Project title (Acronym)	Pump Storage in Sumatera
LA / CSO (type)	Sumatera
Implementing Partner(s)	PT PLN
Country/countries, region	Sumatera, Indonesia
Budget (specify EU funding amount, if applicable)	PDF amount EUR 2,526,642
Is it a Global Gateway project?	Yes
Funding modality	Technical Assistance Grant
Funding sources	EU Funds through KfW
Implementation period	20 months
Thematic development area (5 words)	Renewable Energy
Short description, including target beneficiaries and their engagement/reactions thus far (300 words)	The Indonesian government is focused on enhancing energy security and sustainability by promoting renewable energy sources. The National Energy Policy targets a minimum of 23% from new and renewable energy by 2025. PT PLN (Persero) as Indonesia's Electricity Company has objectives to provide electricity for the public interest in adequate quantity and quality as well as to foster profits and carry out the Government of Indonesia's assignments in order to support the country's economic and social development. PT PLN (Persero) through the Electricity Business Plan (RUPTL) 2021-2030 sets out Indonesia's future power capacity and network development plans over the next 10 years. This business plan aims to support of the Government's objectives to reduce greenhouse gas emissions by 29-41% by 2030 and achieve Net-Zero emissions by 2060 in line with the county's Nationally Determined Contributions. The plan establishes several initiatives including the addition of total power capacity totalling 40.57 GW in which 52% of it coming from the renewable energy and specifically 23% from hydro power. The Sumatra Pumped Storage Hydropower Plant project in Indonesia is a strategic initiative to meet the country's escalating energy demands sustainably. The project aligns with national objectives to expand energy access and reduce dependence on non-renewable fuels. The capacity that will be installed in the project is 2 x 250 MW (500 MW). The project is aiming to adding the power in regional or even the whole system of the island of Sumatra. Environmental considerations play a pivotal role in the project's development, with assessments focusing on air emissions, water quality, and land use impacts. Adherence to environmental and social regulations is paramount to ensure sustainable practices and minimize ecological disruptions. The Variable Speed Pumped Storage system at Sumatra improves the reliability and higher quality of the electricity system so as to increase the attractiveness to other industrial fields for regional economic growth. The estimated total project costs approximately US$ 500 Million with

	the Commercial Operation Date for is planned for the year 2032. The Feasibility Study has been started in Q4 2024. The procurement of the consultants was done by PT SMI in accordance with KfW Procurement Guidelines. The procurement was done in relatively shorter period of time for an international competitive bidding and attracted many prominent bidders from various countries.
Lessons learnt, key messages and results relevant for future EU programming (300 words)	When people ask what makes PT SMI's partnership with the European Union work — what turns a signed grant agreement into a project that actually reaches financial close and serves communities — there is rarely a single, satisfying answer. And that, in itself, is the point. The success factor is not one thing. It is a combination — and removing any single element from that combination is enough to make the whole structure fail. The first element is institutional credibility. PT SMI sits at a unique intersection: wholly owned by the Ministry of Finance, yet operating with the discipline of a development finance institution. That dual identity means international partners like KfW, AFD, and EIB Global can trust us with their capital, while national counterparts — ministries, state enterprises, regional governments — recognise us as part of the same public mission. Without that credibility on both sides of the table, no amount of technical skill closes a deal. The second is technical depth. Project preparation is unglamorous work — feasibility studies, financial models, environmental assessments, procurement compliance. But it is precisely this work that transforms a concept into something a lender can underwrite. EU grant funding for this preparation phase is not overhead. It is the mechanism by which risk is identified, quantified, and structured into forms the market can absorb. The third is an active, engagement-built pipeline. We do not wait for projects to arrive. We map infrastructure gaps, sit with local governments, convene multi-stakeholder forums, and embed community concerns into project design from the start. A pipeline built this way is more resilient — it carries social licence, not just technical approval. The fourth, and perhaps least visible, is the ability to design financing structures that make viable what the market alone would leave behind. Blended finance is not charity. It is precision engineering — calibrating the right mix of grants, concessional loans, credit enhancements, and market capital so that a project crosses the viability threshold it could never reach on commercial terms alone. Take away any one of these four, and the model breaks. Together, they are why the projects get built.
	T SMI serves as a critical bridge between international funding

Replicability (100 words)	institutions and local government agencies across Indonesia — many of which lack the institutional capacity, language, or track record to access these sources of capital directly. International funds come with high standards, and for good reason. But those standards can feel distant and inaccessible for a district government trying to build a water treatment plant or manage its waste. What PT SMI does is translate. We translate international requirements into workable processes for local institutions — and we translate local development needs into the language of bankability that international partners require. In doing so, the funds become more than just money. They become a vehicle for institutional transformation. When a local government works through PT SMI to prepare a project, it is not simply accessing financing. It is learning to assess projects against technical, financial, environmental, social, institutional, and regulatory standards simultaneously — the same standards applied to infrastructure investments anywhere in the world. This is the deeper value of the partnership with the European Union. The EUR 16 million S4I grant does not only prepare individual projects. It builds the domestic capacity to prepare the next generation of projects — with or without EU support. Every local government that has gone through this process emerges with stronger teams, better documentation practices, and a clearer understanding of what sustainable infrastructure development actually requires. PT SMI's role, at its best, is to make itself progressively less necessary — by raising the floor of institutional capability across Indonesia, one project, one city, one feasibility study at a time.