

Adapting to climate change impacts in Nepal: Clean energy pathways

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Context

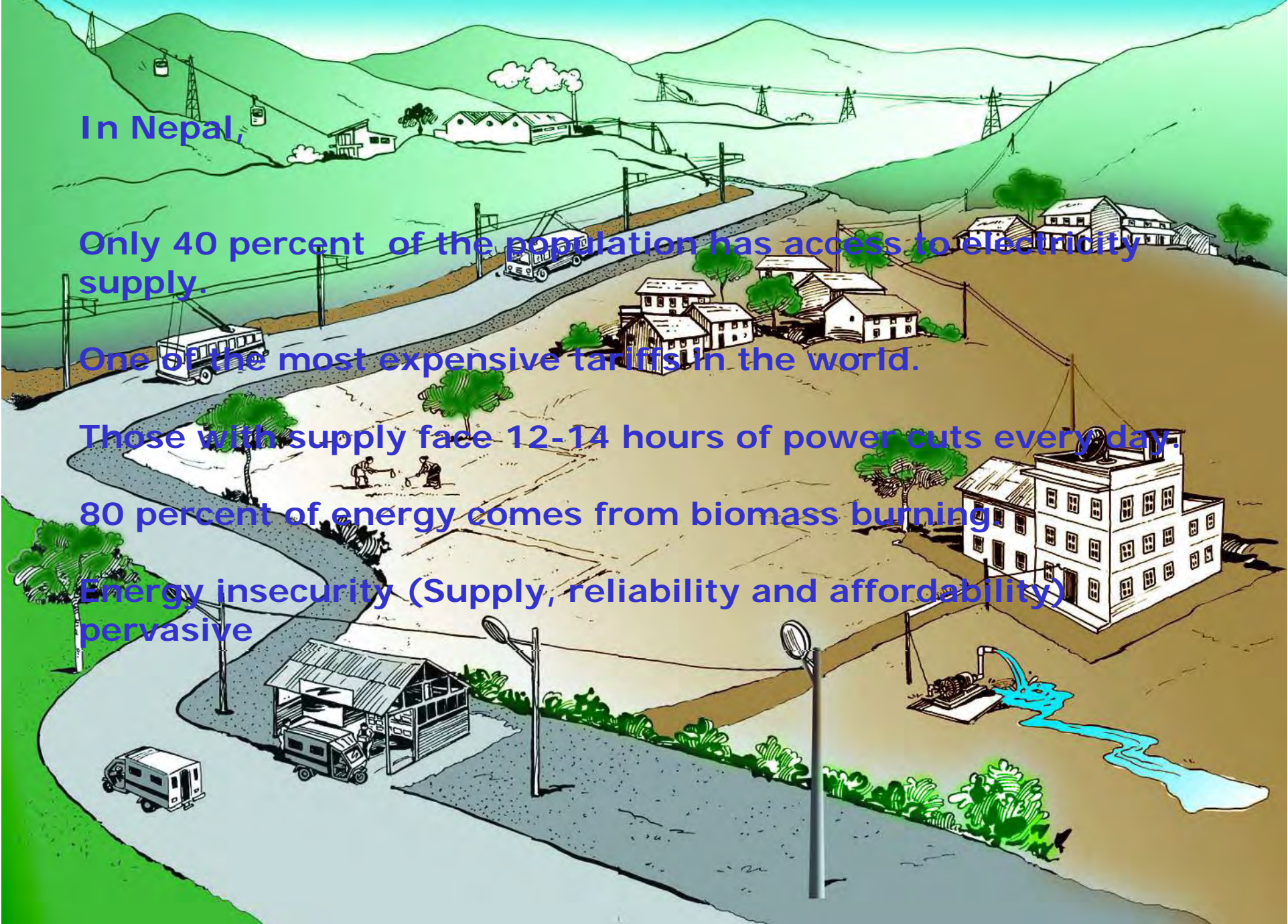
Adaptation is the ability to shift strategy and do well.

Individuals and families with more than one source of income are able to adapt better than those without.

Access to communication, education, banking services, mobility, drinking water services, sanitation and health services etc. enable adaptation.

