

Training needs of the public and private sector in the field of LCA

Tomasz Nitkiewicz

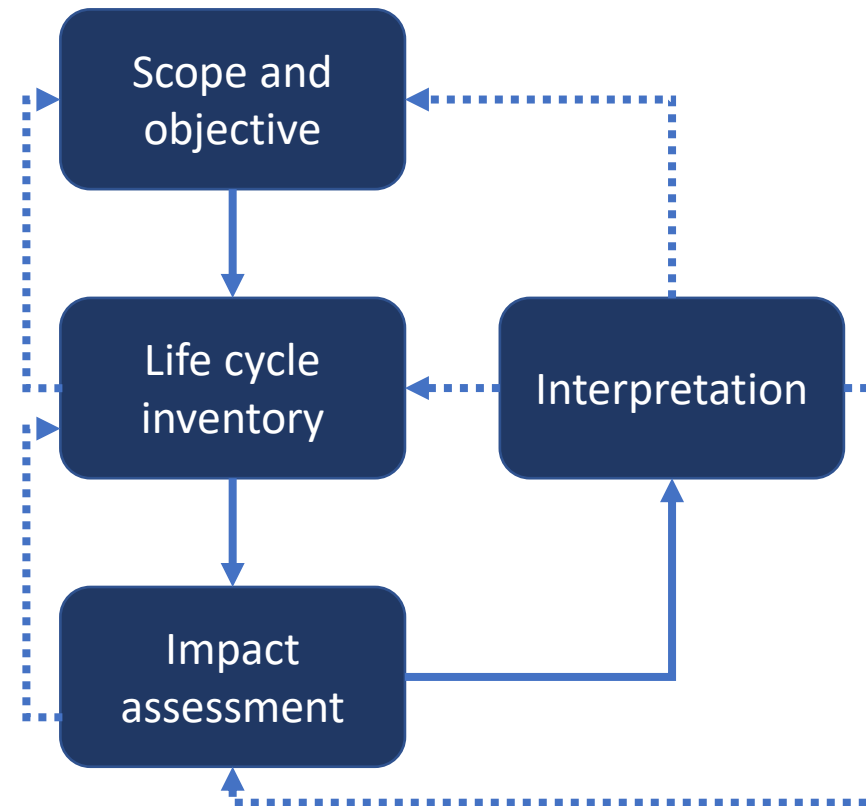
Life Cycle Modeling Centre

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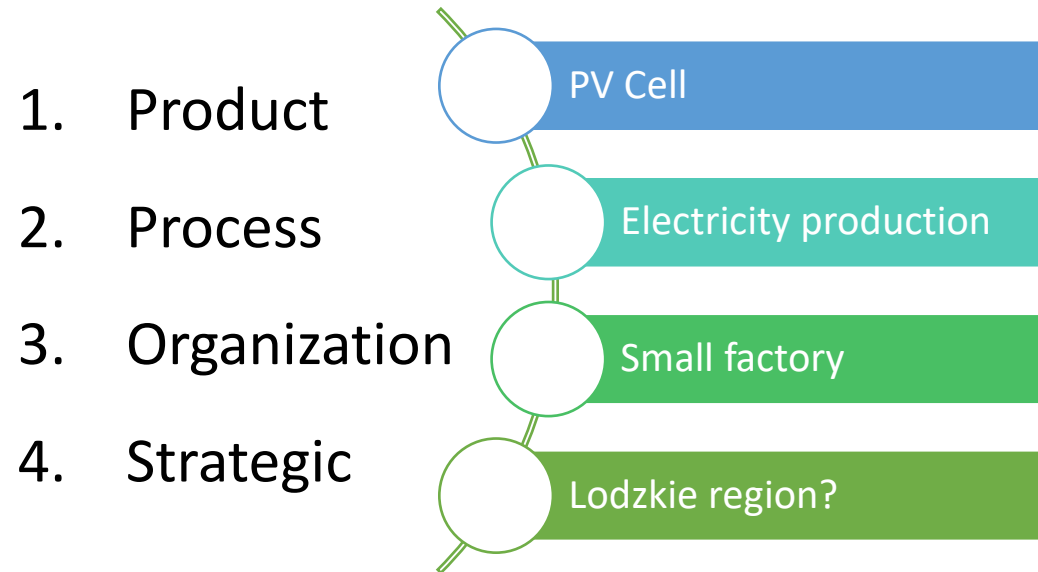
What is LCA?

