**DOCUMENT OF THE EUROPEAN BANK
FOR RECONSTRUCTION AND DEVELOPMENT**

Approved by the Board of Directors on 28 January 2026[1]

# SERBIA

# PAMBUKOVICA DAM PROJECT

*[Redacted in line with the EBRD's Access to Information Policy]*

*[Information considered confidential has been removed from this document in accordance with the EBRD's Access to Information Policy (AIP). Such removed information is considered confidential because it falls under one of the provisions of Section III, paragraph 2 of the AIP]*

[1] As per section 1.4.8 of EBRD's Directive on Access to Information (2024), the Bank shall disclose Board reports for State Sector Projects within 30 calendar days of approval of the relevant Project by the Board of Directors. Confidential information has been removed from the Board report.

For the avoidance of any doubt, the information set out here was accurate as at the date of preparation of this document, prior to consideration and approval of the project.

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# ABBREVIATIONS / CURRENCY CONVERSIONS

| | |
|---|---|
| B/C ratio | Benefit-Cost ratio |
| BMP | Biodiversity Management Plan |
| BPN | Business Performance Navigator |
| CAP | Corrective action plan |
| CapEx | Capital Expenditures |
| CSD | Climate Strategy Delivery |
| DD | Due Diligence |
| E&S | Environmental and Social |
| EIA | Environmental Impact Assessment |
| EIRR | Economic Internal Rate of Return |
| ENPV | Economic Net Present Value |
| EPRP | Emergency Preparedness and Response Plan |
| ESAP | Environmental and Social Action Plan |
| ESD | Environment and Sustainability Department |
| ESDD | Environmental and Social Due Diligence |
| ESIA | Environmental and Social Impact Assessment |
| ESMP | Environmental and Social Management Plan |
| EU | European Union |
| FDI | Foreign Direct Investment |
| GBVH | Gender-based violence and harassment |
| GDP | Gross Domestic Product |
| GET | Green Economy Transition |
| GRU | Grant Review Unit |
| HLA | Historic land acquisition |
| HLACAP | Historical Land Acquisition Audit and Corrective Action Plan |
| IFI | International Financial Institution |
| IMF | International Monetary Fund |
| IPM | Project Profitability Model |
| LTESA | Lenders' Technical, Environmental and Social Advisor |
| LRP | Livelihood Restoration Plan |
| MAFWM | Ministry of Agriculture, Forestry and Water Management |
| MDB | Multilateral Development Bank |
| MoF | Ministry of Finance |
| NbS | Nature-based solutions |
| NPV | Net Present Value |
| NTS | Non-Technical Summary |
| PA | Paris Agreement |
| PAP | Project Affected Person |
| PCI | Policy Coordination Instrument |
| PIA | Project Implementation Advisor |
| PIU | Project Implementation Unit |
| PP&R | Procurement Policies and Rules |
| PRs | Performance Requirements |
| PSD | Policy Strategy and Delivery |
| RoS | Republic of Serbia |
| SDGs | Sustainable Development Goals |
| SEP | Stakeholder Engagement Plan |
| SIA | Social Impact Assessment |
| SSF | Shareholders' Special Fund |
| SV / Srbijavode | Public Water Management Company Srbijavode |
| SWP | Shadow Water Price |
| TA | Technical Assistance |
| TC | Technical Cooperation |
| TS | Term Sheet |

| | |
|---|---|
| WMD | Water Management Directorate |
| UN | United Nations |

| Currency Conversion | 1 EUR to RSD |
|---|---|
| 2024 | 117.10 |
| 31 December 2024 | 117.01 |
| January – November 2025 | 117.18 |
| 30 November 2025 | 117.35 |

# PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of the Republic of Serbia (the "**Borrower**" or "**RoS**") for the benefit of Ministry of Agriculture, Forestry and Water Management ("**MAFWM**") are submitted for consideration by the Board of Directors.

The facility will consist of a sovereign loan to the Borrower, represented by the Ministry of Finance ("**MoF**"), in the amount of up to EUR 66 million to finance the construction and operation of a multipurpose dam and reservoir infrastructure at Pambukovica village, in western Serbia, to enhance flood protection, enable future irrigation development, and improve climate resilience in the Kolubara River basin (the "**Project**"). The Project is considered a strategic intervention aimed at enhancing climate resilience of the Kolubara River basin, one of the most flood-prone regions in Serbia. The operation builds on the Bank's previous cooperation with the Borrower in the water sector and complements Serbia's efforts for improving its water infrastructure and climate adaptation.

The expected transition impact of the Project stems primarily from the *Green* transition quality under the Bank's Green Economy Transition ("**GET**") as 100 per cent of the Bank's financing will be used for flood mitigation and future irrigation potential, which is expected to help increase the resilience of the agriculture sector to the impacts of climate change. The Project introduces climate-resilient, multipurpose dam design and advanced environmental management practices, setting a new sustainability benchmark in Serbia.

Technical cooperation ("**TC**") support for project preparation has been provided by Austrian Municipal Infrastructure Fund and the EBRD Shareholders' Special Fund ("**SSF**").

I am satisfied that the operation is consistent with the Bank's Strategy Serbia 2023-2028, the Infrastructure Sector Strategy 2025-2029, and the GET Approach 2021-2025 and with the Agreement Establishing the Bank.

I recommend that the Board approve the proposed loan substantially on the terms of the attached Report.

