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LOCAL STAKEHOLDER CONSULATION

DIPTI – DISTRIBUTION OF LED LIGHTBULBS IN BANGLADESH

19 May 2022

Verified Carbon Standard (VCS)
& SD VISta

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PURPOSE OF THE MEETING

To explain the background and purpose of our upcoming project called **“DIPTI- Distribution of LED Lightbulbs in Bangladesh”**

To introduce VCS and SD VISta standards under VERRA

To seek feedback from participants on project design and implementation

To address questions from participants about the proposed project and its implementation

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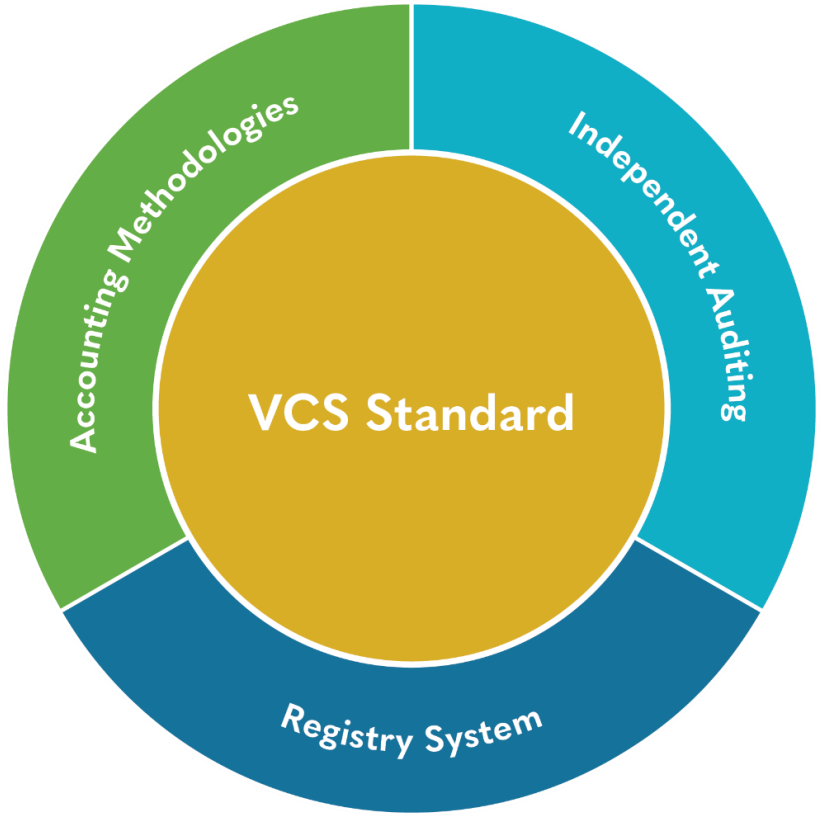
Verified Carbon Standard (VCS)

The VCS Program is the world's most widely used voluntary GHG program.

Independent Auditing: All VCS projects are subject to desk and field audits by both qualified independent third parties and Verra staff to ensure that standards are met, and methodologies are properly applied.

Accounting Methodologies: Projects are assessed using a technically sound GHG emission reduction quantification methodology specific to that project type.

Registry System: The registry system is the central storehouse of data on all registered projects, and tracks the generation, retirement and cancellation of all VCUs. To register with the program, projects must show that they have met all standards and methodological requirements.



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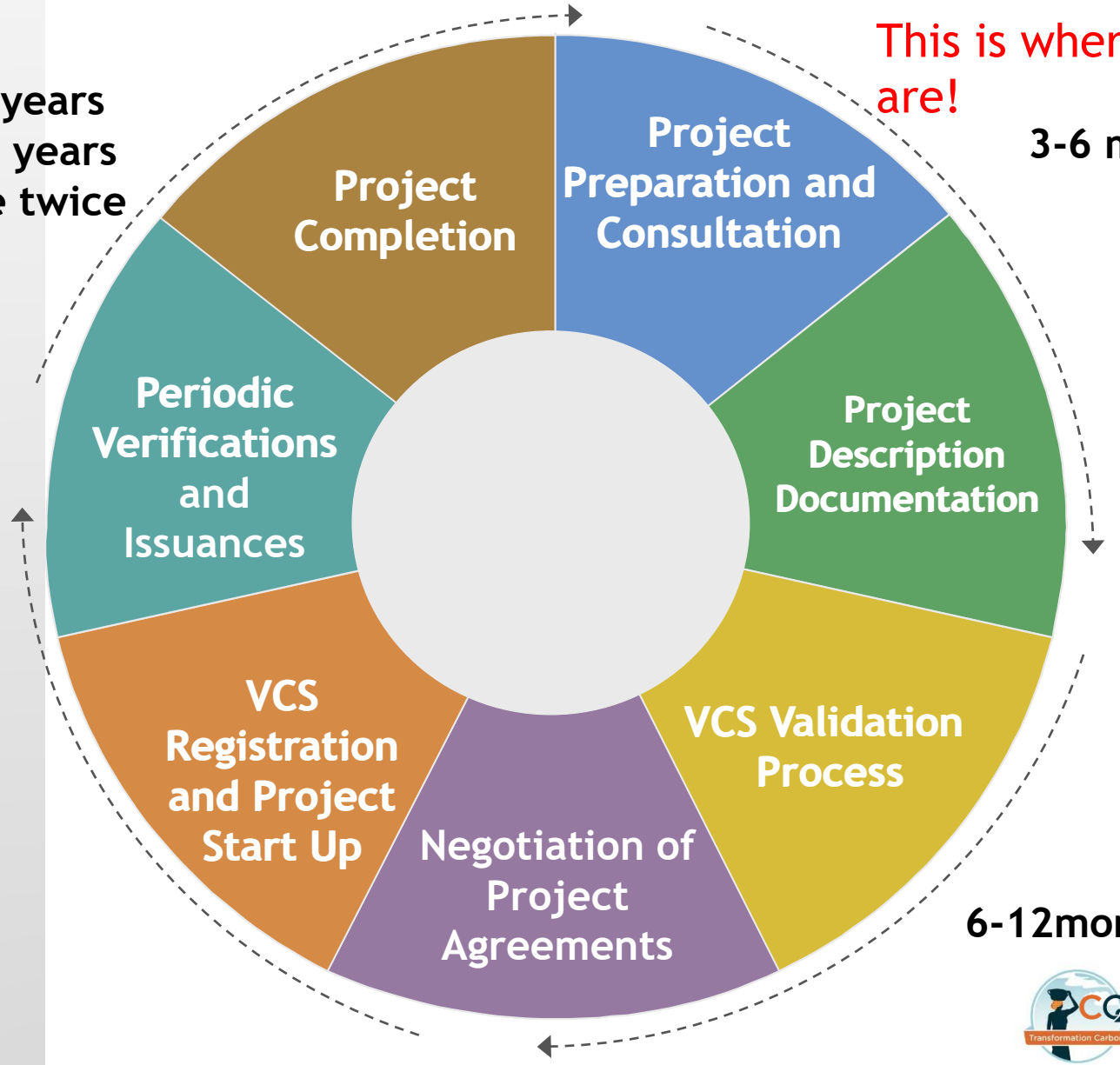
VCS PROJECT TIMELINE

Up to 10 years fixed or 7 years renewable twice



This is where we are!

3-6 months

6-12months

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Sustainable Development Verified Impact Standard (SD VISta)

