

# Monitoring and Evaluation in Climate Action

How to develop a program Theory of Change?

Video 4



# Monitoring and Evaluation in Climate Action



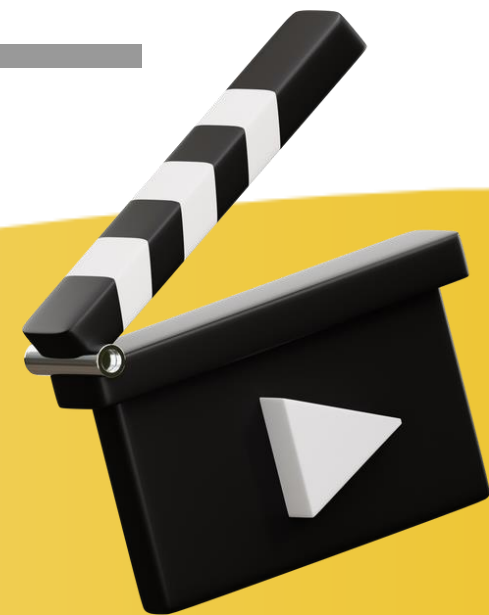
Why is evaluation important for climate?

What is monitoring and evaluation (M&E)?

How is M&E useful in the program cycle?

How to develop a program Theory of Change?

VIDEO 4



# How to develop a program Theory of Change?



**Theory of Change components**

**5 steps to building a ToC**

**ToC with a system lens**

**Conclusions**

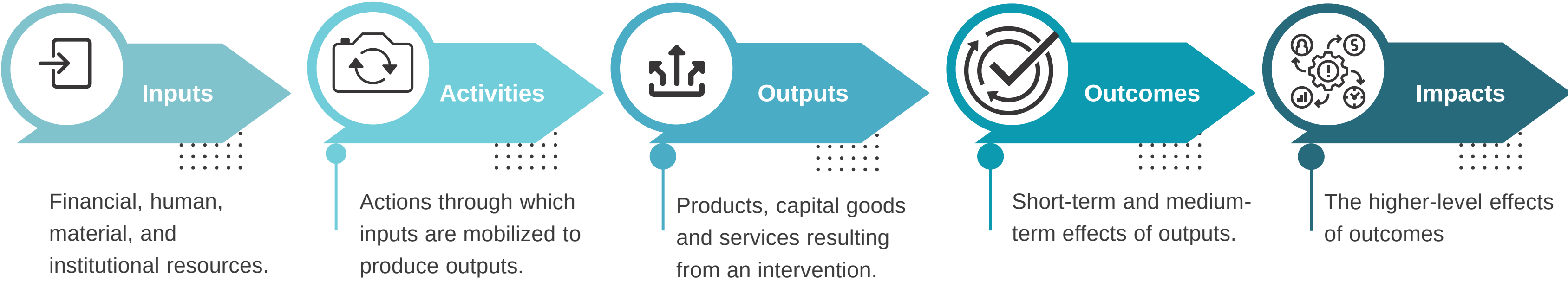
# Theory of Change



- A Theory of Change is a **road map** of **where** we are going (results) and **how** we are getting there (process)
- It is an ongoing process of reflection to **explore change and how it happens** – in a particular context, sector, and/or group of people.
- Expresses a **causal link** between inputs + activities and their consequences
- Represented in a schematic diagram or a series of “**If-then**” statements

*If [inputs] and [activities] produce [outputs] this should lead to [outcomes] which will ultimately contribute to [goal].*

# Theory of Change components



**Assumptions: the conditions necessary for the "if-and-then" connections to hold true**

# 5 steps to building a Theory of Change



Situation  
analysis

Set program  
goals

Design the  
program

Map the  
causal  
pathway

Explicate  
assumptions

# Guinea-Bissau: Solar Energy Project



## Intervention

- Installation of mini solar grids on Bijagós Islands.

## Goals

- To increase access to electricity and availability of solar energy.
- To improve quality and reduce cost of electricity.
- To increase the islands' tourism potential.