Life cycle assessment is a **environmental management tool** than enables quantitative assessment of a product (and many other objects) and supports decision making with environmental information.

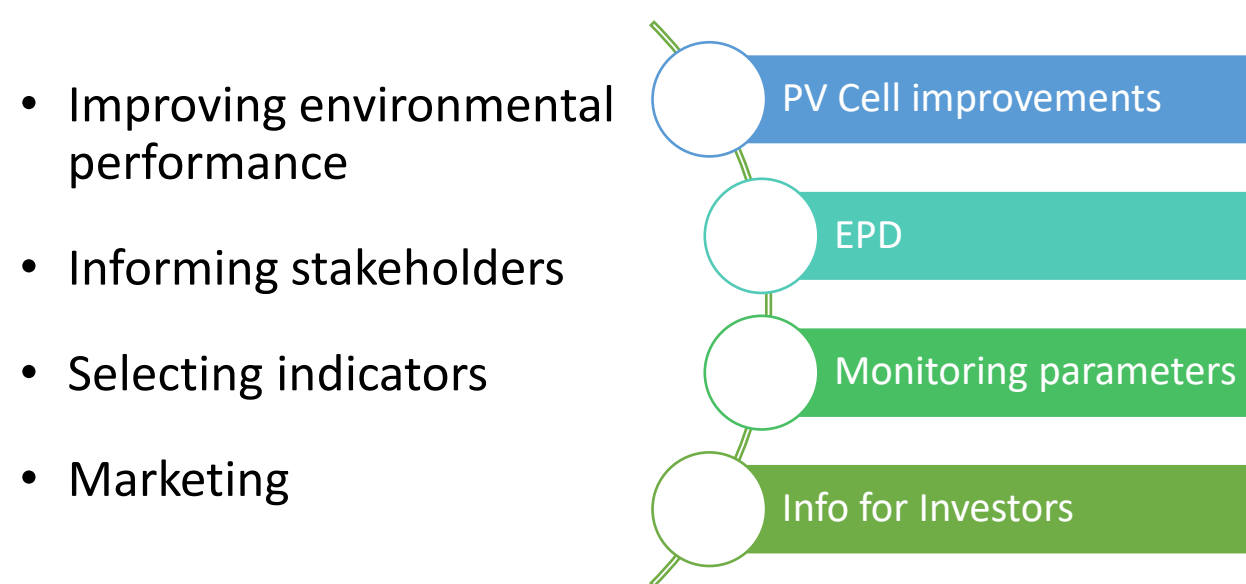


LCA utility

Scopes of LCA



Potential application



Stakeholders / Agents of regional LCA?

Citizens



Industry



Authorities & Institutions

Strategic Framework



Infrastructure and Landscapes



Neighbourhood

Visitors



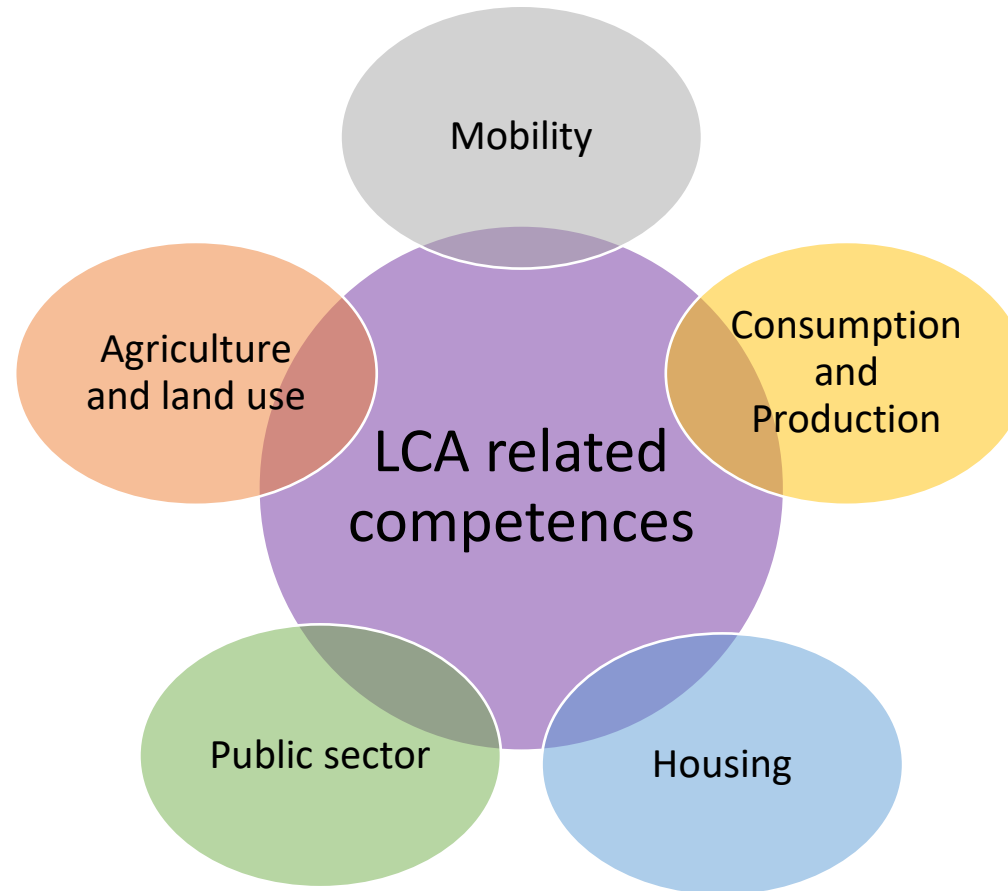
Challenges for regional LCA

- Define borders and scope **What is the region? Why do we assess it?**
- Mobilization of stakeholders **Who provides the data? How come?**
- Gather data on key impact areas:
 - Mobility
 - Housing
 - Agriculture and land-use
 - Consumption of goods / Manufacturing
 - Public sector
- Identifying interpretation patterns and possible intervention plans **How to use it?**
- Monitoring the impact and developing long term strategies **What to check?**
- Meaningful feedback **Who to include? How?**
- Empowering individuals and organizations **How to make the stakeholders responsible?**

Types of required data

- LCI on products and processes
 - What are average emissions from daily travels?
 - What is the impact of local factory?
- Number of citizens and visitors
 - How many employees arrives in Łódź every working day?
 - How many cars are used in daily travels?
- Stakeholder engagement and allocation
 - What is an average travel route?
 - How may people travels in one car?
- Average consumption / production data
 - What is an average of fuel consumption?
 - What is the production outcome of loval factory?

Impact areas ?



Impact areas within strategic framework

European Green Deal

EU Funds for Łódzkie Region 2027

Strategy for Responsible Development
for the period up to 2020

Development Strategy for the
Lodzkie Region 2030

National Waste Management
Plan 2014-2022

Thermomodernization

Strategy of Sustainable Transport
Development (2030)

EcoCar

Energy Policy of Poland until 2040

My electricity
ECO Lantern

Roadmap towards the Transition to the Circular Economy

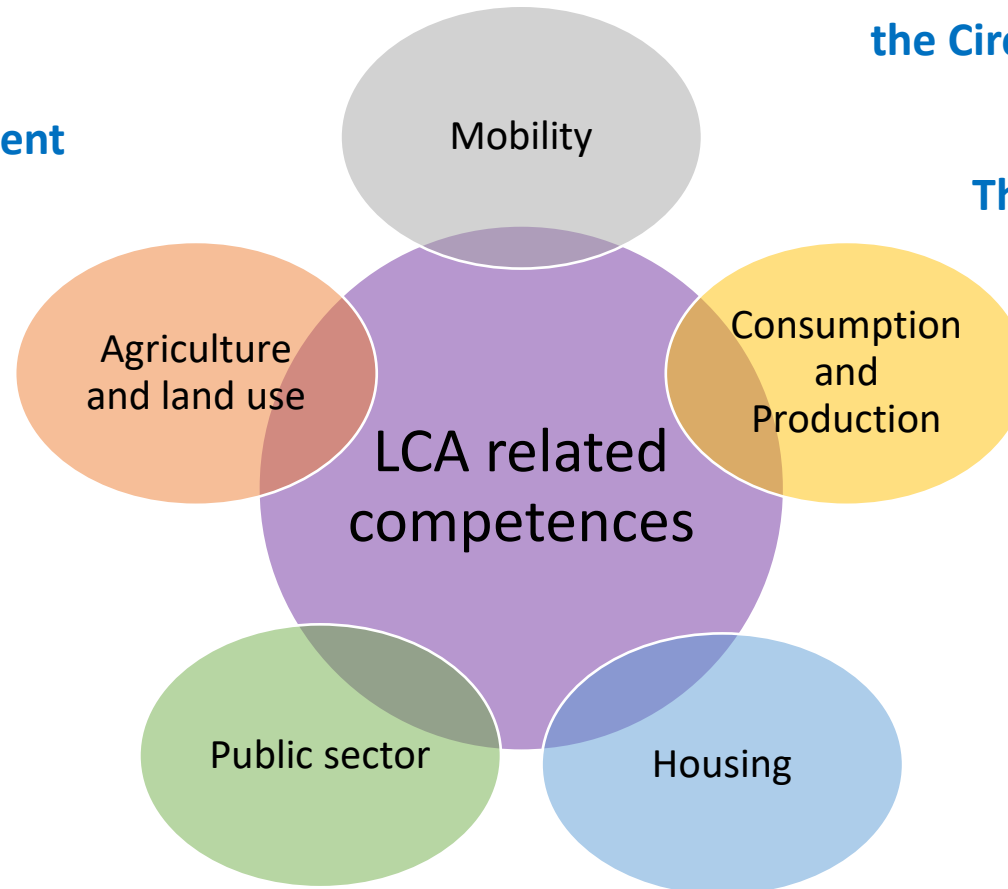
Territorial Plan of Just Transformation
of the Lodz Region
The 2030 National Environmental Policy

