

## VIETNAM ENERGY EFFICIENCY PROGRAM 2024

#### **PROJECT ID: VCS 3244**



## က PROPONENT

Organization name	Sustainability Investment Promotion and Development Joint Stock Company (a member of INTRACO Holdings)	
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Title	Chairman	
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## က DESCRIPTION

This Grouped project aims to reduce fossil-fuel-based electricity consumption in households in Vietnam by introducing more energyefficient LED lamps (9W) to replace incandescent lightbulbs (60W) ("ICLs"), which would result in a reduction in greenhouse gas emissions.

Total primary electricity demand in Vietnam has grown manifold over the past twenty years. From 2000 to 2019, electricity consumption in Vietnam increased nearly 10 times from 22.9 TWh to 223.8 TWh and was forecast to continue to increase at an average rate of 9% a year from 2021 onwards. Along with this considerable escalation, household power consumption per capita is also over four times higher at 138.8 kWh in 2000 to 589.4 kWh in 2016. In addition, the electricity generation sources are mostly dependent on coal and natural gas (fossil fuel sources) which account for nearly 70%. Under these circumstances, responsible use and saving of energy gets more significance.

The ordinary incandescent bulb is extremely energy inefficient for lighting compared to LED. Only 10% of the energy an incandescent bulb uses is converted to light; the other 90% is lost as heat while LEDs use 90% less power than incandescent lights, are ecologically friendly, have zero UV emissions or mercury, and are very durable. Despite being inefficient, ICLs are the preferred option because of their cheaper cost for replacing the broken ones which is about four times lower than LED lightbulbs. Replacing ICLs with energy-efficient LED bulbs will reduce energy consumption, thus resulting in less GHG emissions.

# CREDITING PERIOD

The Grouped project distributes 5,999,464 LEDs to households that are using incandescent lightbulbs for lighting. All the project instances to be included in this grouped project are from within Vietnam only. The estimate of annual average GHG emission reductions of the Grouped project activity is 488,224 tCO2e/annum.

Fixed crediting period has been chosen

Start date of crediting period: August 30th 2022

End date of crediting period: August 29th 2032

Total number of years : 10 years, 00 months



have been issued for the 2022 and 2023 vintage year

#### 1 tCO2 = 1 credit



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### ESTIMATED GHG EMISSION REDUCTIONS OR REMOVALS

Year	Estimated GHG emission reductions or removals (tCO2e)	
2022	60,786	
2023	522,744	
2024	587,947	
2025	576,189	
2026	558,903	
2027	536,547	
2028	509,719	
2029	479,136	
2030	445,597	
2031	409,949	
2032	194,726	
Total estimated ERs	4,882,243	
Total number of crediting years	10	
Average annual ERs	488,224	

## TECHNOLOGY

Technical Specifications	9W LED	60W ICL
Rated wattage	9 W	60 W
Input voltage	220-240 V	220-240 V
Rated life	22,000 hours	1,500 hours
Usage time	>10 years	8 months
Initial lumen	850 Ln	715 Ln
Lamp shell temperature when in use	30oC	>90oC

## **OWNERSHIP**

The Project Ownership is with "Sustainability Investment Promotion and Development Joint Stock Company (SIPCO)" which is also the Coordinating & Managing Entity of the grouped project. The ownership of carbon credits shall be demonstrated through the following indicative information:



SIPCO evaluates and purchases LED lamps directly from 02 famous LED lightbulb manufacturers named SMK Vietnam Joint Stock Company and Rang Dong Light Source & Vacuum Flask JSC. The purchased contracts shall be signed between the two parties for each project activity (project instance) in this grouped project. Every contract will be attached with a statement or/and a beneficial agreement between the project owner (SIPCO) and the LED lightbulb manufacturers, the statement or/and beneficial agreement is to confirm that all carbon credits right from the purchased LED lightbulbs for the project activity shall be remained to the project owner without affected result with LED lightbulb manufacturer.



The ownership of carbon credits also is demonstrated through a beneficial agreement between the project owner, SIPCO, and the household who gets free distributed LED lamps, the household shall be the end user, and the beneficial agreement shall confirm that the household shall irrevocably transfer all rights to any Carbon Credits that may be generated by the operation of the LED lightbulbs to SIPCO, and to take all reasonable steps to affect such transfer; the household irrevocably waive any rights to Carbon Credit in exchange for the free supply of the LED lightbulbs.





### THE PROJECT HAS BEEN VALIDATED TO SATISFY THE FOLLOWING SDGS:

