Reimbursable Advisory Services (P171176). *Companion Paper 5: A survey of urban local government's needs and challenges* (April 2020).

<sup>12</sup> EU Directives 2018/844, 2018/2001, 2018/2002.

<sup>13</sup> This represents Romania's expected contribution to the overall EU target under the EU Governance Regulation EU 2019/1999.



leadership and coordination, enforcement and evaluations, data and communications, and financing and implementation, need to be addressed as part of a national-level program. The overall market is also largely dependent on EU financing and funding, with minimal leverage and co-financing, which is neither sustainable nor scalable.

24. **Energy efficiency measures in schools are not widespread and quality issues remain.** Despite linkages to indoor pollution, quality of learning experience, and maintenance costs, most school buildings in Romania have not benefited from energy efficiency investments. At the same time, the quality of renovation for energy efficiency, in Romania, particularly for schools, has been poor in the past. In the context of limited funding / co-financing, and the intention to renovate as many buildings as possible, energy audits and designs were prepared to meet mostly minimum efficiency levels rather than promote deeper renovations. For example, energy efficiency improvements are often made superficially, without adequately addressing ventilation solutions, thereby creating indoor air quality issues in the renovated schools. As for lighting, most systems in the existing schools are composed of energy-inefficient fluorescent lamps. The proposed Project is aligned with the World Bank's ongoing engagement in the sector. In 2019, the Bank provided advisory services to support the MPWDA to develop the Long-term Building Renovation Strategy for 2020-2050, part of the requirements of the EU Energy Performance in Buildings Directive,<sup>14</sup> together with other components targeting seismic risk. The proposed Project represents an opportunity to target a high-priority category of public buildings and test models that could be replicated at a wider and larger scale. It will also support strengthening coordination of the many actors active in the energy efficiency sector.

### Project Rationale: A Critical Need to Invest in Safer, Inclusive and Sustainable Schools in Romania

25. **The proposed Project addresses development challenges related to issues of safety, inclusion and sustainability in school infrastructure.** World Bank analysis of the status of school infrastructure in Romania has illustrated serious deficiencies in the safety of students, teachers and school building users, and inadequate designs that fail to provide universal access (Annex 1). These deficiencies may contribute to the dropout rate of students and poor learning outcomes and a lack of focus on sustainability. Beyond safety, inclusiveness and sustainability, the Project aims to build the institutional capacity of national and sub-national authorities to design, invest and implement projects aimed at enhancing school infrastructure. Specific issues with safety, inclusiveness and sustainability are summarized below.

#### Safety

26. **Many schools in Romania are under high risk of complete collapse or serious damage in an earthquake, risking the lives of students, teachers and administrative staff.** Current estimates indicate that 1,057 schools with 317,718 students are under this extreme risk, with many more buildings under moderate risk of damage.<sup>15</sup> Ex-ante investments to strengthen the most at risk buildings (or demolish/rebuild new) is expected to save the lives of at least 10,000 to more than 15,000 students and teachers and save many tens of thousands of students and teachers from minor to severe injuries and emotional and psychological trauma in the event of an earthquake.<sup>16</sup>
27. **A high proportion of Romanian schools – more than 4,000 schools by some estimates – do not yet meet fire codes.** Since the devastation of the 2015 Colectiv Fire which killed 64 people and injured another 146, Romania has reviewed and strengthened its norms for fire safety in buildings. However, a large number of school buildings fail to have fire detection and warning systems, fire suppression systems (such as sprinklers) and appropriate exit routes to ensure rapid evacuation of school buildings. Moreover, based on the World Bank's rapid assessment of schools'

<sup>14</sup> EU Directive 2018/844.

<sup>15</sup> Analysis presented here is based on probabilistic seismic risk models developed by the Technical University of Bucharest; see Annex 1.

<sup>16</sup> The numbers of students and teachers saved depend on the scenario earthquake magnitude used in scenario modeling.



quality, 25 percent of schools rely on archaic heating systems – such as fireplaces – that increase the risk of fire initiation.