# Step 1: Situational analysis

- **Access to electricity:**
  - 29% of country's population (58% in the capital city Bissau)
- Substantial **disparities across regions**, income groups, by gender and education
- **Electricity is both scarce and very costly** – one of the most expensive in Africa
- Secondary cities rely on diesel generators, and smaller cities use solar power grids
- **Consumption:**
  - 51% - public and commercial services (public offices, hotels, restaurants, shops)
  - 21% - households
  - 28% - the rest of the economy i.e., the real productive sector
- **Challenges:** political instability, lack of planning, vested interests, lack of investments, fragmented donor assistance, and poor public management





# Step 2: Setting program goals



## IMPACTS

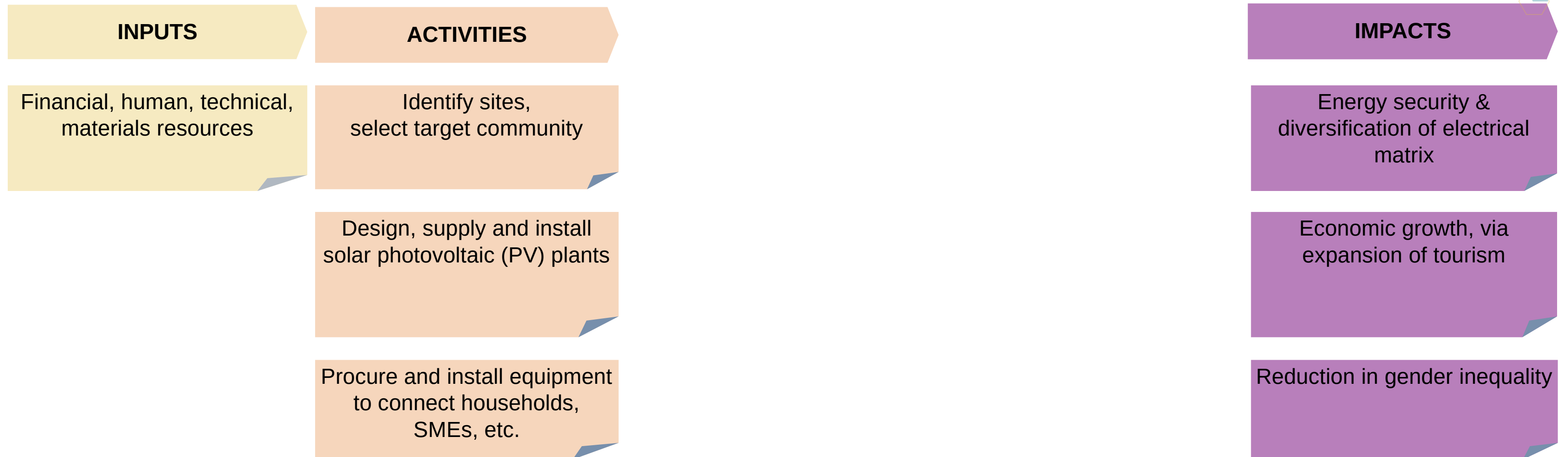
Energy security & diversification of electrical matrix