Applies to projects that aim to deliver sustainable development benefits

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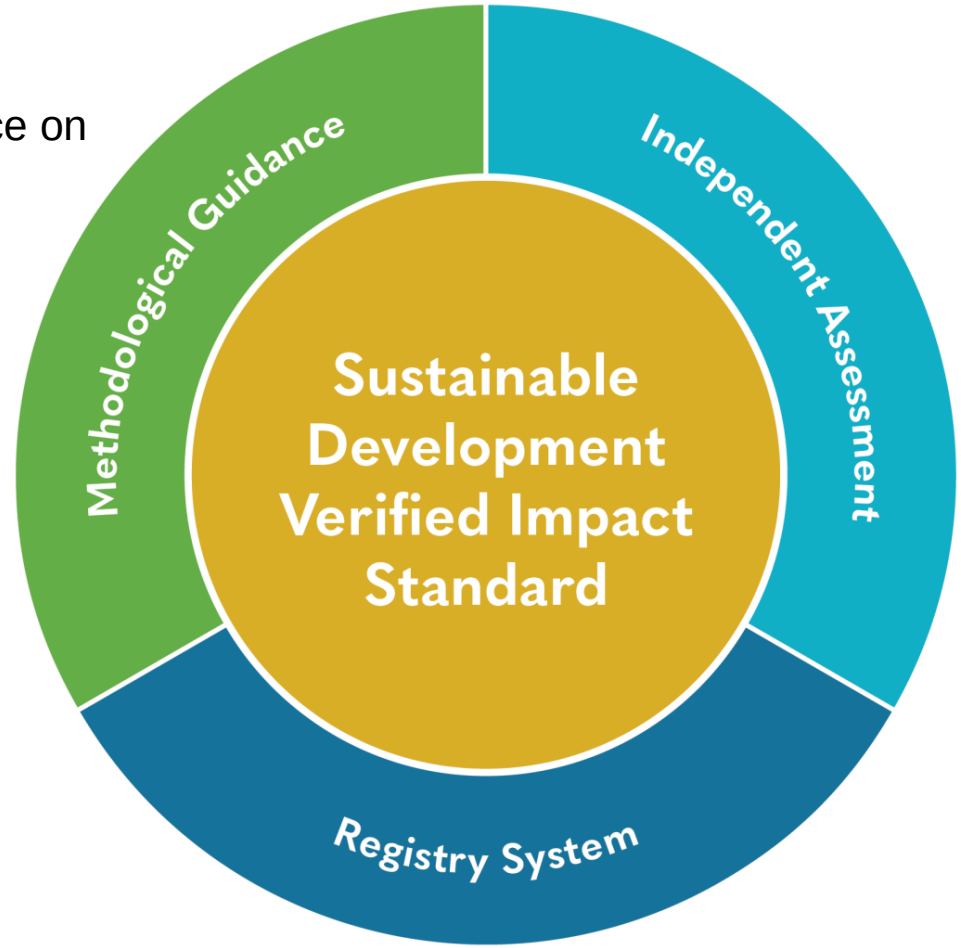
Sustainable Development Verified Impact Standard (SD VISta)

Verra will provide guidance on methodologies



Subject to assessment by qualified independent third parties

The Verra registry tracks the generation, retirement and cancellation of any SD VISta asset

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DIPTI - DISTRIBUTION OF LED LIGHTBULBS IN BANGLADESH

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BACKGROUND

- Lighting is one of the largest load in the electricity system in Bangladesh
- More than 50% of the electricity is consumed by the residential sector
- Predominant load in rural households is lighting*
- Efficient energy end-use emerged as a viable option to sustain economic growth even as gas shortages continued in Bangladesh
- The project will bring energy efficient lighting technology, i.e., LEDs to the group of low-income consumers in rural and peri-urban areas of Bangladesh
- Baseline Scenario is continued use of existing luminaries in the households, i.e., Incandescent Light Bulbs

*Source: Demand-side energy efficiency opportunities in Bangladesh (2017) World Bank Group

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GEOGRAPHICAL EXTENT

The political boundary of Bangladesh will be the geographical boundary for DIPTI - Distribution of LED Lightbulbs in Bangladesh.

TECHNOLOGY

Light-emitting diodes (LEDs) (also called solid state lighting, SSL) technology is evolving rapidly as the newest and most energy-efficient option for a variety of residential/commercial lighting applications.

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WHY LED ?

Energy Efficient

Saves up to 80% in energy consumption

Eco-Friendly

LEDs are eco friendly and generate less heat. Ideal for lower carbon footprint

Longer Life

With average rated life of 25,000-30,000 hrs, LEDs last longer than ICL with average rated life of 1,000 hrs

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BARRIERS TO PENETRATION OF LED TECHNOLOGY

High price of LED

The upfront cost of LED units is too high. At a time of serious financial constraints, this can limit LED sales even in settings where the long-term economic and social benefits clearly outweigh the costs.

Clear and informative consumer guidance is missing

There is great variation between levels of consumer awareness in areas such as –

- Recognizing energy saving as an issue
- Being alert to the current state of LED technology
- Understanding how to proceed in procuring well-designed LED solutions
- Product positioning at retail is weak with little distinction between energy efficiency of LED and CFL bulb

CONTRIBUTION BY PROJECT “DIPTI” IN ALLEVIATION OF BARRIERS

Subsidized LEDs to be distributed amongst the lower income group consumers who cannot afford to buy LED bulbs

Technological Advancement owing to increased demand

Increase awareness about LED bulbs and their advantages as compared to incandescent bulbs and fluorescent tubes