28. **Despite an urgent need, schools cannot be designated as evacuation and emergency centers.** In many countries, schools are recognized and advertised widely as evacuation centers that the community can and should use in times of disaster. However, in Romania, few schools have been designated by the Inspectorate for Emergency Situations (IGSU) as emergency shelters and evacuation centers for two reasons. First, it is not clear that the buildings can withstand earthquake damage, and there are few school buildings in Romania that have technical surveys attesting to their seismic resilience. Second, school buildings may not have the design features suitable for shelter, such as water, communications and emergency supplies, adequate and flexible spaces, sanitary facilities, and so forth.
29. **Romanian classrooms have poor air quality which negatively impacts the learning environment.** In buildings from the early 1960s or 1970s (or earlier), the ventilation system is equivalent to “natural ventilation by windows opening” done by teachers or staff. This situation results in poor indoor environment in the classrooms, meaning both thermal discomfort and weak indoor air quality, with measured CO<sub>2</sub> levels often above 2,000 ppm. CO<sub>2</sub> levels this high are expected to cause headaches, sleepiness, poor concentration, increased heart rate and nausea. These levels are detrimental for all students in a learning environment but particularly for smaller children. Global studies are increasingly linking air pollution to lower standardized test scores,<sup>17</sup> negative behaviors and higher absenteeism rates. Overheated classrooms are also a concern, with recent evidence showing that heat and extreme heat in the classrooms is linked to lower standardized test scores. In the long-term, poor indoor quality leads to a worsening of academic performance. Children in overcrowded schools face higher grade repetition, age-grade distortion and dropout rates. In kindergartens, the situation has become even worse, because the lack of appropriate ventilation has led to an increase in the transmission of children’s respiratory illnesses, with social and financial implications.
30. **There are critical infrastructure gaps related to school water access, sanitation, and waste management.** Based on the World Bank’s rapid assessment of schools’ quality (see Annex 1), 33 percent of schools do not have the sanitary authorization, and 22 percent of schools lack appropriate water sources, meaning almost one in six schools are not connected to an authorized source for water and sanitation. Some 30-35 percent of schools do not have indoor bathrooms, and almost 10 percent of primary and secondary schools do not have access to adequate sewerage, almost exclusively in rural areas. Moreover, one-quarter of schools reported lacking organized garbage collection service. Rural schools score 2-3 times worse vis-à-vis urban schools in terms of adequate sewage disposal, and access to indoor toilets, contributing to the inequality of quality of public service.
31. **COVID-19 pandemic has highlighted that overcrowded schools and schools with inadequate hygiene, sanitary facilities, and sewage disposal also pose potential public health risks.** Safe use of school buildings in the COVID-19 pandemic requires space for social distancing and advanced hygiene and sanitary facilities and schools in Romania face considerable challenges on both fronts. Beyond the sanitary challenged outlines above, schools in cities face issues overcrowding and many schools operate double and triple shifts in normal times, which makes the requirements for 1.5m of school distancing within classrooms impossible to reach.

## Inclusion

32. **The traditional design of Romanian schools is not conducive to creating an equal and inclusive learning space.** Various groups are affected, including students with disabilities and special needs, Roma students, children from rural areas, migrant or low-income households, boys and girls, and different age groups. Most Romanian schools lack appropriate facilities for students with disabilities. Universal access is rare, with 70 percent of schools do not have ramp access, and 85 percent do not have bathrooms for the disabled. During Project preparation additional

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<sup>17</sup> A study featured in the EPA Guide on Air Quality and Academic Performance notes that students in classrooms with higher air ventilation scored 15% higher than students with lower air ventilation rates. [Weblink](#).



information will be collected on challenges faced by vision and hearing-impaired students as well as students with attention deficit hyperactivity disorder (ADHD), autism, etc.