**Odile Renaud-Basso**

# BOARD DECISION SHEET

| SERBIA - Pambukovica Dam Project - DTM 53846 | |
|---|---|
| **Transaction / Board Decision** | Board approval[2] is sought for a sovereign loan of up to EUR 66 million to the Republic of Serbia (the "**Borrower**" or "**RoS**") represented by the Ministry of Finance ("**MoF**") for the benefit of the Ministry of Agriculture, Forestry and Water Management ("**MAFWM**"), to finance the construction and operation of a multipurpose dam and reservoir infrastructure at Pambukovica village, in western Serbia, to enhance flood protection, enable future irrigation development, and improve climate resilience of the Kolubara River basin (the "**Project**"). |
| **Client** | The implementing entity will be Public Water Management Company Srbijavode ("**SV**", "**Project Entity**", "**Client**"), the national body responsible for water management, including water use and pollution and flood protection. SV operates under the Water Management Directorate ("**WMD**"), an administrative authority of the MAFWM ("**Beneficiary**"), which is responsible for the agriculture and water management in Serbia through the WMD. |
| **Main Elements of the Proposal** | **Transition impact.** Primary Quality – *Green* / GET Direct Track. The Project will enhance climate resilience in the Ub River valley, expand irrigation potential, strengthen water infrastructure, and boost agricultural resilience under the Bank's GET approach. All EBRD's loan proceeds qualify as green finance.<br>**Additionality**<br>**Financing Structure**: EBRD offers financing that is not available on the market from commercial sources on reasonable terms and conditions.<br>**Standard setting:** Due to its complexity, the Project will be implemented by a dedicated project implementation unit ("**PIU"**) and will be monitored by an independent panel of experts ("**PoE**") on dam safety and a lender's technical, environmental and social advisor ("**LTESA**"). The procurement will be carried out in accordance with the EBRD Procurement Policies and Rules ("**PP&R**").<br>**Sound banking:** The transaction is a sovereign loan. |
| **Key Risks** | **Political support:** The Project is strongly supported by the Serbian government and is expected to maintain support in the future due to its widely recognised public benefit.<br>**Macroeconomic risk:** Serbia's rating (BB+/BBB-/Ba2) is underpinned by a track record of macroeconomic stability and credible policy framework.<br>**Implementation risk:** Mitigated through long-term preparation, leveraging SV's experience from managing other dams and international consultancy support. Project implementation support will be provided by PIU Support consultant, Supervision Engineer, the PoE and the LTESA to ensure dam safety, ESAP compliance, appropriate technical project management, and procurement compliance. |
| **Strategic Fit Summary** | The Project is consistent with the Bank's Strategy for Serbia 2023-2028, the Infrastructure Sector Strategy 2025-2029, the GET Approach 2021-2025 and with the Agreement Establishing the Bank. |

[2] Article 27 of the AEB provides the basis for this decision.

# ADDITIONAL SUMMARY TERMS FACTSHEET

| | |
|---|---|
| **EBRD Transaction** | Up to EUR 66 million sovereign loan to RoS to finance the construction and operation of a multipurpose dam and reservoir infrastructure at Pambukovica village, in western Serbia, to enhance flood protection, enable future irrigation development, and improve climate resilience of the Kolubara River basin (the "**Project**"). |
| **Mutual Reliance** | No. |
| **Existing Exposure** | As of 30 November 2025, the Bank's existing exposure to the RoS was EUR 1,414.2 million of which EUR 590.7 million were operating assets. Please refer to Annex 1 for details. |
| **Repayment** | Tenor of 15 years [REDACTED] |
| **Potential AMI eligible financing** | None. |
| **Use of Proceeds - Description** | The proceeds of the Bank's loan will be used to finance (i) the construction and operation of a new multipurpose dam and reservoir infrastructure at Pambukovica village, including associated works such as upstream sediment traps and road realignment; (ii) PIU and ESAP implementation support consultants; (iii) works supervision consultants; (iv) PoE; and (v) the front-end fee. |
| **Investment Plan** | [REDACTED] |
| **Financing Plan** | [REDACTED] |
| **Key Parties Involved** | • MoF<br>• MAFWM through WMD<br>• SV |
| **Conditions precedent to effectiveness** | [REDACTED] |
| **Conditions to disbursement** | [REDACTED] |
| **Key Covenants** | [REDACTED] |
| **Guarantees** | Sovereign loan. |
| **Other material agreements** | None. |
| **Associated Donor Funded TC and Blended Concessional Finance** | **Technical Cooperation (TC)**<br>**Pre-Signing:**<br>**TC 1: Gap Analysis**<br>1. Assessment of existing project documentation against the requirements of the Bank's Environmental and Social Policy (2019).<br>2. Funding source: Austrian Municipal Infrastructure Fund (Government of Austria).<br>3. EUR 64,262.<br><br>**TC 2: Technical, Environmental and Social Due Diligence**<br>1. Independent review of the Project's technical and economic viability, compliance with EBRD Performance Requirements, and Paris Alignment based on the ESIA and related documentation.<br>2. Funding source: SSF.<br>3. EUR 232,000. |

| | |
|---|---|
| | **Post signing:**<br>**TC3: LTESA**<br>1. Independent monitoring of environmental and social ("E&S") aspects, ongoing oversight of technical matters and Project procurement.<br>2. Funding source: it is expected to secure SSF funding for Phase 1 (pre-construction phase) in 2026. Subsequent phases of the TC are expected to be financed by SSF or another international donor. The Team plans to seek SSF funds or alternative donor funding for LTESA in multiple phases.<br>[REDACTED]<br><br>**Reimbursement:** The above assignments are non-reimbursable transactional TCs required to evaluate the investments and assist the Client during the Project's implementation.<br><br>**Client contribution:** The Government made a significant contribution to the Project's early preparation [REDACTED] for ESIA and related studies, as TC funds were not available at that stage. In addition, PIU support, works supervision and PoE consultancies will be loan-funded [REDACTED]. |