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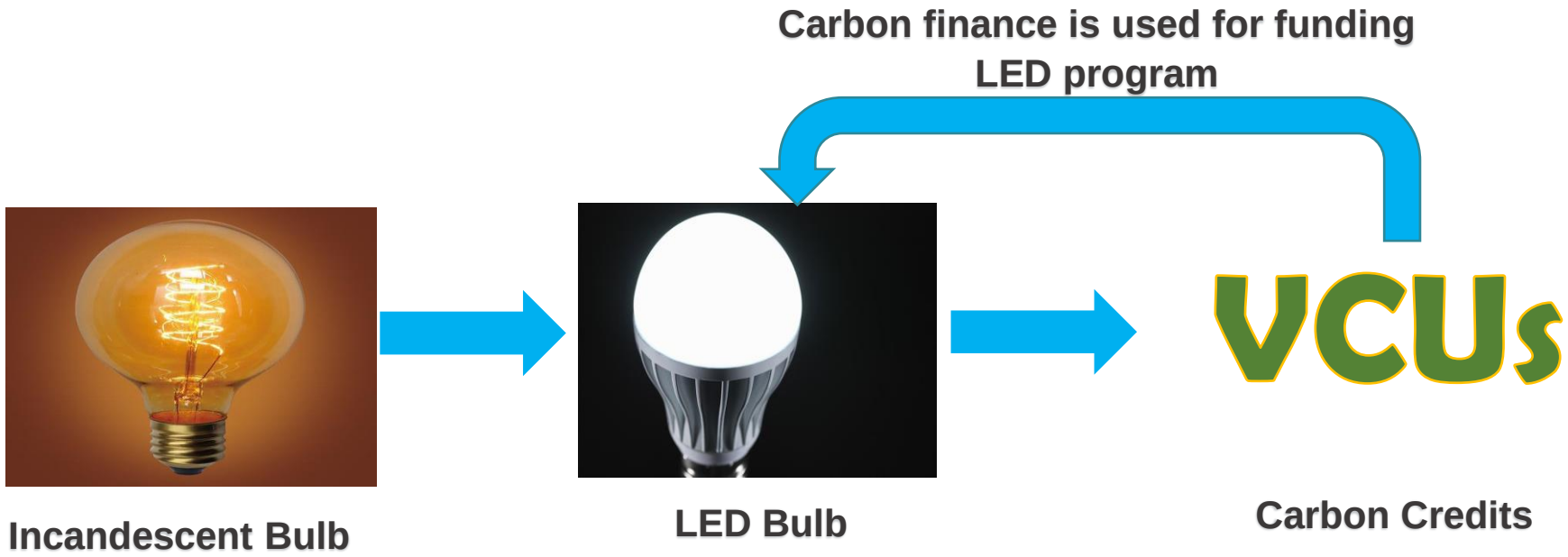
HOW IT WORKS?

- Replacing ICLs with LEDs saves electricity resulting in reduction of greenhouse gases (mostly Carbon Dioxide)
- SD VISta labelled Verified Carbon Units are issued by Verra
- The finance obtained from selling carbon credits is used for subsidizing the cost of LEDs for households



LED DISTRIBUTION PROCESS IN BRIEF

- **Sourcing of LED:**
  - Quality shall be equal/ better than market. Min 20,000 hrs life.
  - Warranty min 2 years
  - LED shall be sourced locally/ imported to Bangladesh with due consideration to quality & logistics
- **LED distribution:**
  - Suitable and competent local distribution partner
  - LEDs shall be distributed through counter/ door to door mechanism in rural Bangladesh – standardised processes stemming from CQC's vast experience in such projects in India.
  - Distribution to grid connected households only.
  - Data capture using robust inhouse App and Database Management System
  - ICLs collected from household (against each distributed LED bulb) will be disposed off per extant e-waste guidelines
- **Monitoring and Verification:**
  - During distribution – robust and ongoing spot checking using third party surveyors
  - Post distribution third party monitoring
  - Verification by VVB

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CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

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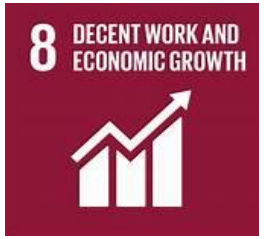
SUSTAINABLE DEVELOPMENT CONTRIBUTION BY PROJECT “DIPTI” (1/2)

Increased access to affordable, reliable, and sustainable modern energy by one-to-one replacement of ICLs bulbs with energy efficient LED under the project lifecycle



Generation of employment opportunities

Contribute to reducing environmental pollution & associated impacts by reducing the amount of fossil fuel burning attributed to reduced electricity consumption