33. **Roma students face challenges in accessing and completing education in Romania, and these challenges are exacerbated in the COVID-19 pandemic.** Recent surveys by the World Bank<sup>18</sup> have highlighted that Roma students face disproportionate challenges with hunger and food insecurity, especially with the discontinuation of hot meals provided through education and after school services during the pandemic. The pandemic appears to have unequally negative effects on Roma's access to schooling, with concerns raised about the gap in school completion increasing. Unequal access to internet and technological equipment and overcrowding at home was cited as main reasons for this, with fears that this could compound existing socio-economic incentives to leave school early. During stakeholder consultations, Roma experts, councilors, and NGOs across all locations raised fears of eventual higher school dropout amongst Roma families due to the pandemic.
34. **There is also a lack of flexible spaces suitable for students of different ages, and needs, and lack of IT equipment.** Research has shown increased educational outcomes when younger students have access to different learning zones and create smaller and flexible spaces, while older students can use larger flexible workspaces. One study highlights the use of flexible spaces increased student progress in reading, writing, and math by 21 percent, 23 percent, and 49 percent, respectively.<sup>19</sup> Boys are increasingly falling behind in school in Romania with increased rates of absenteeism, early drop-out, and poor educational achievements. In part, this challenge results from educational spaces designed for long periods of sitting at desks, without flexible spaces to break out, and limited opportunities to harness digital technology. COVID-19 pandemic has also highlighted the gaps related to digital access due to limited equipment available to schools and students. Children from lower income households do not have access to digital devices or internet at home, putting them at a further disadvantage as schooling moves online in times of health crisis, and/or causing them to drop out.

## Sustainability

35. **The quality of renovation for energy efficiency in schools has been poor in the past.** In the context of limited funding / co-financing, and the priority to renovate as many buildings as possible, energy audits and designs were prepared to meet minimum efficiency levels rather than promote deeper renovations. To reduce the energy consumption and carbon emissions of heating systems, a first step is to consider a renovation to the building envelope to improve building isolation. Such an approach can be combined with seismic rehabilitation/retrofitting and installing more efficient and lower capacity heating or cooling systems. Where possible and cost-efficient, the next stage is to install renewable heating systems (e.g., geothermal/ground source heat pumps, solar hot water, solar photovoltaic, biomass boilers, or combined heat and power units as appropriate). This approach optimizes the amount of energy required to deliver heating or cooling while supplying the remaining heating/cooling needs using renewable sources to the extent possible. More comprehensive energy audits will be conducted during Project preparation to assess potential savings, including from renewable energy like solar thermal and photovoltaic energy.
36. **Energy efficiency investments could result in savings for the schools' operations and maintenance costs.** The budget for capital improvements in schools, maintenance and operating costs is provided by the respective municipalities. Depending on the income and capacity of the municipality, many schools do not receive a regular maintenance budget. Energy efficiency investments could result in savings for the school (lighting and heating, for instance) and reduce ongoing operating costs. The Project will assess innovative operation and maintenance

<sup>18</sup> World Bank. 2020. *Pulse Survey on the impacts of COVID on vulnerable groups in Romania. Series of Rapid Assessments.*

<sup>19</sup> Peter Barrett, Fay Davies, Yufan Zhang, Lucinda Barrett. 2016. 'The Holistic Impact of Classroom Spaces on Learning in Specific Subjects.' *Environment and Behavior*, 49:4, page(s): 425-451.



schemes to ensure the long-term sustainability of the investment, such as revolving funds that allow for energy savings to cover costs or be reinvested in additional investments. Consideration of innovative and sustainable financing mechanisms for operation and maintenance of the renovated schools is also critical given that the municipalities bear these costs with constrained budgets.

- 37. **The Project will also explore opportunities for schools to adopt broader sustainability measures mitigating climate risks and promoting sustainable approaches.** The Project will provide an opportunity to explore how initiatives aimed to improve the management of climate risks at the school level, such as the use of reflective roofs, green or water-based initiatives, or sustainability-oriented activities, such as rainwater harvesting and zero-waste can be integrated into infrastructure design, school operation, and staff/student learning opportunities.

