

CONTRIBUTION TO STRATEGY 2030 OPERATIONAL PRIORITIES

OP No.	Corporate Results Framework Indicators (Outputs and Outcomes)	Expected Value	Methods and Comments
1.2	Jobs generated (number)	144 new jobs by 2023	Refers to DMF output 2a At least 144 e-ferry crew is hired by 2023.
2.1	Skilled jobs for women generated (number)	At least 43 female jobs by 2023	Refers to DMF output 2b 30% of total e-ferry crew hired are female. (Calculation: $144 * 30\% = 43$ female e-ferry crew)
2.2.3	Solutions to prevent or address gender-based violence implemented (number)	4	Refers to DMF outputs 2c, 3a, 3b, and 3c. <ul style="list-style-type: none"> Installation of at least 4 CCTV cameras and 2 emergency buttons in each of 27 e-ferries as a tool to enable monitoring of incidents. An online means that enables reporting of sexual harassment or abuse. Installation of posters in all 27 e-ferries communicating zero tolerance of sexual harassment and abuse. Develop and implement an anti-sexual harassment policy for e-ferries.
3.1	Total annual greenhouse gas emissions reduction (tCO ₂ e/year)	18,900 tCO ₂ /year by 2025	Refers to DMF outcome c Methodology followed the Guidelines for Estimating Greenhouse Gas of Asian Development Bank Projects- Additional Guidance for transport projects. Avoided GHG emissions is the difference between carbon emissions from the fuel consumption of the diesel ferries and the emissions from electricity consumption of E Smart e-ferries. For diesel ferries, annual diesel consumption is estimated at 8.29 million L/year. Based on density of diesel of 0.844 kg/L, net calorific value of 43 MJ/kg, and diesel emission factor of 74.10 tCO ₂ /TJ, the annual GHG emission is estimated at 22,297 tCO ₂ /year. For E Smart ferries, annual electricity consumption is estimated at 8.68 GWh/year. The annual GHG emission of e-ferry is estimated at 3,381 tCO ₂ /year using Thailand grid emission factor of 390 tCO ₂ /GWh. Therefore, the net GHG emission reduction of the project is about 18,900 tCO ₂ /year.
3.1.3	Low-carbon infrastructure assets established or improved (number)	1 low-carbon asset by 2023	Refers to DMF output 1 The project will develop and operate an e-ferry system that promotes passenger modal shift which helps reduce GHG emissions. This new electric ferry system to be established is considered as 1 low-carbon infrastructure asset.
4.1	People benefiting from improved services in urban areas (number)	15,000 daily passengers by 2025	Refers to DMF outcome a Estimated from daily passenger trips based on ticket sales. It is assumed that each passenger makes 1 trip per day on average.
4.1.2	Urban infrastructure assets established or improved (number)	1 e-ferry system by 2023	Refers to DMF output 1 The project will develop and operate 27 e-ferries. This new e-ferry system to be established is considered as 1 urban infrastructure asset.

CCTV = closed circuit television, DMF = design and monitoring framework, E Smart = E Smart Transport Company Limited, e-ferry = electric ferry, GHG = greenhouse gas, GWh = gigawatt-hour, kg = kilogram, L = liter, MJ = megajoule, OP = operational priority, tCO₂ = ton of carbon dioxide, tCO₂e = ton of carbon dioxide equivalent, TJ - terajoule.

Source: Asian Development Bank estimates.