Economic growth, via expansion of tourism

Reduction in gender inequality

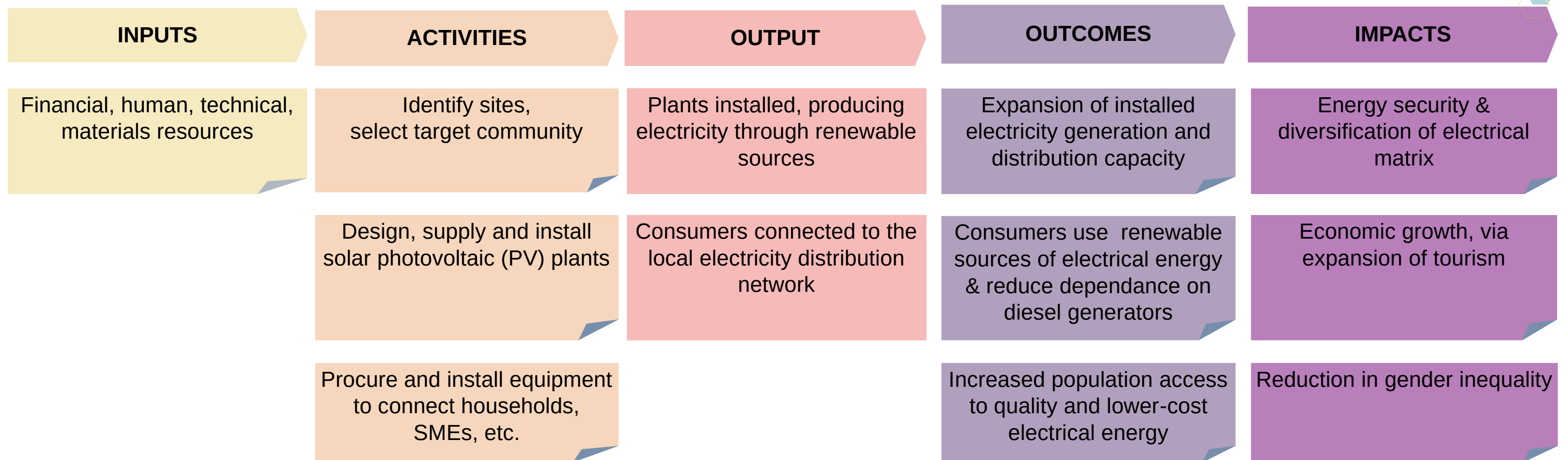
**SITUATIONAL ANALYSIS:** Lack of infrastructure, high cost of electricity, lack of access with regional, gender disparities, suboptimal sectoral performance

# Step 3: Design the Program



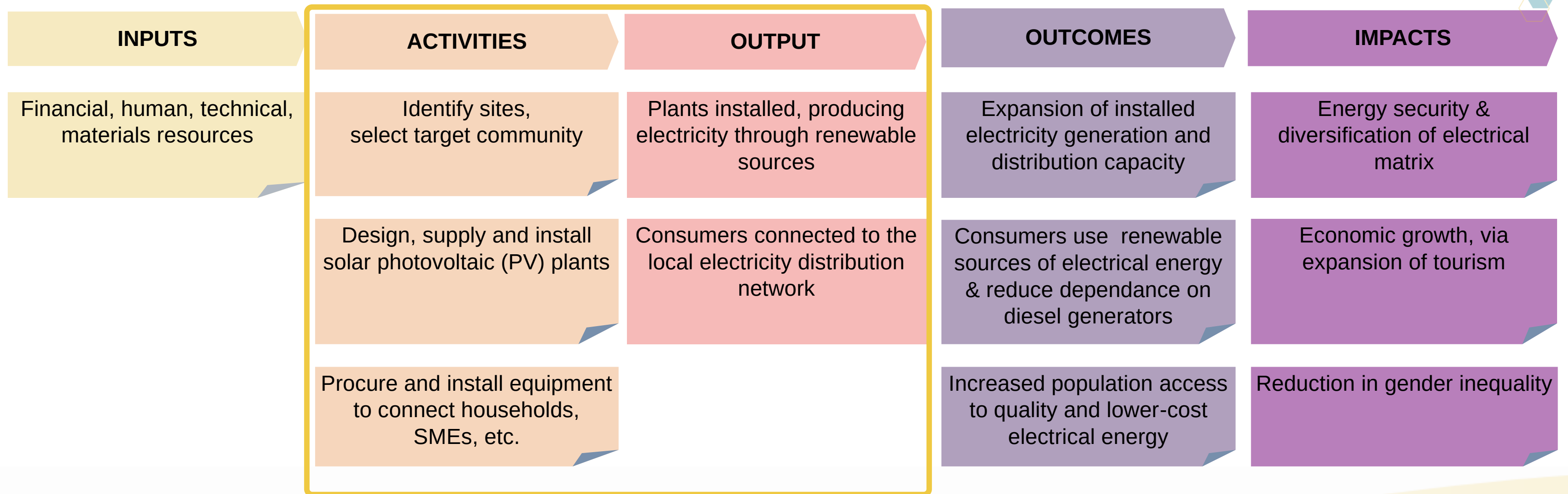
**SITUATIONAL ANALYSIS:** Lack of infrastructure, high cost of electricity, lack of access with regional, gender disparities, suboptimal sectoral performance

# Step 4: Map the causal pathway



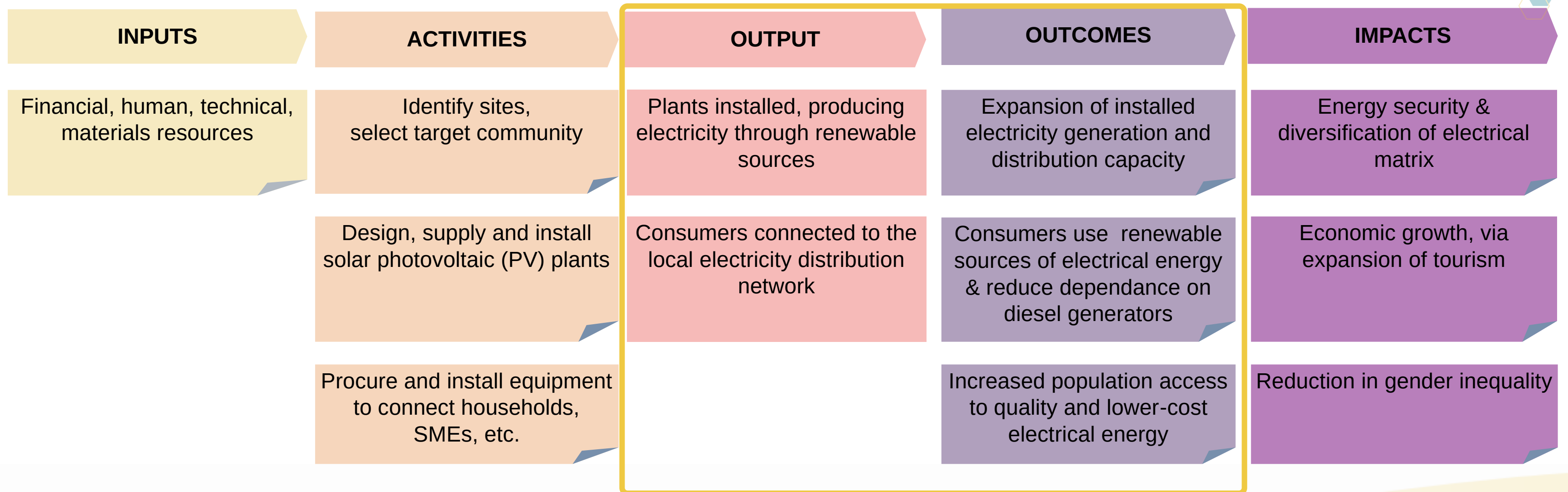
**SITUATIONAL ANALYSIS:** Lack of infrastructure, high cost of electricity, lack of access with regional, gender disparities, suboptimal sectoral performance