Relationship to CPF

- 38. **The proposed Project is fully aligned with the objectives of the Romania Country Partnership Framework (CPF) for the period FY19–FY23,<sup>20</sup> which seeks to reduce poverty in Romania and foster sustainable income growth for the bottom 40 percent of the population.** The Project will contribute to the overarching goal of the CPF of improving public service delivery by building the national and local institutional capacity to invest in safer, inclusive and sustainable school infrastructure. The CPF focuses on building better public institutions through three Focus Areas, and the Project will contribute to two of them: the third Focus Area, “Build Resilience to Shocks,” through its focus on public buildings by making them disaster resilient, climate resilient, and energy-efficient; and the first Focus Areas “Ensure Equal Opportunities for All” by improving the quality of school infrastructure, promoting human capital development, and equitable and universal access to high-quality public infrastructure.
- 39. **The Romania CPF also highlighted education as a fundamental enabling condition for better human capital and inclusive growth in Romania, as the country has an ambitious ‘Agenda for Sustainable Development by 2030’ and places education at the center to attain universal achievement of the Sustainable Development Goals (SDGs).** The government realizes that to sustain growth and join Europe's living standards, Romania needs to revamp the growth drivers, with more and better labor, better capital investment, and more efficient allocation of resources. The CPF commits to supporting the government’s program focusing on economic growth and poverty reduction and addressing inequities through increased access to quality education.
- 40. **The Project fully meets the selectivity filters introduced in the CPF for the WBG operations to address the main country constraints identified in the Systematic Country Diagnostic (SCD<sup>21</sup>) in the following ways:**

Table 1. CPF Selectivity Filters

| CPF filters                                                                                                                                       | Project contribution                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Developing innovative solutions that benefit the most poor and vulnerable, including Roma                                                         | Promoting investments that will benefit the poor and vulnerable, including Roma, who would be most affected during disasters. The Project will also consider options to increase the participation and retention of the poorest and most vulnerable in education through modern infrastructure designs that consider specific needs. Inclusive access to education for the disabled is also a priority. |
| Maximizing finance for development, including catalyzing private sector investment or leveraging additional resources (e.g., better absorption of | Ensuring that comprehensive and integrated investments in school infrastructure are eligible expenses under Romania’s programs for EU funds, increasing absorption capacity of EU funds, and laying foundations for successful implementation of further investments in school                                                                                                                          |

<sup>20</sup> IBRD, IFC and MIGA (2018) Country Partnership Framework for Romania For the Period FY19-FY23.

<sup>21</sup> Systematic Country Diagnosis (2018) <https://www.worldbank.org/en/country/romania/publication/romania-systematic-country-diagnostic>



|                                                  |                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU funds); and/or                                | infrastructure.                                                                                                                                                                                                                                                                |
| Contributing to regional and global public goods | Reducing disaster and climate impact on school infrastructure saves lives, enables emergency shelter and reduces disruption to education services in the aftermath of disaster. This Project will also showcase energy efficiency, renewable energy and sustainable solutions. |

**WBG COVID-19 Crisis Response Approach Paper**

41. **The proposed Safer, Inclusive and Sustainable Schools Project addresses a range of core principles of “scaling up selectively for impact” articulated in the WBG COVID-19 Crisis Response Approach Paper.** These principles include: (i) fighting poverty and promoting shared prosperity, (ii) sustainability, (iii) inclusion, and (iv) continued commitment to building human capital and preserving global public goods. The proposed Project is complimentary in supporting the educational system to cope with COVID-19 challenges provided through the Romania Secondary Education (ROSE) Project and substantively contributes to Pillar 2 “protecting the poor and vulnerable” and Pillar 4 “strengthened policies, institutions and investments for rebuilding better [...] by resilient, inclusive and sustainable recovery”:

- a) *Fighting poverty and promoting shared prosperity.* Disasters can undermine hard-earned development gains, potentially trapping vulnerable groups in poverty and preventing economic growth. Building disaster and climate resilience thus directly contributes to sustained development and allows the poorest—those most affected by disasters—to escape cycles of poverty as demonstrated by World Bank research.<sup>22</sup> Furthermore, research focused on Romania<sup>23</sup> further highlights how lower income families have reduced socio-economic resilience, are hit hardest by disasters, and face greater barriers to cope and recover with lasting impacts of disasters on health and education. DRM interventions can significantly reduce these potential impacts and protect existing development gains.
- b) *Promoting greater inclusion and equality.* This Project focuses on inclusion by promoting universal access for students, teachers and community members with disability, and encouraging school attendance, reduced drop out and re-engagement in education for poor and marginalized groups through digital access, family and lactation friendly facilities for young mothers and cafeterias that can provide hot meals. Measures will be also explored during preparation that would foster increased engagement of boys in schools.
- c) *Investing in sustainability and climate change adaption and mitigation.* This Project supports sustainability approaches, as well as mitigation and adaptation for climate change. By focusing on energy efficiency in public buildings and showcasing the use of renewable energy, the Project can demonstrate progress towards Romanian and EU climate change objectives. Moreover, the Project supports adaptation through consideration of disaster and climate risks in school design as well as enabling the use of schools as emergency shelters in disasters. Sustainability will also be supported through rainwater harvesting and zero waste promotion in schools, and consideration of buildings design that can help manage extreme heat impacts, for example green or white building roofs, use of greenery, or water elements.
- d) *Building human capital.* Learning losses in Romania imply that the percentage of students performing below functional literacy may increase by up to 10 percentage points, i.e., from 41 to 51 percent, based on World Bank estimated. Studies show that the poor will suffer learning losses of up to a half year<sup>24</sup> while another one-

<sup>22</sup> Hallegatte, Stephane; Vogt-Schilb, Adrien; Bangalore, Mook; Rozenberg, Julie. 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development.* Washington, DC: World Bank.

<sup>23</sup> World Bank. Forthcoming. *Overlooked.*

<sup>24</sup> Atteberry, A., & McEachin, A. 2016. *School’s out: Summer learning loss across grade levels and school contexts in the US today.*



third of the school-year learning is lost over the summer break.<sup>25</sup> This primarily affects students from lower-income backgrounds who have been facing limited or lack of access to electronic devices and poor connectivity to remote teaching. The COVID-19 pandemic is resulting in substantial learning losses and is pushing many more students into functional illiteracy.

- e) *Protecting the poor and vulnerable* through additional support to social distancing and hygiene and increased digital access in schools. Under short and long-term measures – from acquisition of temporary trailers for learning and sanitation – to better designed schools and enhanced access to digital services, this Project will support measures critical for learning in COVID-19 times. The Project will also consider infrastructure and furnishing design options to encourage pregnant girls and young mothers back to school so that they can complete their education.
- f) *Increasing employment and economic activity*. This Project is expected to generate activity in the construction and engineering sectors in Romania which can drive increased employment in a range of low- to high-skilled jobs.

### C. Proposed Development Objective(s)

- 42. The Project Development Objective is to facilitate access to safer, disaster resilient, inclusive and sustainable schools for Romanian students and teachers of the project participating schools.

#### Key Results (From PCN)

- 43. Achievement of the PDO will be monitored through the following proposed key outcome indicators:
  - a) Number of direct Project beneficiaries with access to safer and disaster resilient schools that minimum standards for water, sanitation, universal access, heating, ventilation, and energy efficiency;
  - b) Percent change in the student retention and presenteeism rates at schools intervened under the Project, disaggregated by gender and other relevant demographic information; and
  - c) Level of community satisfaction with the modernization of schools under the Project.

### D. Concept Description

- 44. **This Project of €100 million will substantively intervene in ~70<sup>26</sup> of the highest risk schools.** This includes development of technical documentation, execution of civil works and outfitting the schools with modern furnishing, digital requirements, renewable energy and energy efficient systems and bringing the schools up to appropriate safety, sanitary and hygiene standards. These schools will provide a demonstration of the process to intervene in high-risk schools and options for the seismic strengthening (retrofit/refurbishment versus demolish/rebuild) that can guide further investments in the educational sector and other public infrastructure in Romania.
- 45. **Project financing will cover necessary analytical studies, design, civil works and furnishings for the participating schools to ensure their:**
  - a) *Safety and resilience*: Earthquake resistance, reduction in extreme heat and cold impacts (which are expected to increase with climate change) on learning through adequate heating and cooling systems, appropriate air ventilation, adherence with fire safety norms (including monitoring and warning, fire suppression systems and

<sup>25</sup> Borman G. D., Benson J., Overman L. T. 2005. *Families, schools, and summer learning*.