[REDACTED]

# INVESTMENT PROPOSAL SUMMARY

# 1. STRATEGIC FIT AND KEY ISSUES

## 1.1 STRATEGIC CONTEXT

Serbia faces growing climate change impacts, including rising temperatures, prolonged droughts, and more frequent severe floods. The Kolubara River basin is among the most affected, with the devastating May 2014 floods highlighting the urgent need for comprehensive flood risk management and adaptation. To address these climate challenges, the Government of Serbia has identified the **Pambukovica Dam Project** as a strategic investment for the country, also in line with Serbia's development priorities and United Nations Sustainable Development Goals ("SDGs") 11 and 13.

The Pambukovica dam will be built on the Ub River, 21 km upstream of the Tamnava confluence. [REDACTED] The Project's main goal is to enhance climate resilience of the Ub Valley and the wider Kolubara basin. The Project will also promote future irrigation potential with 2,225 ha of agricultural land planned to be irrigated in a later stage, sediment retention, and ecological flow management.

The Project's expected benefits include reduced flood risk, protection of lives and infrastructure, support for agricultural resilience, ecological flow maintenance, and strengthened institutional capacity in water resource management.

The Programme is in line with the following strategies and objectives:

- Country Strategy for Serbia 2023-2028, whose objectives include provision of finance and TC to improve infrastructure and to support the Green economy by investing in projects that support "decreased vulnerability to climate change";
- Infrastructure Sector Strategy 2025-2029 which promotes investments for "support regional and national irrigation and water conveyance projects that improve food and water security"
- GET Approach 2021-2025 objectives as it addresses irrigation and water infrastructure and contributes to water and energy savings as well as reduction of system's vulnerability to climate change.

## 1.2 TRANSITION IMPACT

**Primary Quality: Green**

| Obj. No. | Objective | Details |
|---|---|---|
| 1.1 | *The percentage of EBRD use of proceeds that supports a green economy transition and therefore qualifies as GET finance exceeds 60%.* | The entire EBRD use of proceeds qualifies as GET finance due to the dam's enabling role in enhancing flood protection and drought resilience for downstream communities. This aligns with the three-step approach outlined in the joint MDB methodology for climate finance attribution. The Project's primary objective is to address the compound impacts of flooding and drought in an increasingly uncertain hydrological context, offering a long-term adaptation solution to water-related hazards in Serbia's Kolubara Basin. |
| 1.2 | *The project introduces one of the first three of its kind green products or* | The dam is technically innovative for Serbia in three keyways:<br>1) Its development is reverse-sequenced: Phase 1 provides flood retention, while the infrastructure is pre-designed for Phase 2 seasonal irrigation without further redesign. This departs from Serbia's typical approach of prioritising irrigation first and enables the dam to address both hydrological extremes – floods and droughts. |

| Obj. No. | Objective | Details |
|---|---|---|
| | *technologies that are innovative at the national or regional level.* | 2) It introduces advanced adaptive operations, using climate-informed rule curves that dynamically balance downstream flood protection, irrigation abstraction and ecological flows. This requires real-time digital monitoring, predictive modelling and decision-support tools, representing a new operational practice in Serbian dam management.<br>3) The Project integrates nature-based solutions (NbS) across the catchment. [REDACTED]<br>This is among the first Serbian dams to integrate such green innovations. The NbS concept was developed following the 2014 floods and formalised in the 2018 Kolubara Water Protection Study. With limited national precedents – Ćelije Reservoir being the closest – the combination of engineered infrastructure with NbS remains highly innovative. NbS for sediment management are not mandated under EU regulations, though increasingly recognised as best practice, and the EBRD has not previously financed a project with this level of NbS integration.<br>Overall, the Project represents a significant addition to Serbia's multi-purpose reservoir network. It introduces a climate-resilient dam with initial flood protection and future irrigation capacity, advanced adaptive management systems, and integrated NbS that reduce sediment inflow, stabilise soils, improve water quality, and support new habitats. This approach enhances long-term climate resilience and demonstrates a modern, sustainable model for water management in Serbia. |
| 1.3 | *The project has a good climate resilience benefit-to-cost ratio which exceeds one. (above 2)* | The Project's climate resilience benefits stem from its ability to mitigate the combined downstream impacts of flooding and drought. These benefits include reduced flood damages, enhanced agricultural productivity through improved irrigation, and the sustained provision of ecological flows. [REDACTED] |

**Delivery risks:** Risks to achieving the *Green* transition impact quality objective include the Client's limited institutional capacity to implement climate-resilient infrastructure in line with international standards. Inadequate coordination among stakeholders and lack of experience with EBRD procedures may delay the Project's execution and reduce impact. These risks are mitigated through the strengthening of internal SV's PIU, supported by experienced PIU support and works supervision consultants, as well as independent PoE for dam safety oversight. The Bank will also engage LTESA to ensure timely and quality delivery on E&S, technical and procurement aspects.