They also are sources of employment.

Functioning of communication, education, banking services, mobility, health services are dependent on access to reliable **energy** supply.



In Nepal,

Only 40 percent of the population has access to electricity supply.

One of the most expensive tariffs in the world.

Those with supply face 12-14 hours of power cuts every day.

80 percent of energy comes from biomass burning.

Energy insecurity (Supply, reliability and affordability) pervasive

Problem

Clean energy insecurity prevents shifting to climate-resilient livelihoods

Impacts

Individual, family and community level:

- Lower productivity
- Does not lead to economic and social well-being
- Low education and poor health
- Migration (?)

National level:

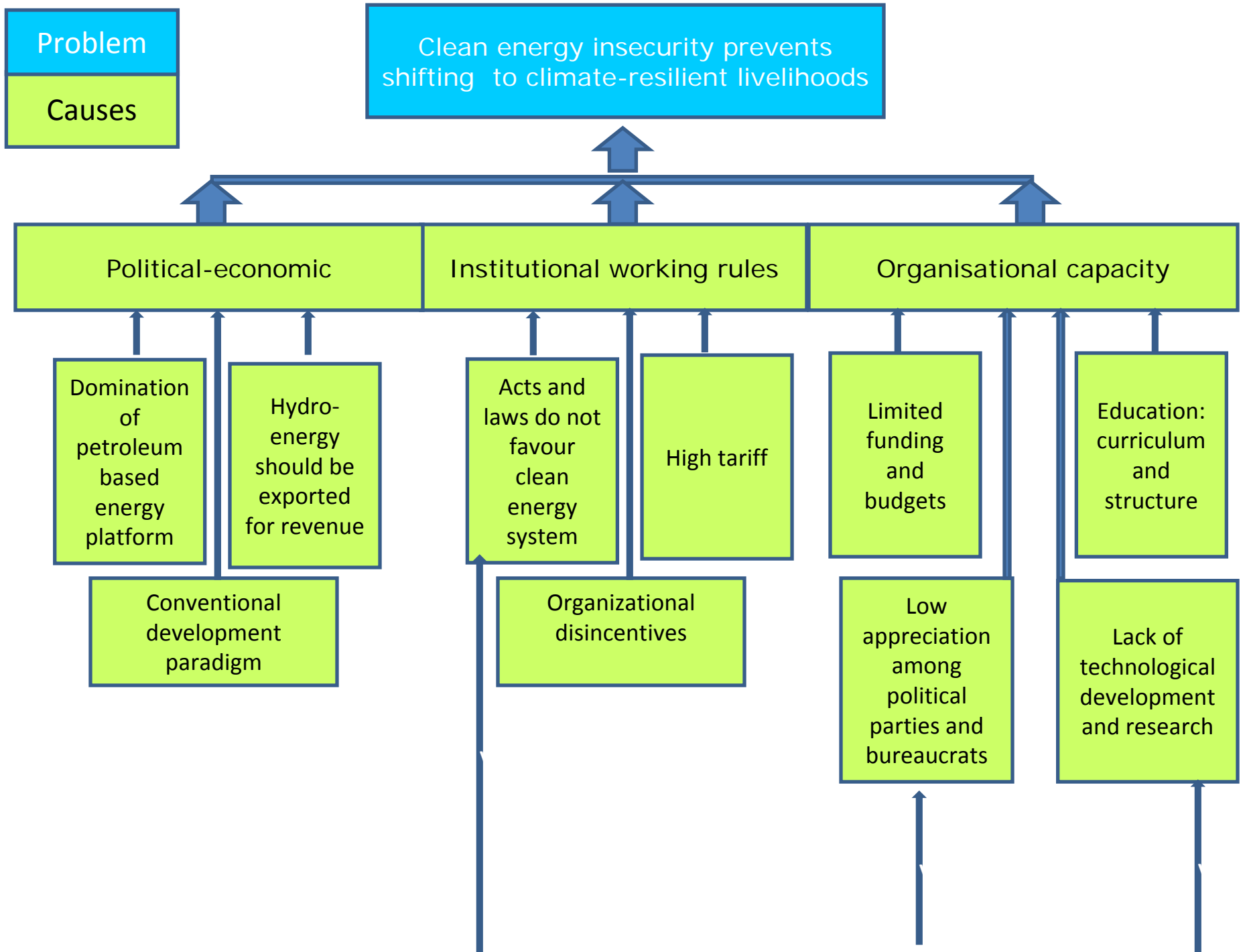
- Poverty perpetuates,
- Lack of social and economic well-being
- Social and political unrest
- Foreign exchange loss
- Higher losses due to increased climate uncertainties