# Step 5: Explicate Assumptions



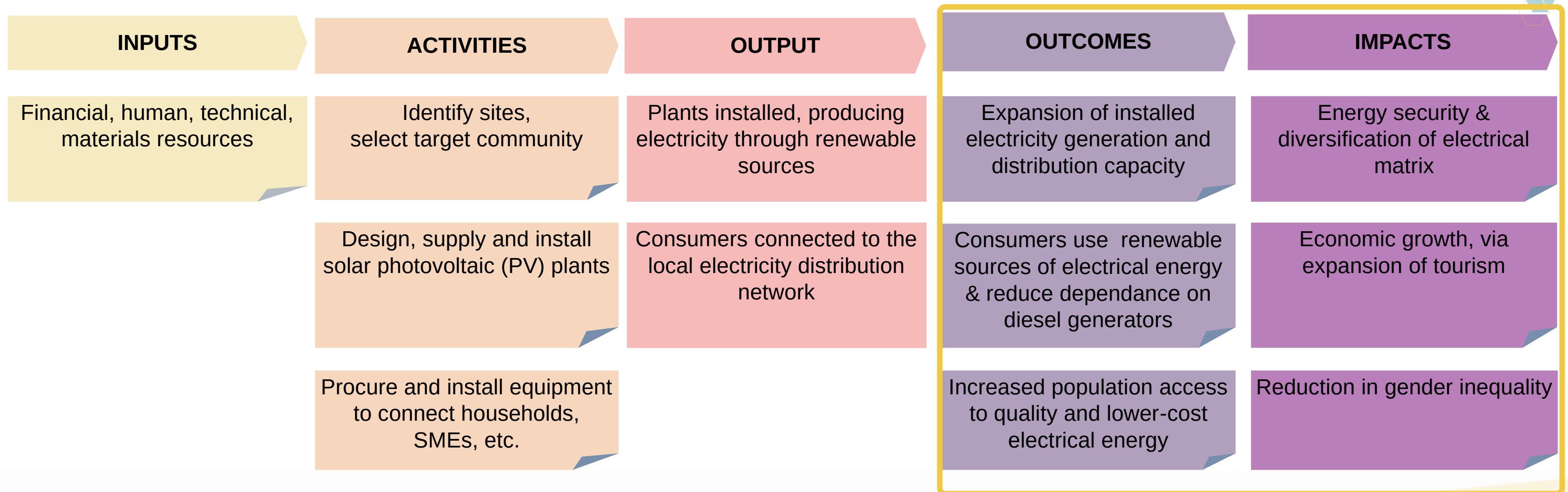
**A1: No restrictions on land use and broad community support to select target communities and enable implementation**

# Step 5: Explicate Assumptions



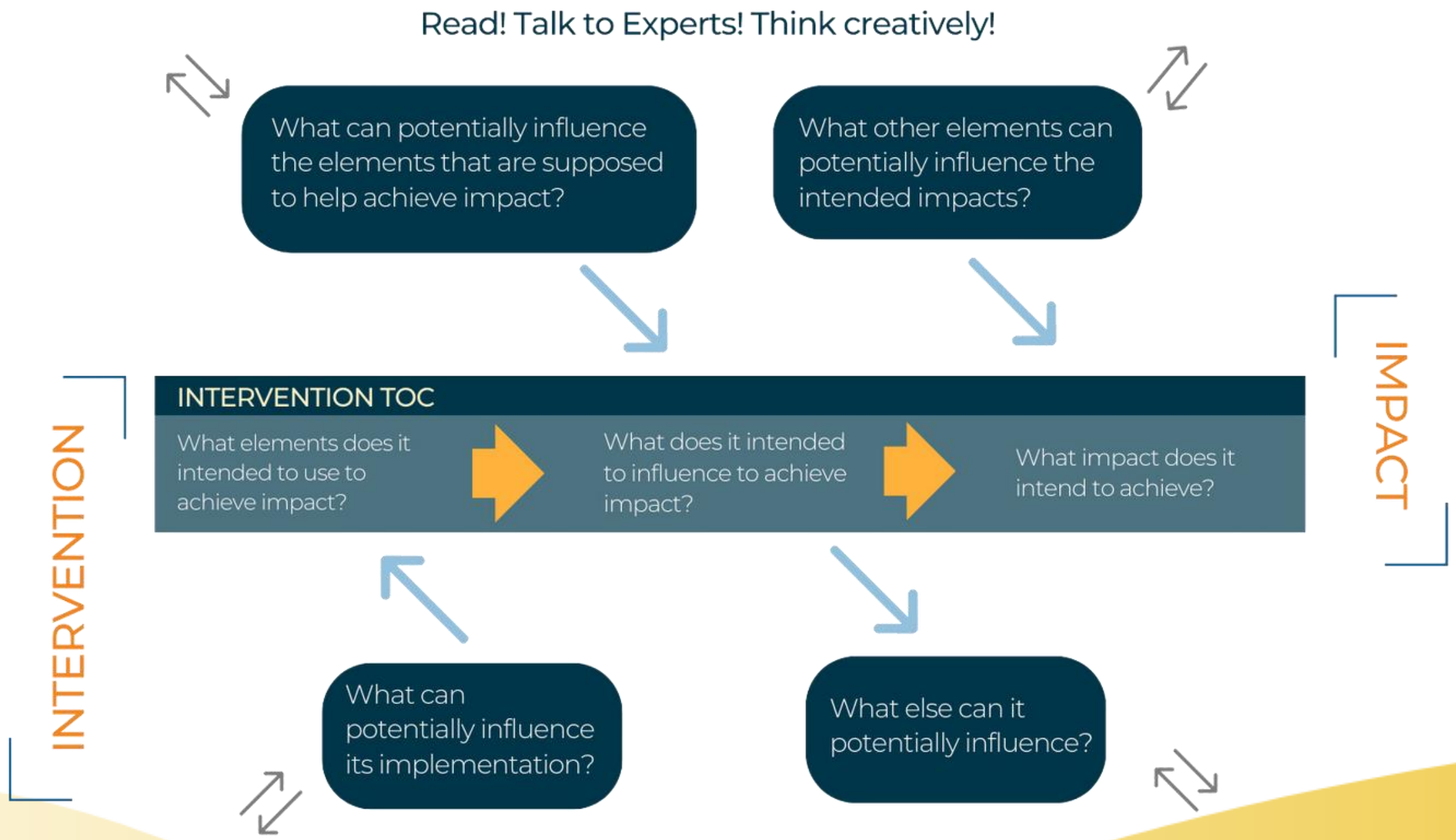
**A2: Consumers see value in use of renewable energy sources relative to traditional sources**