**GENDER SMART TAG: Gender Aware.**

### 1.3 ADDITIONALITY

| **Identified triggers*** |
|---|
| *Serbian Climate Resilience & Irrigation Programme SCRIP* |
| **Additionality sources** |
| **Financing Structure**<br>• The Bank provides long-term financing, which is not readily available in Serbia from local or international commercial banks. The proposed tenor [REDACTED] above the market average and are necessary to structure the Project given its use of proceeds.<br>• Public sector: EBRD investment is needed to close the funding gap. At the same time, the EBRD does not crowd out other sources, such as from IFIs, government, commercial banks and/or complements them. |
| **Risk Mitigation**<br>• EBRD helps the Client to mitigate physical transition risks and take climate action, such as to identify and manage physical climate risks and build resilience to them. |

| |
|---|
| • EBRD helps the Client to mitigate climate governance risks and take climate action, such as to improve its internal corporate governance for managing climate risks.<br>The Project enhances climate resilience by financing flood protection infrastructure and enabling future irrigation in a flood- and drought-prone region. It mitigates physical climate risks by:<br>(i) building a multipurpose dam to regulate flows and reduce flood damage,<br>(ii) supporting irrigation over 2,225 ha to improve water availability and agricultural productivity (subsequent phase), and<br>(iii) maintaining ecological flow and sediment retention to reduce vulnerability to extreme weather.<br>Together, these measures directly address climate risks and foster long-term environmental sustainability. |
| **Standard setting: helping projects and clients achieve higher standards.**<br>• Client seeks/makes use of EBRD expertise on **best international procurement standards**.<br>• The Project will achieve high standards, that are expected to go beyond national requirements. The EBRD have supported the Client in identifying and prioritising best practice for water infrastructure investments. |

### 1.4 SOUND BANKING - KEY RISKS

| Risks | Probability / Effect | Comments |
|---|---|---|
| **Fiscal / Macro-economic risk** | Medium / Medium | **Sovereign ratings remain stable at BBB-/Ba2/BB+.** Serbia's economy grew by 3.8% in 2023 and 3.9% in 2024 but slowed to 2.0% year-on-year in the first three quarters of 2025 amid broad-based sectoral slowdown, weaker external demand, and domestic uncertainty linked to social protests. Growth is projected at 2.5% in 2025 (vs 2% as per IMF latest report) and 3.3% in 2026. Inflation fell sharply from 16.2% (Mar 2023) to 2.8% (Oct 2025), supported in part by temporary retail margin caps, enabling gradual monetary easing. The NBS cut the policy rate from 6.5% to 5.75% by August 2025, while maintaining a cautious stance amid persistent core pressures, strong wage and pension growth, and rising fiscal spending. Faster current spending shifted the fiscal balance from a surplus in the first nine months of 2024 to a deficit of around RSD 62 billion (EUR 532 million) in the same period of 2025, though the full-year deficit target of 3% of GDP remains achievable.<br>The current account deficit widened early in the year but narrowed to EUR 2.8 billion (4.3% of GDP) in the nine months of 2025, reflecting weaker services and secondary income balances. Net FDI inflows fell by 56% to EUR 1.5 billion amid lower investor confidence and higher outward investment. FX reserves declined following NBS interventions but remain adequate. Public debt fell to 43.4% of GDP by September 2025, supported by a primary surplus, solid revenue performance, and a stable exchange rate. Although the high share of FX-denominated debt presents risks, robust reserves and IMF PCI support anchor fiscal stability. Serbia retains access to IFI financing and donor support under EU IPA III, WBIF, and bilateral frameworks. The banking sector remains sound, with capital adequacy around 20%, ROA near 3%, and NPLs below 3%. |
| **Political Risk** | Medium / High | [REDACTED] Serbia remains broadly stable. The Government strongly supports the Project, which aligns with national strategies and international donor priorities. The Project also supports commitments under the EU Water and Floods Directives, the Paris Agreement, UN SDGs (6, 11, 13), and the Sendai Framework, reinforcing its position as a climate-resilient water infrastructure investment. |
| **Regulatory risk** | Medium / Medium | Serbia faces **moderate regulatory risks** in the water management sector due to ongoing alignment with the EU Water Framework and Floods Directives. While the core legal framework is in place, evolving secondary legislation, technical standards, and institutional overlaps between central and local authorities may cause permitting and implementation delays. These risks are mitigated by EU accession commitments, the strong track record of the MAFWM and SV in donor-financed projects, and the Bank's due diligence and technical support. |
| **Implemen-tation and** | Medium / High | Dam construction projects are **inherently complex and high risk**, with potential for cost overruns. Implementation risk is mitigated by: |