Environment Protection Program
Clean Air Program
Polish Hydrogen Strategy

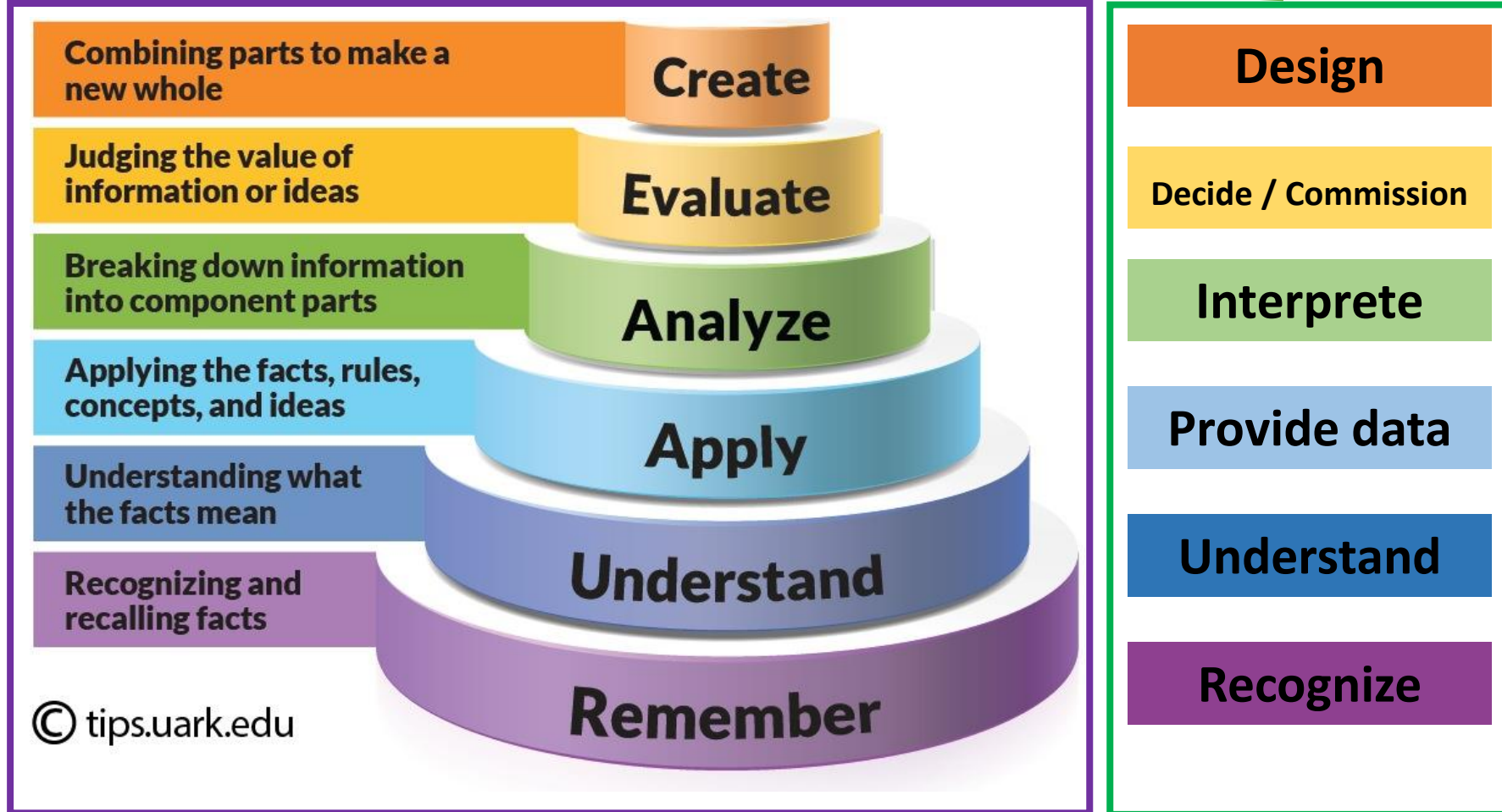
Rural Development Program PROW
Creating green areas with educational paths