# Step 5: Explicate Assumptions



**A3: Increased energy access leads to economic growth, accruing to women**

# Theory of Change with a system lens



Source: GEF/IPDET (2022)

# Conclusions



- A Theory of Change makes explicit how a program is expected to achieve its goal
- Theory of Change can be used for both program and evaluation design
- For evaluators, it helps solve the "black box" problem and identify implementation failure vs. theory failure
- Theory of change with a system lens is important for climate action projects



# References

Benbarka, Anas. Concept Project Information Document (PID) - Guinea-Bissau: Solar Energy Scale-up and Access Project - P174576 (English). Washington, D.C. : World Bank Group.

<http://documents.worldbank.org/curated/en/629941622730511131/Concept-Project-Information-Document-PID-Guinea-Bissau-Solar-Energy-Scale-up-and-Access-Project-P174576>

American Evaluation Association. (2018). Principles for effective use of systems thinking in evaluation. Better Evaluation. <https://www.betterevaluation.org/tools-resources/principles-for-effective-use-systems-thinking-evaluation>

CIF. (n.d.). Transformational Change Guidance Questions. [https://www.cif.org/sites/cif\\_enc/files/knowledge-documents/tclp\\_webinar\\_guidance\\_questions\\_0.pdf](https://www.cif.org/sites/cif_enc/files/knowledge-documents/tclp_webinar_guidance_questions_0.pdf)

CIF. (2021, September). CIF's Transformational Change Concepts – Transformational Change Learning Brief.

GEF/IPDET. (2022, July). Developing a Theory of Change with a Systems Lens. Powerpoint presentation.

IPCC. (2023). Climate Change 2023: Synthesis report. [https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_SPM.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf)

TEDx Talks. (2019, April 4). Systems thinking is not optional: Lessons from a pandemic | Steve Woodsmall | TEDxLakeJunaluska [Video]. YouTube. <https://www.youtube.com/watch?v=NkpUe0ojFfY>

Sea Change / UKCIP. (2014). Guidance note 1: Twelve reasons why climate change adaptation M&E is challenging. Better Evaluation. [https://www.betterevaluation.org/sites/default/files/2014\\_01\\_SEA\\_Change\\_UKCIP\\_GN1\\_12\\_Reasons\\_why\\_CCA\\_MandE\\_is\\_challenging\\_0.pdf](https://www.betterevaluation.org/sites/default/files/2014_01_SEA_Change_UKCIP_GN1_12_Reasons_why_CCA_MandE_is_challenging_0.pdf)

Williams, B. (2014, September 16). Systems thinking [Blog post]. Better Evaluation. <https://www.betterevaluation.org/blog/week-36-systems-thinking>

Guidance note "Theory of Change approach to climate change adaptation programming" by Sea Change and UKCIP (2014) - <https://www.ukcip.org.uk/wp-content/PDFs/MandE-Guidance-Note3.pdf>