Contribute to reduction in waste generation through reduced need for replacing failed baseline lamps and ensuring proper collection & disposal of baseline lamps

Reduction in net CO_2 emissions released into the atmosphere

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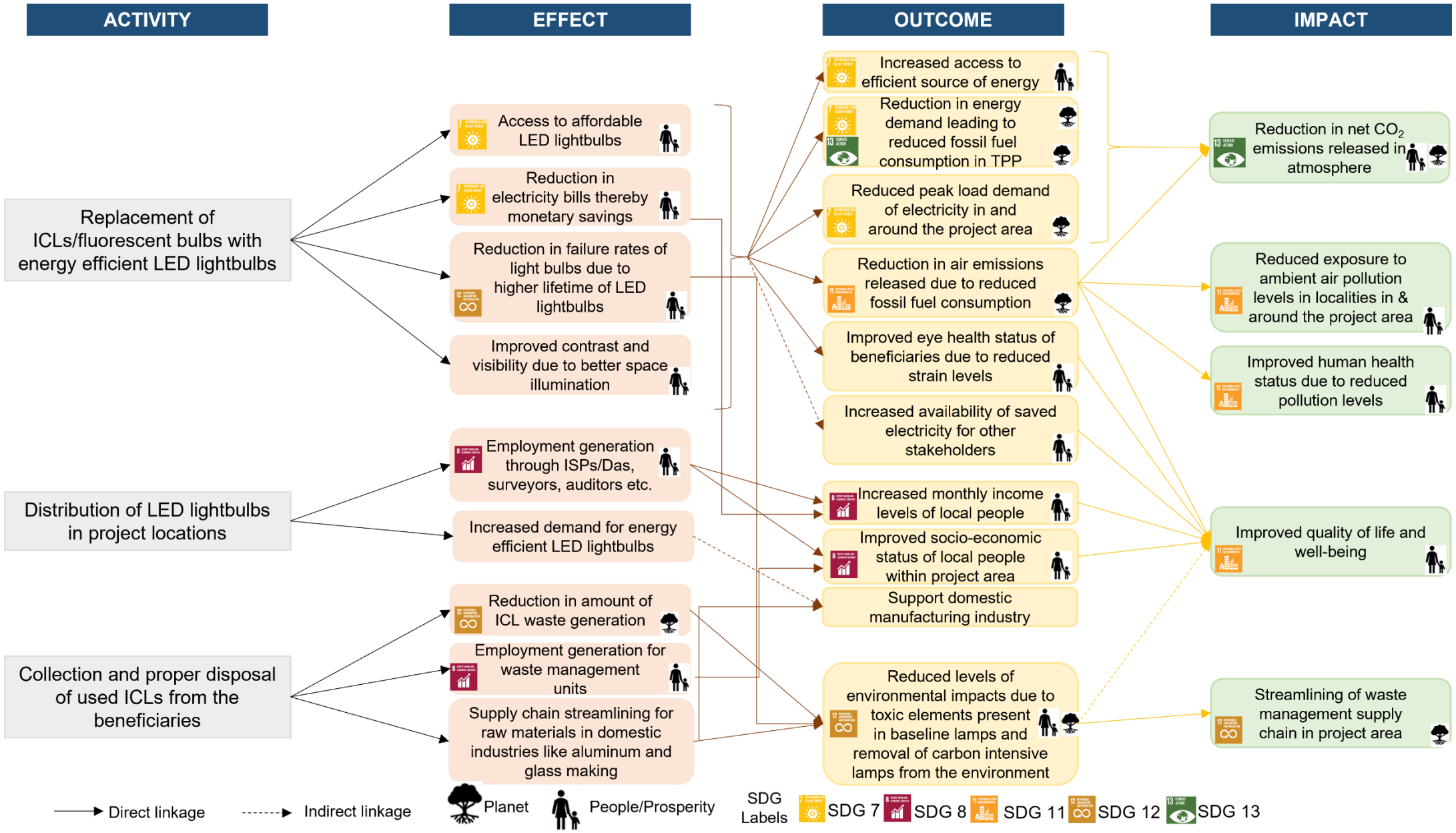
SUSTAINABLE DEVELOPMENT CONTRIBUTION BY PROJECT “DIPTI” (2/2)



QUESTIONS AND ANSWERS SESSION

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Carbon Powered Community Development

Thank You!

We are open for Queries and discussion

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