Fact Sheet

Title of the proposed Joint Programme	Green Financing Facility to Improve Air Quality and Combat Climate Change in North Macedonia
UNCT	North Macedonia
Date	Tue, 03/31/2020 - 12:00
RCO focal point	Lilian Kandikjan, Partnership and Development Finance

Lead UN entity and contact person

UN entity	Name	Email
United Nations Development Programme (UNDP)	Ms. Narine Sahakyan, Resident Representative	narine.sahakyan@undp.org

Participating UN entities and contact persons

UN entity	Name	Email
United Nations Development Programme (UNDP)	Ms. Sanja Bojanic, Deputy Resident Representative	sanja.bojanic@undp.org
International Organization for Migration (IOM)	Ms. Sonja Bozinovska Petrusevska, Head of Office	sbozinovska@iom.int

Relevant UNDAF Outcome/s and Output/s

UN Partnership for Sustainable Development: Outcome 4, Output 4.3

Relevant objective/s from national strategic document/s

- Target on reducing air pollution up to 50% in the City of Skopje and up to 30% in other cities and Priority Actions 3,4 and 8 of the

Clean Air Plan (public awareness and education, reduction of PM particle emissions generated from households, and Industry measures);
- Strategic goal 3 - Decarbonisation and goal 1 – Energy Efficiency of the Strategy for Development of the Energy Sector in the Republic of North Macedonia until 2040; as well as the commitment of the National Determined Contributions (NDCs);
- Strategic goal 2, especially part 3.2., on productive use of remittances, of the National Strategy of the Republic of North Macedonia for Cooperation with the Diaspora 2019-2023.

SDG targets on which the progress will be accelerated (includes targets from a range of SDGs and development pillars)

Goal 1: End Poverty	
Goal 2: Zero Hunger	
Goal 3: Good Health and Well-Being	3.9
Goal 4: Quality Education	
Goal 5: Gender Equality	
Goal 6: Clean Water and Sanitation	
Goal 7: Affordable and Clean Energy	7.1 7.2 7.3
Goal 8: Decent Work and Economic Growth	
Goal 9: Industry, Innovation and Infrastructure	
Goal 10: Reduced Inequalities	10.7
Goal 11: Sustainable Cities and Communities	
Goal 12: Responsible Production and Consumption	
Goal 13: Climate Action	13.3 13.a
Goal 14: Life Below Water	

Goal 15: Life On Land

Goal 16: Peace, Justice and Strong Institutions

Goal 17: Partnerships for the Goals

Self-Assessment

The proposal reflects the integrated nature of the SDGs	Yes
The proposal is based on an inter-agency approach (two or more UN entities involved), with RC coordinating Joint Programme preparation and implementation	Yes
The proposed results are part of the UNDAF and aligned with national SDG priorities	Yes
The proposed Joint Programme will be led by government and include key national stakeholders	Yes
The proposal is based on country level consultations, as explained in the Concept note, and endorsed by the government (the letter of endorsement)	Yes
The proposal is based on the standard template for Concept Notes, it is complete, and it includes: • **Theory of Change demonstrating contribution to SDG acceleration and transformation to implement the 2030 Agenda and awareness of relevant financial policy efforts at regional or national level,** • **Results-oriented partnerships, including a strategy to engage and partner with IFIs/MDBs,** • **"Quick wins" and substantive outcome-level results, and** • **Initial risk assessment and mitigation measures.**	Yes
The proposal is expected to leverage resources for the SDGs at scale	Yes

Proposal for Joint Programme

1. Summary of the Joint Programme

Overall purpose

This project intends to reduce air pollution levels and carbon emissions in North Macedonia by catalyzing private sector and households' investments into renewable energy (RE) and energy efficiency (EE) solutions that will support the country in advancing the implementation of the SDGs.

The problem

North Macedonia suffers from very high levels of air pollution with Particulate Matter (PM) levels high above safety thresholds and reaching 2.5 in Skopje, the capital. Other major cities also experience high levels of air pollution, hence, 75% of Macedonians are exposed daily to toxic air imposing enormous socio-economic costs.