National Fund for Environmental
Protection and Water Management

Regional Fund for Environmental
Protection and Water Management



LCA capacity within Blooms taxonomy



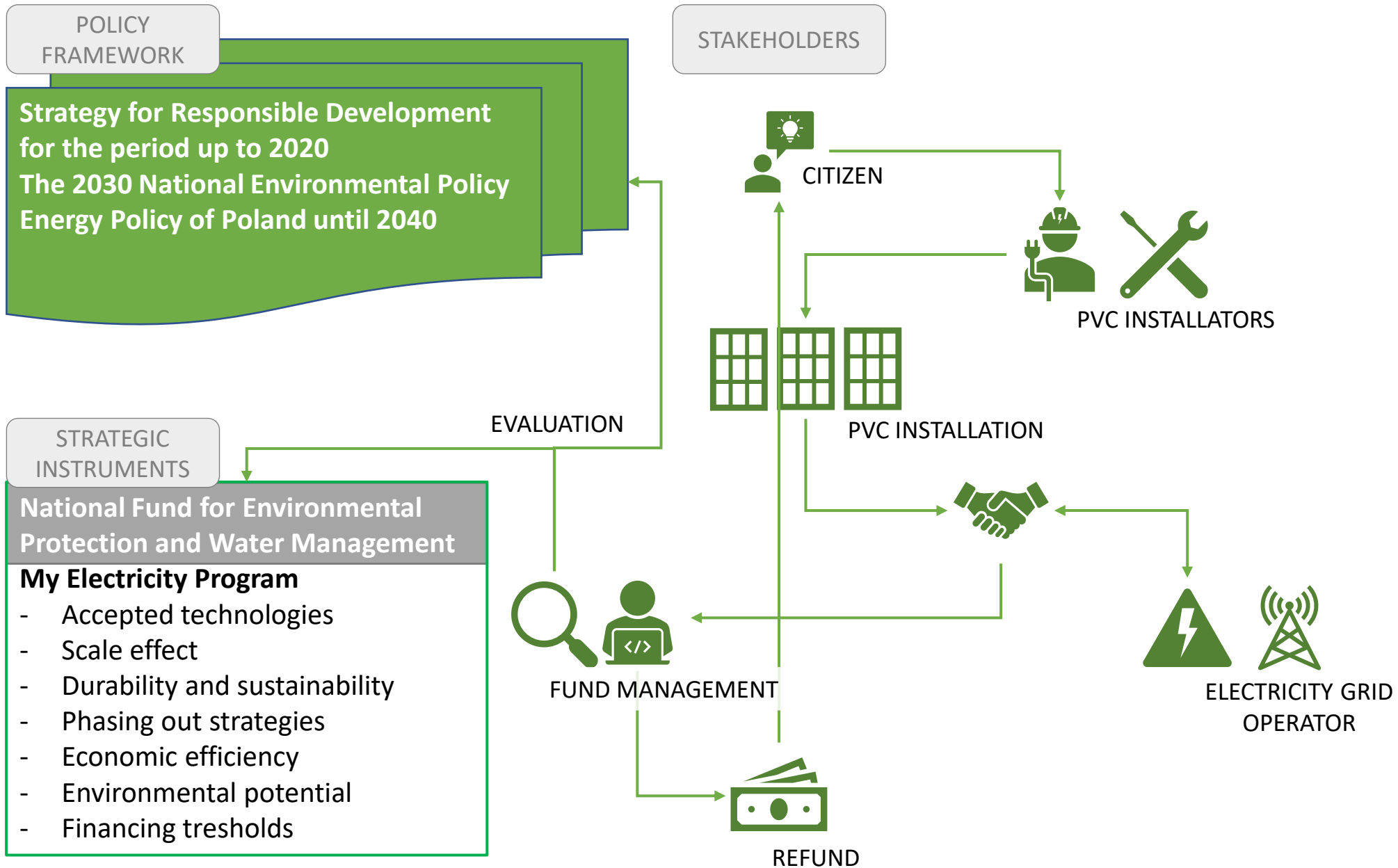
Do we need LCA experts?