| Risks | Probability / Effect | Comments |
|---|---|---|
| **cost overrun risks** | | i) **In-house expertise**: SV is currently constructing the Arilje Dam (south-west Serbia) and has a solid experience in water infrastructure.<br>ii) **Detailed preparation**: Reputable local and international consultants prepared detailed technical and E&S studies, which were reviewed and validated by the Bank's independent consultants.<br>iii) **PIU support and supervision:** SV will strengthen its internal PIU in line with an independent capacity assessment, supported by dedicated PIU support and works supervision consultants. An independent PoE will monitor dam safety, and the LTESA will provide ongoing technical, E&S and procurement oversight.<br>**Cost overrun risks** are mitigated through**:**<br>i) **Conservative cost estimates:** Based on a comprehensive feasibility study, including 10% physical and financial contingency.<br>ii) **Robust procurement:** Open tendering under Yellow FIDIC contracts and competitive bidding.<br>iii) **Independent review:** Design and cost estimates reviewed by the PoE and LTESA.<br>iv) **Strong contract management and phased disbursements:** Payments linked to milestones to manage cash flow and cost control. |
| **Performance risk** | Medium / Low | There is a **moderate risk** that the Project may not fully achieve its flood protection, irrigation, or ecological objectives due to technical challenges in dam construction, reservoir operation, maintenance or delays in irrigation network development. These risks are mitigated by established dam design standards, SV's experience, engagement of experienced contractors and supervision consultants, and a phased approach that enables early flood protection benefits and adaptive adjustments for subsequent irrigation development. |
| **E&S risk** | Medium / Medium | The Project is Category A due to the scale and nature of the new dam and reservoir. Environmental and social due diligence ("ESDD") has identified mitigation measures which are included in the ESAP. Refer to Section 6.1 for further details. |
| **Climate Risk** | Medium / Medium | The Project faces climate risks from variable precipitation, droughts, and more frequent extreme floods, which could affect reservoir performance, dam safety, and downstream water availability, alongside evolving EU and national climate requirements. These risks are mitigated through climate-resilient design, adaptive reservoir operations, and ecological flow management. Climate vulnerabilities and mitigation measures have been defined in the ESDD and ESAP and will be monitored through the Project supervision. Overall, the Project enhances Serbia's climate resilience by reducing flood damage, improving water security in droughts, and enabling future low-carbon agriculture via irrigation. |
| **FX risk** | Low / Low | The loan and Project-related expenditures will be in EUR. Although the Borrower is sovereign, currency depreciation could increase the RSD-denominated debt service burden over time. The RSD/EUR exchange rate has exhibited very low volatility since 2019, and FX risk is generally mitigated by Serbia's stable macroeconomic framework and the economy's high euroization. |

# 2. MEASURING / MONITORING SUCCESS

**Transition Impact Monitoring Indicators**

| *Overall objectives of the project* | *Monitoring benchmarks* | *Implementation timing* |
|---|---|---|
| Improved quality, sustainability and inclusivity of infrastructure by the reduction of flood risks in the Kolubara basin, protection of people, housing, services, and economic assets. The dam's climate-resilient design (incl. ecological flow management and sediment control) ensures its long-term reliability, while future irrigation of more than 2,200 ha of agricultural land will expand access to water for small farmers and rural communities. | - Successful Project implementation<br>- Project completion within the timeline and the budget<br>- Dam operation within the set of monitoring benchmarks | - Until the end of the seventh year of the Project, during implementation<br>- Following the Project's completion |

**Primary Quality:**

| Obj. No. | Monitoring indicator | Details | Base-line | Target | Due date |
|---|---|---|---|---|---|
| 1.1 | Area of land under sustainable land management practices (ha) | The Project will increase irrigation efficiency and agricultural productivity by ensuring a consistent water supply for [REDACTED]agricultural land, even during prolonged dry periods, stabilizing yields and supporting high-value crop cultivation. | *[REDACTED]* | *[REDACTED]* | *[REDACTED]* |
| 1.2 | Ecosystem area restored or having improved resilience or reduced degradation (ha) | The Project will reduce flood damage to agricultural lands, communities and infrastructure - such as roads, bridges, and utilities [REDACTED] | *[REDACTED]* | *[REDACTED]* | *[REDACTED]* |
| 1.3 | New or updated GET technology or product leading to pollution prevention control introduced. | Nature-positive water quality management and upstream sediment control to reduce the sediment inflow in the reservoir. [REDACTED]<br>- | *[REDACTED]* | *[REDACTED]* | *[REDACTED]* |

# 3. KEY PARTIES

## 3.1 BORROWER

The Borrower is the RoS, represented by the MoF. The Project will be implemented by SV for the benefit of MAFWM. Serbia is the largest economy in the Western Balkans, with a population of around 6.6 million and a robust, service-oriented economy. The services sector dominates, accounting for nearly 60 per cent of GDP, while industry remains significant at just above 20 per cent, and the share of agriculture continues to decline.

In October 2025, S&P reaffirmed Serbia's investment-grade rating (BBB-, stable outlook), citing sustained macroeconomic stability, a credible fiscal framework, and adequate reserves despite domestic and external challenges. Moody's upgraded its outlook to Positive from Stable in August 2024, maintaining the rating at Ba2. Likewise, Fitch upgraded its outlook to Positive from Stable in August 2024, keeping the rating at BB+; the rating was reaffirmed in July 2025.

Serbia's economic activity has slowed down during 2025 due to external and domestic factors, notably the impact of the US tariffs and prolonged domestic unrest, which weakened external and internal

demand. The current account deficit widened in the first half of the year but narrowed to EUR 2.8 billion (4.3 per cent of GDP) in the first nine months, a 5 per cent increase year on year, driven by lower services and secondary income surpluses. Net FDI inflows fell sharply by 56 per cent year on year to EUR 1.5 billion over the same period. Nonetheless, there is no immediate risk of breaching the full-year 3 per cent of GDP deficit target as the realised deficit remains better than planned. Despite these challenges, the fiscal position remains stable, with the budget deficit projected at around 3 per cent of GDP, supported by strong revenues performance despite higher wages, pensions, and ambitious capital spending. Further details are provided in Section 1.4.

### 3.2 IMPLEMENTING ENTITY

The overall management of water resources in Serbia is carried out by the MAFWM, other ministries, local governments, and the public water management companies (PWMCs). The MAFWM, through the WMD, is the leading water authority and the institution with responsibility for the Project's oversight and related approvals. WMD has international experience with coordinating multiple IFI and donor-supported irrigation projects, including the World Bank and the EBRD (SCRIP 1 and SCRIP 2 projects), reflecting strong international support for Serbia's water management. PWMCs are responsible for the operation, maintenance, and development of state-owned water infrastructure.