Technical description of solution

The project proposes the development of a green financing facility and mechanism that provide loans, performance-based payments, and technical assistance to trigger private sector and households' investments into RE&EE solutions.

Component 1

A new partially subsidized loan scheme of $25 million will be developed and on-lent by local banks to SMEs to accelerate investments in RE and EE solutions. This financial instrument will be co-financed by EBRD and the UN/SDG Fund as structured below:

- Loan component: $22.6M (USD equivalent* of EUR 20M) provided by EBRD.
- Performance-based payments component: $2.26M extended ex-post to loan recipients whose installed projects meet the investment criteria, provided by UN/SDG Fund. EE projects will receive 5%, RE 10%, and projects that include both will receive 10% of the loan amount.
- Technical assistance (TA) component: $1.13M to consultants to assist applicants to design qualifying projects and to conduct post-implementation verifications, provided by UN/SDG Fund.

Component 2

This component will support households to purchase RE solutions** by utilizing $1.5M (SDG Fund) for ex-post performance-based payments. Additionally, $0.5M (SDG Fund) will be deployed for TA to support project-owners with the design and then to do the verification of projects.

Component 3

This component will provide $0.61M (SDG Fund) to support the development of innovative RE and EE solutions via a Challenge Fund of the Fund for Innovation.

Footnotes:

* Based on the UN exchange rate of 1 EUR = 1.13 $(as of 13 March 2020)). For clarity, the EBRD will provide EUR 20M while: a) the $equivalent of 10% of this amount will be allocated for performance-based payments and b) the $equivalent of the 5 % of this amount will be allocated for technical assistance.

** Partnerships with local banks are being explored to ensure credit lines for individual households for this purpose.)

2. Thesis and theory of change of the Joint Programme

Thesis

Residential heating and energy production are two leading sources of PM and CO2 emissions in urban areas, respectively responsible for 36%, and 20% of total emissions. These high levels of PM create negative socio-economic impacts and contribute to the national/global emissions that contribute to climate change and hinder national progress on the SDGs.

To address the problems the country seeks to reduce the amount of PM and C02 that are released through the widespread adoption of RE and EE solutions. To date, utilization of RE and EE solutions has been limited as the upfront acquisition costs of RE & EE solutions are viewed as high.

This project intends to trigger SMEs and individual users to invest in RE & EE solutions through the provision of loans, performance-based payments, and technical assistance and drive innovation of these types of solutions. In addition, the project will aim to test/create financing mechanisms that will facilitate that remittance recipients and returning migrants channel an increased percentage of USD 344 million of remittances into productive usage.

The project will unlock significant amounts of private sector and household capital driving growth of both a market for RE and EE credit financing and related products and services as well as creating an enabling environment for greater awareness, competition and the adoption of these solutions.

Theory of Change

Goal:

North Macedonia advances towards a low-emission sustainable development pathway via the utilization of renewable energy and energy-efficient solutions.

Goal Statement:

If financial mechanisms and incentives trigger investments into renewable energy and energy efficiency solutions, then the country will have improved air quality, reduced CO2 emissions, and better socio-economic outcomes.

Outcomes:

1. Financial mechanisms that scale up the adoption of renewable energy and energy efficiency solutions by SMEs established.
2. Financial mechanisms that scale up the adoption of renewable energy by households and individuals, including remittance recipients and returnees, established.
3. Support to fostering innovations of RE/EE solutions strengthened.

Barriers:

- Little to no access to affordable finance and incentives for RE/EE solutions.
- Limited willingness of private sector actors to invest in RE/EE solutions.

-Limited willingness of banking sector to provide financial services for RE/EE solutions given low awareness and perceived risks/rewards.

- Remittance recipients and returning migrants typically utilize remittances on non-productive consumer purchases.
- Low awareness of the negative socio-economic impacts of current energy production and utilization practices, as well as the benefits of RE & EE solutions.

Problem:

- PM and CO_2 emissions contribute to poor and worsening air quality and climate change.