<sup>26</sup> The Project is fully scalable with additional financing meaning that more schools could be added under the demonstration element of this Project. For example, €150 million investment project could cover ~120 schools, whereas €100 million would cover ~70 schools.



adequate building egress), storm resistance, and ensuring that schools and predominant school routes are not under risk from flood and landslide – all considering current and future climates. Safety measures will also consider the enhanced ability for physical distancing, appropriate handwashing and sanitation facilities and appropriate indoor bathrooms which is urgently needed to ensure safety in the COVID-19 pandemic and future public health emergencies. The sanitation facilities will be provided in the short-term through temporary container facilities and in the long-term through renovated and/or reconstructed schools. Safer and resilient schools can be designated as evacuation and emergency shelters in emergencies.

- b) *Inclusiveness*: Designs will include access for students with disabilities, such as ramps and disability friendly bathrooms, access to appropriate bathrooms for both genders, consideration of facilities for teachers, administrative staff and students returning to work after maternity leave, and other aspects. The design will support increased participation of poor and marginalized students through provision of hot meals through cafeterias, access to childcare and lactation rooms to boost female Roma student enrolment/re-enrolment. Moreover, design elements (such as breakout spaces, access to digital learning, etc.) will aim to reduce absenteeism and drop-out of key student demographics, such as boys. Safer space design will also include features that promote a positive school climate that fosters learning.
- c) *Sustainability*: Buildings will be improved for increased energy efficiency (lighting, insulation etc.), modernized in terms of heating and cooling, and where feasible include renewable energy options (i.e. solar rooftops), rainwater harvesting, use of reflective/green roofs or greenery/water elements, and zero waste facilities will be introduced. The Project will consider the sustainability of school networks from a student population perspective, aiming to prioritize interventions in schools where student populations are increasing and/or where double or triple shift schooling is underway. Sustainability also considers ensuring access to municipal funds for operation and maintenance of new or newly renovated schools.

- 46. *Project locations. It is envisaged that the ~70 Project participating schools will focus on two to three areas of high seismic risk.* The Bucharest-Ifov region is under very high seismic risk, and yet the EU funding for school infrastructure improvements is expected to be limited due to the region's higher development level. Therefore, Bucharest-Ifov will be a priority area. One to two regions outside Bucharest will be selected during preparation, and prioritized based on seismic risk, rural disadvantage challenges, and low socio-economic development.
- 47. **Project investments in ~70 schools will be complemented by a technical assistance component to build the foundation for a long-term intervention in other ~800-900 high-risk schools through access to government and EU funds.** A longer-term investment program with necessary capacity to reach scale in safer, inclusive and sustainable schools is urgently needed. Such program could target significant financing opportunities through different government and EU funding mechanisms. For example, it is expected that through the next phase of the Regional Operational Programs (2021-2027) and the Recovery and Resilience Facility (2021-2026), there will be dedicated EU funds available for energy efficiency in public buildings, investment in infrastructure in kindergartens, lower secondary schools, vocational education campuses, national colleges (high schools), universities and digitization of education systems.
- 48. **The Project will serve as a national demonstration and institutional learning process.** The ~70 schools supported by the Project will showcase an integrated approach for school infrastructure for a variety of different school types – such as historical school buildings, schools in urban and rural settings, schools to be designated as emergency shelters, school buildings that can be retrofitted versus those to be demolished and rebuilt, opportunities to harness renewable energy and so forth. Project preparation and implementation will also serve as a learning process for the engaged authorities and local government, highlighting opportunities for standard terms of references to streamline procurement, permitting, capacity etc. that need to be overcome for long-term investment in school infrastructure.



These would include many transferrable lessons for the authorities related to also other types of public infrastructure facing similar set of challenges.