SV is the Project's implementing entity. SV has strong institutional and technical capacity to manage complex hydraulic infrastructure and ensure effective flood protection across the country. It manages 2,166 kilometres of embankments and regulated riverbeds, as well as 46 publicly owned dams and reservoirs built to control peak flood waves. SV oversees 16 high dams equipped with monitoring systems, with SCADA-based automation partially implemented depending on technical conditions and data availability. In addition, a centralized water information system supports real-time data collection and decision-making.

Organisationally, SV demonstrates sufficient technical expertise, with no critical gaps identified by external consultant during the capacity assessment. Still, strengthening of key departments and a formal reassessment of capacity is recommended twelve months before commissioning. E&S roles require further definition and expansion, supported by dedicated training aligned with EBRD policies to ensure long-term compliance with international standards.

The Project will be implemented by the PIU and supported by experienced PIU support consultants, works supervision engineer, PoE and LTESA. The PIU support consultant will ensure the Project's technical and E&S compliance throughout implementation, while the PoE provides independent oversight of dam safety across all Project phases. The LTESA will carry out continuous monitoring and verification of technical and E&S performance, offering recommendations to maintain alignment with international standards and safeguard the Project's integrity.

## 4. MARKET CONTEXT

Agriculture remains a strategic but shrinking share of Serbia's economy. According to recent national statistics, agriculture contributed only about 3.15 per cent of GDP in 2024, down from 7-8 per cent in earlier decades. Employment in agriculture has also fallen – as of 2023 about 19.2 per cent of the workforce was employed in agriculture, compared with higher figures in past decades[3]. These shifts

[3] https://www.theglobaleconomy.com/Serbia/share_of_agriculture/

reflect structural changes including rural depopulation, declining farm numbers, and a drop in agricultural labour force.

At the same time, Serbia's agricultural output structure remains heavily skewed toward crops: in 2024, crop production accounted for about 65.2 per cent of total agricultural output, while animal (livestock) output made up roughly 32.0 per cent. Within crop production, cereals remain dominant (c. 31.1 per cent), but industrial crops, fruits, vegetables, wine and potatoes together represent a growing share – a sign of potential for higher-value diversification under irrigation[4].

Irrigation remains extremely limited: in 2023 only 47,579 hectares of agricultural land in Serbia were irrigated – a steep decline compared with prior years[5]. This accounts for only a tiny fraction of total arable land nationally, underscoring the vulnerability of agriculture to climate stress and rainfall variability. In this context, investments in reliable water storage, irrigation, and flood protection infrastructure are essential.

Agricultural productivity and rural livelihoods in the Ub municipality are highly vulnerable to climate extremes, particularly floods and droughts. The Kolubara River basin, where Ub is located, has a long history of flooding, with the 2014 flood causing extensive damage to infrastructure, farmland, and communities. Approximately 49.6 per cent of the population in Ub is engaged in agriculture, with 6,006 farms operating across 32,955 ha of arable land. The Project will reduce flood-related losses and support irrigation, directly benefiting local farmers, stabilizing agricultural output, and enhancing regional food supply reliability. This would help stabilise agricultural output, enable crop diversification into higher-value products, enhance resilience to climate extremes, and support Serbia's broader goals of food security and export competitiveness.

# 5. ECONOMIC ANALYSIS

## 5.1 ECONOMIC ANALYSIS

[REDACTED]

## 5.2 SENSITIVITY ANALYSIS

[REDACTED]

## 5.3 PROJECTED PROFITABILITY FOR THE BANK

[REDACTED]

[4] https://publikacije.stat.gov.rs/G2025/pdfE/G202510133.pdf
[5] https://www.stat.gov.rs/en-US/vesti/20240110-navodnjavanje-2023

# 6. OTHER KEY CONSIDERATIONS

## 6.1 ENVIRONMENT

**Categorised A (ESP 2019).** The Bank's ESDD for the Project has been conducted with the support of an independent consultant and included a site visit and review of the **E&S** disclosure package and current design of the Project. The Project obtained its national Environmental Impact Assessment approval in 2020 (which requires renewal prior to the start of construction), however a review of this documentation indicated substantial gaps with the EBRD Performance Requirements ("**PRs**"). Therefore, the Client engaged an independent consultant to prepare an environmental and social impact assessment ("**ESIA**") and associated documents in accordance with the Bank's PRs.

The E&S disclosure package includes the ESIA, Environmental and Social Management Plan ("**ESMP**") including a Biodiversity Management Plan ("**BMP**"), Historical Land Acquisition Audit and Corrective Action Plan ("**HLACAP**"), Emergency Preparedness and Response Plan ("**EPRP**"), a Non-Technical Summary ("**NTS**"), a Stakeholder Engagement Plan ("**SEP**") and an Environmental and Social Action Plan ("**ESAP**"). The disclosure package was published in English and Serbian languages on 13 August 2025 on Srbijavode's website and on the EBRD's website, for a period of 120 days during which comments can be submitted. Hardcopies have been made available in the local area and a programme of consultation activities during this period has been implemented by Srbijavode, supported by the ESIA consultants. The results of consultation activities to date indicate stakeholder concerns related to potential loss of and replacement of access routes to their land and in some cases their homes impacted by the reservoir; requests for additional expropriation including of unviable land; impacts of the reservoir on existing irrigation and drinking water supply from wells, and concerns about construction related dust, noise and vibration. Where needed, the E&S documentation is being updated as needed to address the concerns and the final ESAP has been agreed with the Client.