Assumptions:

- Local Banks, suppliers, and service providers are willing to participate in the project
- Private sector actors and households are financially able & triggered to invest in RE and or EE solutions given the new financial instruments and technical support mechanisms
- The cost of electricity does not substantially decline.
- The costs of EE &RE products and services do not increase.

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3. What are the expected results of the proposed Joint Programme?

The key expected results include:

- Improved air quality by reduced levels of PM particles and CO_2 emissions
- Improved environmental, health and socio-economic outcomes
- Increased utilization of renewable energy and energy efficiency solutions
- Increased affordability of renewable energy and energy efficiency solutions
- An improved commercial ecosystem driving demand and supply of RE and EE solutions
- A credit market for financing RE/EE solutions
- A banking sector that is more informed about RE & EE financing and willing to lend
- Lower energy costs to end-users
- More households including remittance recipients and returning migrants invest in RE/EE solutions.

Alignment with national SDG priorities

With regards to processes and obligations related to EU integration, North Macedonia is in the process of harmonizing legislation with EU legislation in the areas of renewable energy, energy efficiency and the environment to develop a consistent legal framework for the energy sector that provides the basis for institutional and policy reforms supporting increased utilization of renewable energy and energy efficiency solutions.

The key national strategies and policies that this project aligns are:

- National Strategy for Sustainable Development
- Energy Strategy until 2040
- Strategy for Utilization of RES until 2020 and Energy Efficiency Strategy until 2020
- Third National Energy Efficiency Action Plan

- Renewable Energy Action Plan until 2025
- Intended Nationally Determined Contributions
- Resolution on Migration Policy of the Republic of North Macedonia 2015-2020
- National Strategy of the Republic of North Macedonia for Cooperation with the Diaspora
2019-2023

Contributions to SDGs acceleration
SDG 3 of Good health and well-being is accelerated as the project will result in both less PM in the air and people's homes. Therefore, people will be breathing cleaner air which will reduce health issues, especially respiratory.

SDG 7 of Affordable and clean energy is accelerated as the project provides lower cost access to renewable (clean) energy solutions. Furthermore, the provision of gender-specific financial concessionality increases equality of access to RE and EE solutions.

SDG 10 of Reduced inequalities is accelerated by devising performance-based payments for women headed households, remittance recipients and returning migrants.

SDG 13 of Climate action is accelerated as the results of the project will mean a reduction in the amount of C02 being put into the atmosphere in North Macedonia.

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4. Describe the innovative nature of the Joint Programme

Component 1 is financially innovative as it provides a mechanism for financing investments that support both (either or combined) renewable energy and energy efficiency solutions. Currently, there are no financing instruments to support investments in RE and EE solutions in North Macedonia nor commercially available RE or EE loans for SMEs.

The provision of performance-based payments is innovative as it improves the return on investment that will eventually be realised through reduced energy expenditures by shortening the payback period, as well as functions as a triggering mechanism to invest in the first place. This Component is also innovative in that it actively promotes the utilization of RE and EE solutions by private sector actors and the sector in general through awareness-building activities that inform others on the socio-economic value of these types of solutions. This unique approach is expected to foster ongoing demand and support from the banking sector as the solutions prove financially viable.

Component 2 is innovative in that it provides performance-based payments to trigger investment in RE solutions at the household level by reducing overall investment costs and payback period. Furthermore, to support the participation of vulnerable groups, this Component provides a higher percentage of concessionality to female headed households, single parent headed households, remittance recipients and returning migrants enabling more equitable access to RE solutions.

This component is also innovative in its efforts to leverage remittances towards SDG objectives, especially clean energy and climate action. While remittances have long been acknowledged as an instrument to reduce poverty, this project goes one step further and aims to influence the use of remittances into clean energy and, in turn, a reduction in amount of PM and CO2.

Component 3 is innovation as the finances from the SDG Fund will support the fostering of innovation in RE and EE technologies and capabilities through the development of a challenge fund that also provides technical assistance to participants to support their efforts. The collaborative effort of UNDP and Government via the Fund for Innovation will expose participants to international best practices and serve as a learning platform to spur innovation and private sector development leading to better socio-economic outcomes.