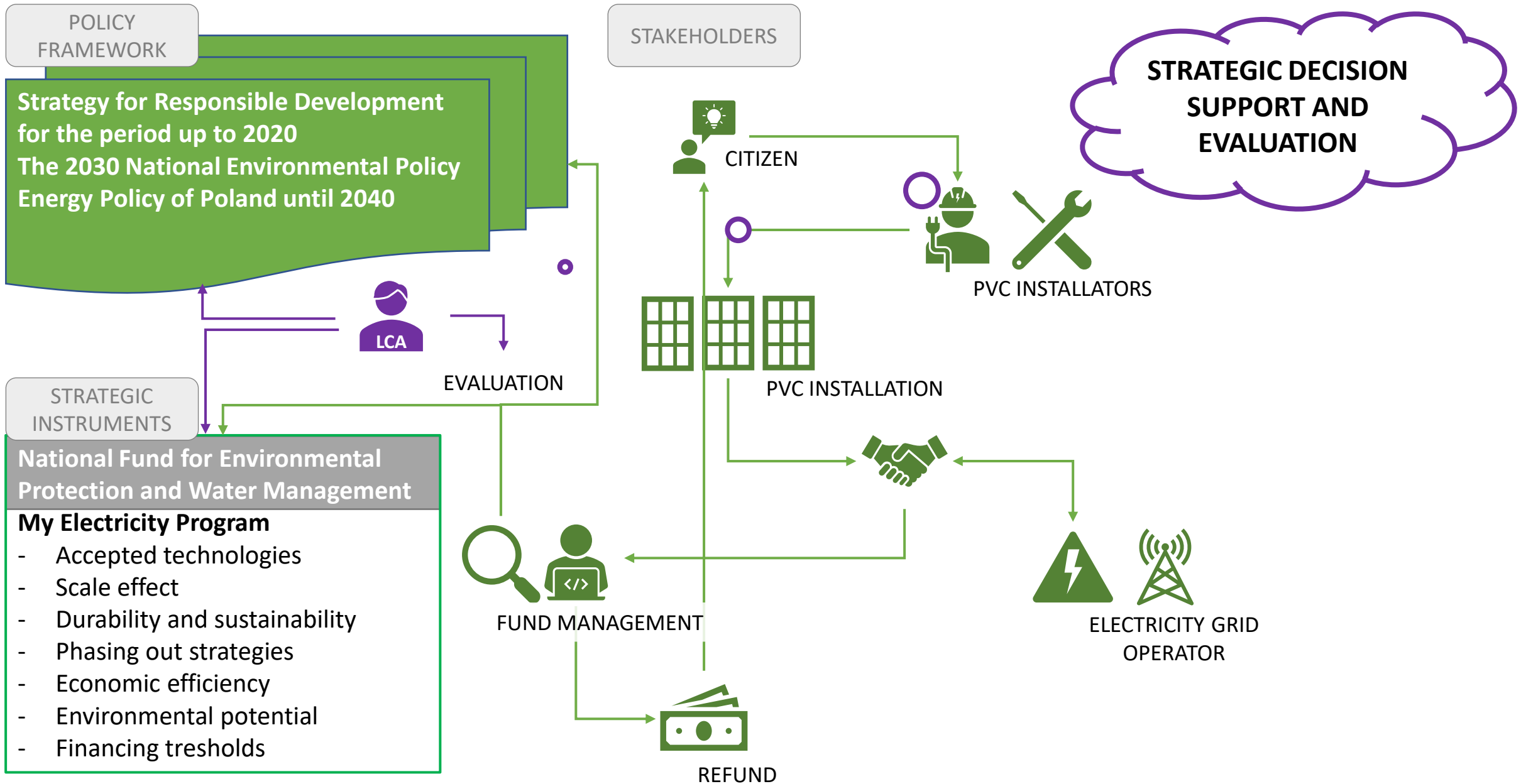
YES! 😊

When? Where? How many?

Justification on the example of *My Electricity* Program







Training and capacity building needs



Where to find LCA experts and practitioners? Academia ?

Lodz University of Technology

- BSc and MSc in Industrial Biotechnology;
- MSc in Management and Production Engineering
- BSc and MSc in Environmental Engineering
- BSc in Computer Sciences and IT in Environment Protection
- BSc in Bioeconomy

University of Lodz

- MSc and BSc in Environment Protection
- BSc in EcoCity

Academy of Fine Arts in Lodz

- Ecodesign education and EcoMade conference

Industry and R&D ?

Environmental
consulting

Environmental
R&D

LCA software
developers

Industry (EPD)

Regional Fund of
Env Protection and
Water
Management

Training ?

Environmental
consulting

LCA Centres of
excellence

Workshops of LCA
software
developers

Institutional
training mobility
projects

Mutual Industry,
R&D & Institutional
Cooperation
Projects

Self-learning
(courses, tutorials,
articles, clips)

Training resources



LCA
Platforms

LCA
networks

LCA
Projects

LCA
Software
Developers

Capacity building scenario

1. Identify the scope and range
2. Check out your capacity and networks
3. Mobilize stakeholders
4. Make it count



THANK YOU FOR YOUR
ATTENTION !

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