49. **The proposed Project complements the World Bank engagement in Romania and builds on the lessons learned from the past and ongoing projects.** Key lessons learnt integrated into the design include: (i) project ownership and committed champions for action at senior and technical levels, (ii) immediate “no-regret” actions initiated in one sector while parallel advocacy, planning, and design take place in other high risk sectors, (iii) maximum clarity around roles and responsibilities for seismic strengthening of assets, (iv) maximum impact through a single intervention bringing multiple benefits, such as seismic safety, climate change adaptation and energy efficiency, improved amenity and functionality, (v) continuous communication across government and Project beneficiaries, and (vi) framework approach with the exact costing and final number of school buildings for retrofitting and reconstruction to be determined during Project implementation.

### Detailed Description of Components

50. The proposed Project will consist of the following components and activities:

#### Component 1: Demonstrating Integrated Investment in School Infrastructure

51. This component will finance preparatory studies, civil works and supervision in the ~70 highest risk schools in two or three country’s areas with the highest seismic risk, as well as outreach to communities and arrangements for students temporarily displaced during construction.
52. *Proposed activities:* The Component will finance the structural retrofitting or demolish/rebuild, functional upgrading, and energy efficiency investments, including:
- a) Preparation, review, and analysis of the technical surveys, energy efficiency audits, feasibility studies, and technical designs;
  - b) Civil works for retrofitting/rehabilitation or demolish/reconstruction of priority schools, including improvement of their functionalities according to the relevant standards in place (e.g. earthquake resistance, fire safety, disaster and climate change resilience), improving energy efficiency, consideration of renewal energy resources (e.g., solar), ensuring universal access, modern spaces that are aligned with student capacity requirements, modern electrical, water, and telecommunications. Improvements in sanitary and hygiene facilities, including the cleanup and land rehabilitation of legacy outside toilets, will reduce disease transmission. For schools intended to be designated as emergency shelters, additional works may be required;
  - c) Supervision of construction works;
  - d) Financing of temporary facilities (trailers) to accommodate students and/or to provide sanitary facilities. These temporary facilities can be used in the short-term to provide extra space to accommodate social distancing during the current COVID-19 pandemic and then during the civil works process to accommodate temporarily displaced students. Where needed, the Project will also finance the transportation of temporarily displaced students to nearby schools via bus services; and
  - e) Outreach to municipalities, school authorities, teachers, students and communities of the intervened schools.
53. *Retrofitting versus demolish/rebuild of school infrastructure.* In the past, most school and other building strengthening projects have focused on retrofitting; however, in many cases it makes greater economic sense to demolish and rebuild school infrastructure. This is especially relevant for buildings more than 50 years old that will require significant intervention to reach safer, inclusive and sustainability objectives and where the student population has significantly grown, and double or triple shift schooling is currently required. Investing in new buildings also offers an opportunity for the schools of the future to be constructed through modern designs that



fully integrate safety, inclusiveness and sustainability. Buildings with historical heritage status and/or buildings located in historical areas are exceptional cases and may focus on retrofitting despite the higher costs associated. These historical buildings should be treated as a specific batch of buildings, given the different permitting processes, expertise for technical design and civil works and the need for strong engagement with the Ministry of Culture and other relevant authorities.

54. *Prioritization process:* This Project follows a framework approach with the exact costing and final number of school buildings for retrofitting and reconstruction to be determined during Project implementation. An initial list of investments was identified during Project preparation, in consultation with MoER and MPWDA, based on the level of seismic risk which considers the building age, engineering structural system and number of students. The initial prioritization will be updated during preparation based on an updated dataset from the Romanian Education Management Information System - *Sistemul Informatic Integrat al Învățământului din România* (SIIR) database from MoER, and organized at national, regional and local levels.