The coming together of UNDP, IOM, and EBRD, and the SDG Fund for driving economic, environmental and social change to advance the country's efforts for low emission sustainable development is a globally unique partnership.

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5. Expected added value of the UN and the Joint SDG Fund

UNDP brings strong expertise and a track record in climate change and air pollution related initiatives in North Macedonia and globally as well as an understanding of and a trust capital with specific vulnerable groups who are potential clients of the project - single-parent and female-headed households.

The IOM brings its own expertise including an understanding of the specific needs and direct access to remittance recipients and returning migrants.

EBRD brings expertise in development and management of credit instruments and established relationships with local banks.

By combining these three complementary aspects of expertise that UNDP, IOM and EBRD offer, better effectiveness, efficiency and outreach of the project will be ensured.

The UNDP and IOM are uniquely positioned to play a critical role in combining the financial resources of EBRD with funds from the SDG Fund, and join it with their own co-financing (parallel) to catalyze investments by SMEs and individuals, including vulnerable groups, into RE and EE solutions.
In doing so, the existing ecosystem for supply and demand of these products and services will grow as will the utilization of these technologies. Without the project, which is the situation now, the banking sector would not extend loans to private sector and private sector will not be likely to undertake EE and RE investments.

To drive a change away from business-as-usual requires concessional financing at the scale provided by this project as it will lead to significant progress in the sector and lay the groundwork for further acceleration of efforts.

As the project evolves, new relationships and partnerships will develop between banking sector actors, suppliers and consumers which will drive further acceleration of utilization of RE and EE solutions and growth of the sector.

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6. Leadership and implementation of the Joint Programme

RCO focal point will receive regular updates on the implementation of the programme and support with relevant coordination support activities, as necessary.

UNDP is the lead agency of the project and acts as the Administrative Agent (AA) under which the funds will be channeled for the Joint Programme through the AA. UNDP will oversee overall project implementation.

IOM is a partner agency of the project and will implement a portion of Component 2 (0.6M) that are focused on remittance recipients, returnees and women-headed households.

EBRD is an IFI partner of the project and will provide ~$22.6Min co-financing. Additionally, EBRD will bring expertise and strong relationships with the local banking sector as they have implemented similar projects previously.

The Fund for Innovation will issue an open a call to catalyse innovative ideas for RE and EE solutions and with UNDP it will continue to support ideation, collaboration, and business model development.

Local banks will serve as a key partner and enabler of the project as they are a conduit to the financial mechanisms of Component 1.

Technical Consultants will provide project design and verification services to ensure that the projects are designed and implemented in accordance with the stipulations of the offer.

The government led by the Deputy Prime Minister for Economic Affairs Cabinet together with the Ministry of Environment and Spatial Planning, and the Ministry of Economy will coordinate all efforts on RE and EE in the country. Their specific role vis-à-vis the project will be detailed in the full project drafting stage while their support to the project is already enlisted.

All partners together will work on the awareness raising activities that inform stakeholders of the offer, the negative environmental, health and economic impacts of current practices, and the potential benefits of incorporating renewable energy and energy efficiency solutions.

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7. Expected period of implementation

The project will be implemented over four years, a duration that was determined to be the optimal amount of time to provide proof of concept that the model is appropriate to achieve the intended environmental, and socio-economic outcomes, as well as enough data and learnings to inform the scaling-up and replicating of the project in other countries.

Furthermore, the duration is deemed to be an appropriate amount of time to demonstrate that financial instruments can drive adoption of RE and EE solutions, for the market to respond to demand pressures, allow for the future expansion of financial services for these types of investments, and to observe and capture examples of the benefits that RE and EE investments can provide.

Key milestones:

1. Agreements and funding mechanism with Banks in place. (Within three months of project implementation)
2. Launch of awareness raising campaigns with targeted end-users. (Within six months of project implementation)

3. First funding and installation of a RE solution. (Within six months of project implementation)
4. First funding and installation of an EE solution. (Within six months of project implementation).