The Project is located on the Ub River in the municipalities of Ub and Valjevo with its primary purpose of providing flood protection and a secondary function to supply water via an irrigation network. Although the irrigation network (to be developed at a later stage) is not currently proposed for financing by the EBRD, it has been considered as an associated facility within the ESIA as per PR1 and impacts were assessed accordingly, based on a conceptual design. The ESIA assesses Project benefits including improved water and flood management and reduction in associated damage impacts; availability of water for irrigation and ensuring a stable environmental flow in the river downstream during drought periods. The Ub River is part of the Kolubara River basin catchment and is entirely located in Serbia but is within the Danube River Basin and the Sava River sub-basin, both of which are governed by international transboundary agreements. The ESIA concluded that the Project is unlikely to have significant adverse transboundary impacts and is consistent with such agreements and associated plans.

The ESIA includes a comprehensive assessment of the Project's E&S impacts and mitigations. The Client will develop and implement a Project E&S management system and management plans as indicated in the ESAP to implement the mitigation and monitoring activities from the ESIA. The contractor will be required to develop an ESMP and sub-plans to manage E&S impacts including occupational and community health and safety, labour standards and working conditions, pollution prevention and waste management during the construction phase. The Client will be supported by a PIU support consultant to improve their capacity to manage E&S issues.

The ESIA has included an environmental flow assessment the results of which have been integrated into the biodiversity assessment. The assessment concluded that the minimum downstream flow defined in the national EIA, would be supplemented by additional flows due to the design and operational mode of the dam. This will contribute to an environmental flow which, although reduced at times, would generally mimic the natural variability in the flow regime and in average, and dry years would represent an increase in flow during drier months, when compared to the baseline. Water quality and sediment management and monitoring plans will be implemented to mitigate impacts and ensure effectiveness during both the dam construction for flood protection and the irrigation infrastructure which is planned to be developed later. The Project is not located in close vicinity to or hydrologically connected to areas protected or designated for their biodiversity importance. The biodiversity assessment includes detailed mitigations to reduce impacts on habitats and species and concluded that the environmental flows, based on current operating assumptions for both the dam construction and irrigation infrastructure phases, will be sufficient to sustain biodiversity downstream with the monitoring measures defined. Whilst the habitats within the Project area are not particularly unique in the landscape or in Serbia, some have been classified as critical habitat according to EBRD criteria. The unavoidable loss of critical habitats, consisting of a 34-ha grassland and forest habitats and conversion of 5.3 km of river aquatic habitat to a lake, will require offset. An initial habitat management and offset plan has been developed to ensure achievement of net gain for such habitats prioritising restoration of suitable habitats within the expropriation boundary of the reservoir and additional biodiversity surveys have verified the suitability of downstream offset areas, the results of which have been incorporated into this plan which has been disclosed by EBRD and PWMC Srbijavode in early December 2025.

One unregistered cultural monument within private land will need to be re-located by the Project and the location of two medieval tombstones potentially within the footprint will need to be verified prior to the start of construction and findings reported to the Bank. If impacts cannot be avoided, mitigation measures in line with PR8 will be agreed with the relevant authorities and other stakeholders and implemented prior to any impact as specified in the ESAP.

The Project entails the expropriation of 267.5 ha of mostly agricultural land, consisting of 578 land parcels and affecting less than 300 individual landowners for the reservoir area and additional, temporary and permanent land takes for ancillary infrastructure, such as for access roads for the construction and maintenance of sediment traps upstream of the reservoir. Physical displacement will potentially occur in relation to one secondary residence on the edge of the reservoir for which discussions are ongoing with the owners. A historic land acquisition ("**HLA**") audit reviewed the expropriation process, which started in 2020 in Ub and 2022 in Valjevo and was undertaken in line with Serbian law. To align with EBRD requirements, additional measures were included in a corrective action plan ("**CAP**"), and a separate Livelihood Restoration Plan ("**LRP**") is currently being developed with specific livelihood support measures developed based on additional baseline data collected post-disclosure and agreed in principle with the Client. The updated new LRP has been disclosed in early December 2025 by EBRD and PWMC Srbijavode.

The LRP reflects this enhanced baseline data and covers additional measures on retaining or constructing new access routes and replacement of water wells. These new measures will also be integrated in the relevant E&S management plans and ESAP and together with the updated Social Impact Assessment ("**SIA**") and HLACAP will be included in the final ESIA which will be published by PWMC Srbijavode on their website.

A dam safety assessment has been conducted including dam breach study and the design of the Project has also been subject to independent technical due diligence. In accordance with PR4, the detailed

design, construction and early operation of the dam will be subject to periodic review by an independent PoE, with significant technical expertise in dams. A comprehensive EPRP has been developed and will be further detailed and subjected to the approval of relevant authorities in the future phases of the Project and review by the PoE.

The SEP includes a description of past stakeholder engagement, disclosure and consultation activities as part of the ESIA disclosure process, as well as during construction and operations, in line with EBRD requirements. A detailed stakeholder map ensures that all affected and interested parties to the Project are included in a process of meaningful engagement, including vulnerable persons who may find it more challenging to have their voices heard or to benefit from Project opportunities. The SEP further describes a description of roles and responsibilities for implementing and monitoring engagement activities, and a detailed description of the Project's grievance mechanism.

The Bank will engage independent consultants to monitor both technical and E&S aspects of the Project during construction and early operation.

## 6.2 INTEGRITY

In conjunction with OCCO, integrity due diligence was undertaken on the Borrower, the Client, its senior management, board members and other relevant parties. [REDACTED]

All actions required by applicable EBRD procedures relevant to the prevention of money laundering, terrorist financing and other integrity issues have been taken with respect to the Project, and the Project files contain the integrity checklists and other required documentation which have been properly and accurately completed to proceed with the Project.