### Component 2: Investing in Clever Classrooms

55. This component will support the development of modern classrooms for the ~70 schools retrofitted and rehabilitated or demolished and rebuilt under Component 1. This will include financing for:
- Digital classrooms*, through procurement of smart boards, laptops, enhanced internet connectivity etc. Air quality and temperature meters will improve learning environments.
  - Quality and safer classrooms*, though improved air quality, illumination, noise reduction; new ceilings with acoustic tiles; blinds; and with all furnishings designed for earthquake resistance and considering measures for improved hygiene standards.
  - Flexible and modern spaces:* Provision of flexible, age-appropriate desks/ chairs and special furniture and materials for multiple learning zones, that could also be used to convert/arrange the space to ensure necessary social distancing, if needed, plus enhanced storage and display options; decorations for moderate stimulation.
  - Teachers of the future:* Provision of training for teachers in the ~70 schools on how to harness the opportunities and flexibilities enabled by safe, digital, quality and flexible learning spaces.

### Component 3: Technical Assistance and Investment in Foundations to Reach Scale in School Infrastructure

56. This component will provide technical assistance focused on streamlining processes, building capacity, and developing the necessary investment architecture for a long-term program aimed at schools across Romania.
57. *Proposed activities* include:
- Designs for schools of the future:* This activity will finance the development of standard school modern and future designs (disaster and climate resilient, inclusive and sustainable) for the construction of new schools (including those to be demolished under Component 1). These designs will consider different student population sizes, rural/urban environments and education level, as well as requirements for the rapid transformation of schools into evacuation and shelters in the event of emergencies. The designs will be based on exemplary /models- example of learning environments, with best practices from across the world explored (such as modular/interior walls). As needed, this activity will also support necessary upgrades to norms that would enable these schools of the future to quickly move from design to construction.
  - Investment planning and foundations for investments:* This will include collection of necessary data for further prioritization and investment planning of schools for safety, inclusiveness and sustainability and highlighting which school buildings fail to meet modern standards. This information can be used to further prioritize



actions and investments to improve school infrastructure. Under this activity, technical surveys and feasibility studies can be financed for schools that will be the recipients of EU, national and/or local government funds for investment in school safety, inclusiveness and sustainability. This activity could also finance standard retrofitting and renovation designs for schools constructed in the 1950-1980 period that have more standard design and construction.

- c) *Streamlined implementation processes*: This activity can support the development of simplified and standard templates for procurement of different stages of investment and guidance for authorities embarking on school infrastructure investment projects. Similarly, this activity can support the identification of steps in permitting and approval that slow implementation, and where improvements can be made. This is especially important for buildings in cultural heritage zones or for buildings designed as cultural heritage sites.
- d) *Fostering disaster and climate resilient, inclusive and sustainable schools and communities*: This activity can support the development of educational materials for different school aged children that can be integrated into the school curriculum, with a focus on actions that can be taken to build resilience to disasters and climate change, how to prepare and respond in disasters (such as drills, school emergency plan preparation, family and teacher training), opportunities to increase sustainability (such as zero waste, water harvesting, energy use and conservation etc.) Beyond the school curriculum, there are opportunities for community outreach on these topics, including training in first aid, use of digital tools and online media, etc. Under this activity, support can be provided to historically disadvantaged communities and groups.

**Component 4: Project Management**

58. This component will focus on expanding and supporting staff capacity that is needed to ensure successful implementation of the activities carried out under the proposed Project within the MoER Project Management Unit (PMU) and in associated stakeholder groups. Activities will comprise: (i) implementation support in the areas of project management, monitoring and evaluation (M&E), fiduciary, and environment and social safeguards management, community outreach/engagement, and auditing; (ii) consultancy services and specific activities for capacity building, equipment, and software to implement the Project and to monitor and evaluate the results; and (iii) incremental operating costs of the PMU.

**Component 5: Contingent Emergency Response Component**

59. This component will allow undisbursed funds to be quickly reallocated from the other components in response to an imminent or eligible emergency or crisis that has occurred. A CERC annex would be included to the Project Operations Manual (POM), which would specify implementation arrangements for the component including its activation process, roles and responsibilities of implementing agencies, positive list that maybe financed, environmental and social aspects, and fiduciary arrangements.

| Legal Operational Policies                  | Triggered? |
|---------------------------------------------|------------|
| Projects on International Waterways OP 7.50 | No         |
| Projects in Disputed Areas OP 7.60          | No         |

Summary of Screening of Environmental and Social Risks and Impacts



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**APPROVAL**

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**Approved By**

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