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8. Cost, co-funding, and co-financing of Joint Programme

Total value of the project inclusive of project management and agency fees is $32.6M
Total amount of funds requested from the SDG Fund is $7M ($6M + 1M)
Total co-finance to be provided by EBRD is $22.6M
Total co-finance to be provided by UNDP + IOM (combined) $3.0M
Project management and agency fees $1M (included in the total amount of $7M from SDG Fund).

Total requested SDG Fund finance (not factoring project management and agency fees) equals 21% of the total project budget.

The total funding requested from the SDG Fund for Component 1 is $3,390,000, of which $1,130,000 will be for Technical Assistance, and $2,260,000 for Performance-Based Payments. SDG Fund resources will augment the EBRD's contribution of EUR 20M (the USD equivalent of $22.6M).

Performance-based payments will be calculated as a percentage of the total loan amount based on the environmental impact of the investments as calculated to reduce emissions (CO2) or the choice of technology solutions (i.e. RE or EE, or RE +EE) implemented and will range between 5 and 10%.

The total funding requested from the SDG Fund for Component 2 is $2M. $1.5M will be for Performance-Based Payments ($0.5M exclusively for remittance recipients and returning migrants), and $0.5M for Technical Assistance.

Performance-based payments for households will be calculated as a percentage of the total investment based on the choice of RE technology implemented and will range between 10 and 20%. In addition, to support more equitable and gender-balanced access to clean energy performance-based payments will be calculated at the following percentages regardless of the RE technology deployed:35% for single parent-headed households and 50% for female-headed households and economically-challenged returning migrants.

Technical Assistance for both Component 1 and 2 will be used for supporting project implementers with project design services to ensure qualification and for verification of implemented projects.

In component 2, USD 0.1M of the total technical assistance budget will be allocated exclusively to support design and verification of projects of remittance recipients and returning migrants.

UNDP and IOM will contribute a combined $2.5M to this Component in co-financing.

The funding requested from the SDG Fund for Component 3 is $0.61M. UNDP will contribute $0.5M to this Component in co-financing. Technical assistance will be provided in organizing the call, developing the criteria for selecting innovative solutions, assessing those withdeveloped proof-of-concept and prototypes, facilitating knowledge exchange and cross-fertilization of ideas/solutions.

9. Risk assessment

Risk: Institutional capacity/coordination of executive entities results in inadequate human resources to effectively manage project implementation.

Response: Project Management team to conduct a stock take of capacities of the various entities involved in delivering the program to identify issues early on and take actions to mitigate any issues.

Risk: Limited collaboration and coordination between stakeholders (government departments, ministries, multilaterals and the private sector) slows project implementation and limits effectiveness.

Response: Conduct extensive stakeholder consultations during project development to secure buy-in from project partners and ensure coordination of project interventions. The project manager will carefully monitor coordination during implementation.

Risk: Limited capacity of market to provide high-quality products and services to meet the expected increased demand leading to insufficient supply and delays in implementation.

Response: Project staff will conduct consultations with local providers of RE & EE solutions early in the implementation of the project to inform them of the project and expected increased demand for products and services, encouraging them to prepare.

Risk: Limited uptake of financial incentives by target beneficiaries.

Response: Awareness campaigns will be reassessed and increased to make sure that target beneficiaries are aware of the project offering and understand the socio-economic benefits.

Risk: Remittance recipients and returning migrants are unable or unwilling to participate in the project.

Response: Project staff will conduct informational consultations with remittance recipients and returnees to inform them of the value of the project and provide them with materials that help them better understand their return on investment, as well as the benefits of RE and EE solutions.

Risk: Local banks delay their participation in the project.

Response: Banking officials will be initially engaged by senior UNDP, IOM and EBRD representatives. Incentives and operating parameters will be reviewed to ensure there is sufficient value for the banking sector.

Risk: Covid-19 results in a sustained economic recession reducing companies and households' ability to invest in RE and EE solutions.