# ANNEXES TO OPERATION REPORT

| | |
|---|---|
| ANNEX 1 | Project implementation |
| ANNEX 2 | Green assessment |

# ANNEX 1 – PROJECT IMPLEMENTATION

**Procurement classification – *Public sovereign***

[REDACTED]

The Project includes one design-and-build works contract for the dam and two consultancy contracts: a) one for supervision of works and b) one for a PIU support consultant, focused on monitoring the Client's technical, social, and environmental obligations during implementation. Additionally, several individual experts will be contracted to form a panel of experts responsible for overseeing compliance with ESAP requirements.

[REDACTED]

**Project implementation arrangements:**

The Project will be executed by Srbijavode's existing PIU established in 2021 for the SCRIP Project, and with the help of PIU Support consultant to be appointed.

Oversight will be provided by:

- PoE monitoring environmental and social compliance.
- LTESA consultant, reporting directly to the Bank, to ensure that the Client, contractor, and works supervision engineer meet all obligations outlined in the ESAP and other Project documents.

**Procurement arrangements:**

The Project will procure:

- A works contract for the dam's design and construction (Design and Build Contract).
- A works supervision consultancy contract.
- A PIU support consultancy contract.
- Several individual experts to serve on the ESAP compliance panel.

Procurement methods:

- Consultancy contracts: Single-stage open tender (two-envelope system).
- Works contract: Multi-stage open tender.
- Individual experts: Direct Contracting.

All procurement will follow Article 3 of the Bank's PP&R for public sector operations. The EBRD's standard tender documents and FIDIC Yellow Book General Conditions of Contract will be used.

The contracts for individual experts, are estimated to have values under EUR 75,000 and therefore will be procured through Direct Contracting.

All contracts will be subject to prior review by the Bank.

[REDACTED]

# ANNEX 2 – GREEN ASSESSMENT

- The Project consists of the construction and operation of a new dam for flood control and irrigation.
- The Project is assessed as Paris Agreement aligned for mitigation and adaptation.
- 100% of the Project is attributed as green finance.
- Climate related financial risk assessment is not applicable as a sovereign transaction.

**Paris alignment assessment**

***General screening of alignment with the mitigation goals of Paris Agreement***

- The Project is on the aligned list under the "Flood management and protection" and "Gravity-based or renewable energy-powered irrigation systems" categories.
- Reservoirs may interfere with area of high carbon stocks or high biodiversity areas. The Pambukovica reservoir will affect c. 270 hectares of cropland and secondary forest, with no peatlands or high-carbon ecosystems impacted. Estimated emissions post-impoundment are 8,427 $tCO_2e$/year - considered low - supporting alignment with EBRD Paris criteria on avoiding High Carbon Stock Areas. While the footprint intersects high biodiversity zones, the Project complies with EBRD's Environmental and Social Policy (2019) and PR6, applying the mitigation hierarchy and conducting a Critical Habitat Assessment to ensure no net biodiversity loss. Therefore, biodiversity concerns are addressed through policy compliance and not further discussed in this note.

**Conclusion: The Project is assessed as aligned with the mitigation goals of Paris Agreement (BB1 aligned).**

***Alignment with the adaptation goals of Paris Agreement***

Conclusion: The Project is assessed as aligned with the adaptation goals of Paris Agreement (BB2 aligned) conditional on designs being revised in-line with international best practices and based on independent and robust hydrological assessment.

[REDACTED]

**GET attribution**

A GET share of 100 per cent is attributed to the Project because of the enabling impact of reservoirs for flood protection and drought resilience. The three-step approach consistent with j-MDB methodology for attribution of climate finance is presented below.

**Step 1. Context of climate change vulnerability relevant to the Project**

- The Kolubara River Basin in western Serbia faces mounting vulnerability to both floods and droughts as climate change intensifies hydrological extremes. Historically prone to spring floods triggered by snowmelt and cyclonic rainfall, the basin has seen increasingly frequent and severe flood events – including the catastrophic 2014 flood that devastated infrastructure, agriculture, and livelihoods. Simultaneously, prolonged dry spells and rising temperatures have led to seasonal water stress, reducing river flow and groundwater recharge. These dual threats – excess water in some months and scarcity in others – are projected to worsen under future climate scenarios, placing pressure on agriculture, water supply, and ecosystem stability across the region.

**Step 2: Statement of intent of the Bank to address climate resilience through the Project:**

- The construction of multipurpose dams is essential for integrated water management. Pambukovica dam serves as critical infrastructure for flood control, capturing peak flows and reducing downstream inundation during extreme weather events, whilst also ensuring adequate ecological flow releases during dry periods. In the second phase, the dam will also provide water storage for irrigation, helping stabilize supply when natural sources falter.

**Step 3: Direct link between climate vulnerability context and Project activities/ Capacity of the recipient**

- The Kolubara River Basin in western Serbia is increasingly vulnerable to both floods and droughts due to climate change. These dual challenges are expected to intensify under climate change, threatening downstream communities, agriculture, and ecosystems. The Pambukovica dam is a key adaptation measure, designed to manage floods, maintain ecological flows during dry periods, and eventually support irrigation. Given that the primary objective of the Project is to strengthen catchment-level resilience to hydrological extremes, it qualifies for 100% adaptation GET, consistent with j-MDB methodology.

**GREEN PROJECT MONITORING PLAN**

[REDACTED]