Response: The project will seek to align itself and capatalise on Government stimulus measures and other support programs to make investing in RE and EE solutions viable and attractive.

Main assumptions are:
- EBRD will provide funding on time and according to plan.
- Local banks, SMEs, households and individuals will participate.
- The price of electricity does not go down materially.
- The price of RE technologies gets lower/stays the same throughout the project implementation.
- The economic impact of Covid-19 is manageable.

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10. Convening the private sector and engaging IFIs/DFIs

Consultations were conducted with the World Bank, the Development Bank of North Macedonia, the EBRD, and local banks.

The project will convene the EBRD, banks, the government Fund for Innovation, consultancy firms, product and service suppliers, and SMEs creating an enabling framework to mobilise private finance for RE and EE investments, driving market linkages and collaborations, and sharing and developing of expertise between these private sector and household participants.

More specifically, the project will:
- engage the EBRD to provide funding to facilitate engagement of local banks.
- engage banks, build their capacity to assess RE & EE projects and their interest in creating financial products for these types of investments.
- engage businesses that are vendors/suppliers of RE & EE products & services, building their capacities for these types of products & solutions in the process.
- stimulate market demand for RE and EE solutions through loans and financial support mechanisms, stimulating demand for various types of related products and services.
- engage households/consumers to adopt RE and EE solutions by providing information and financial incentives.
- work with The Fund for Innovation on establishing a mechanism for enhancing support to innovation in EE and RE.

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11. Leverage and catalytic function

This project will serve as a pilot to test that the model, as designed and implemented, is successful and provides the value and impact so that it can be scaled-up and replicated in other Western Balkan countries. The Western Balkans are an ideal area to scale-up and replicate the model as the other countries in this region have similar market and structural characteristics, conditions, and challenges.

Component 1 will initially leverage/mobilize/unlock approximately $2.26Min private capital from SMEs which is the required 10% "down payment" of the total loan value. However, as these loans will be repaid in their entirety, less performance-based payments of 5-10%, this Component will ultimately unlock 90-95% of the entire loan facility of EUR 20 M / $22.6 M. Therefore, the total amount of private sector finance mobilised under this Component will be between $20,340,000 – $21,470,000 for a private sector leverage ratio of approx. 6.2:1 while co-financing leverage is 6.7:1 ($22.6M EBRD co-financing raised vis-à-vis $3.39M SDG Fund financing).

In Component 2, the households will receive performance-based payment ranging from 10 to 20% of the total investment costs of qualifying projects and 35-50% for support for more equitable and gender-balanced participation in RE investments. These performance-based grant payments will be allocated from the $1.5M provided by the SDG Fund. This means that the individual project owners will contribute between 80-90% (65-50% for the more vulnerable households) of the costs of a project. Combined capital contributions from private sector actors will range between $7.3 – 15M. Note that these figures are a range and the final number depends on the mix of grants actually provided. Therefore, private sector leverage ratio ranges from 3.65:1 to 7.5:1 and co-financing leverage is 1.25:1 ($2.5M UNDP and IOM joint co-financing).

12. Technical support and seed funding

To complete the drafting of the Joint Programme and conduct stakeholder consultations technical support is needed from a national and international consultant. Stakeholders consulted include EBRD, IOM, the World Bank, various government entities, and banks.

The financial support required is expected to amount to $50,000 and will mainly be used for contracting of the National and International Consultant plus for stakeholder consultations and engagement. Thereby, the UNDP Country Office of North Macedonia requests that $50K is transferred to it as the lead agency to conduct this preparatory work.

The project will approach local banks to develop structured RE loan schemes for households that would enable access to more funds under Component 2. The TA within this component will also provide services to the local banks in developing the loan schemes, project documentation and technical assessments of the investments.

Signatures

Signed Signature Form

Signature Page - Comp 2 SDG Financing_0.pdf 2.58 MB

Government Endorsement

Letter of Endorsement

Letter of Endorsement DPMEA - C2 MKD and ENG.pdf 708.1 KB