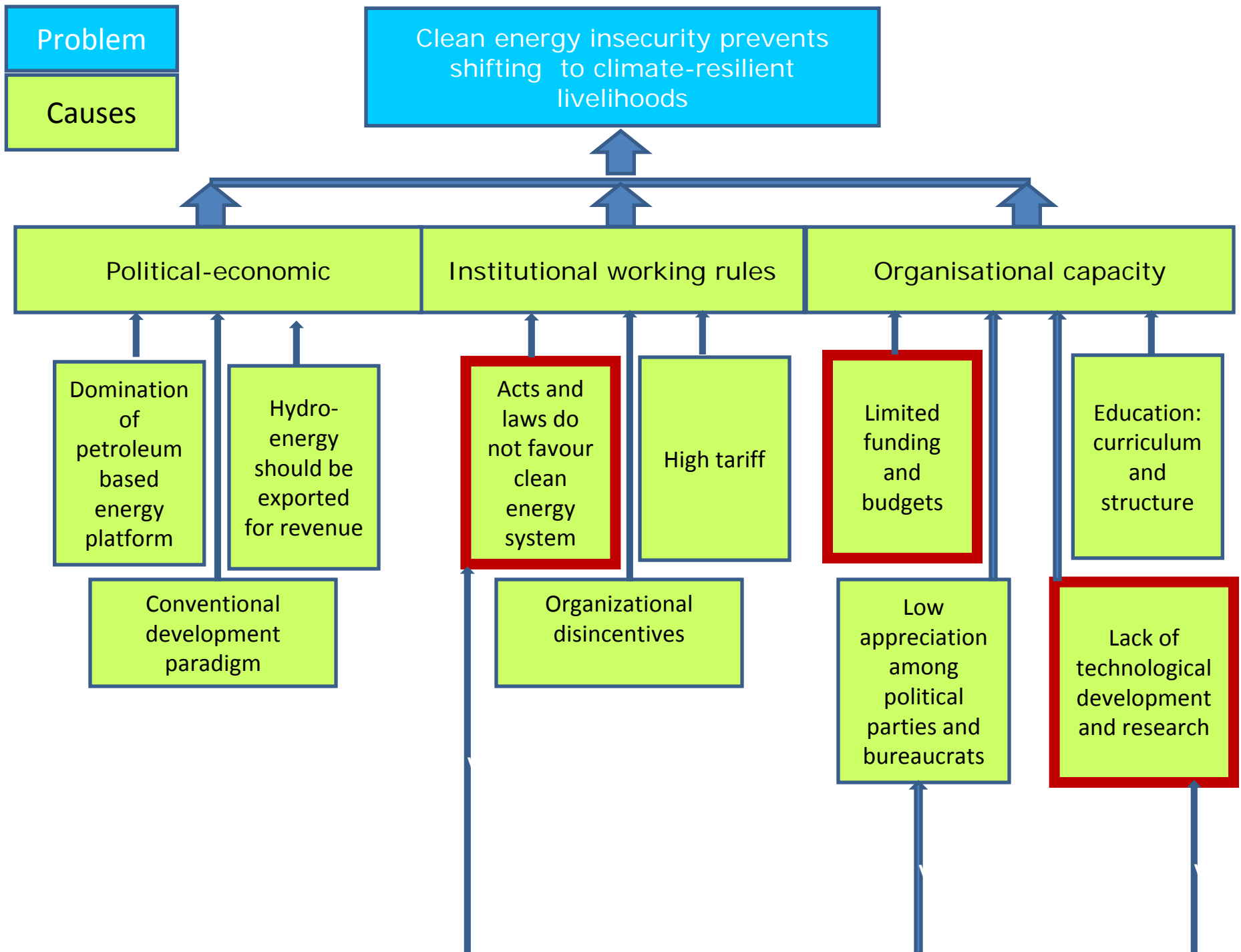
Regional level:

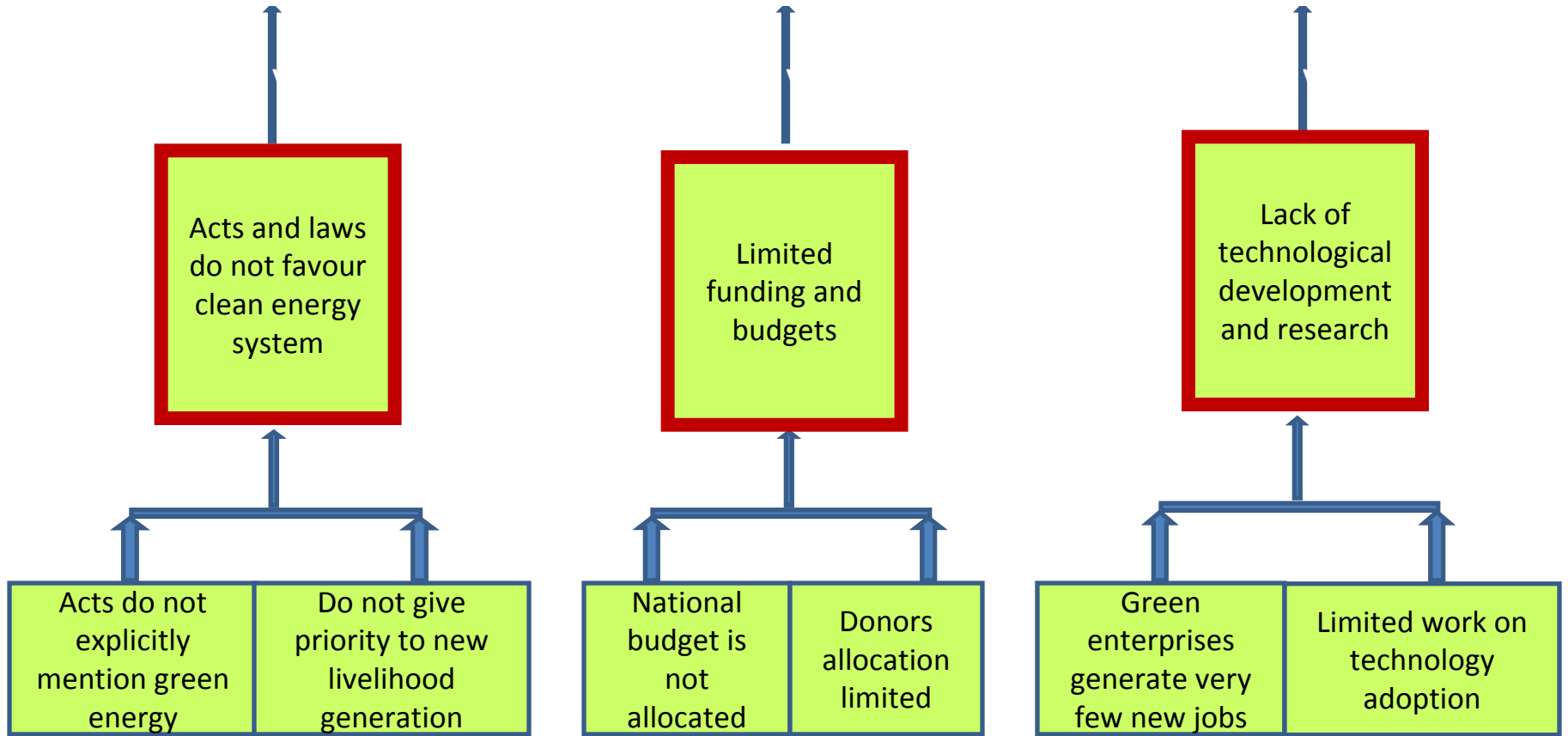
- Changes in snow system and regional hydrology will lead to ill effects

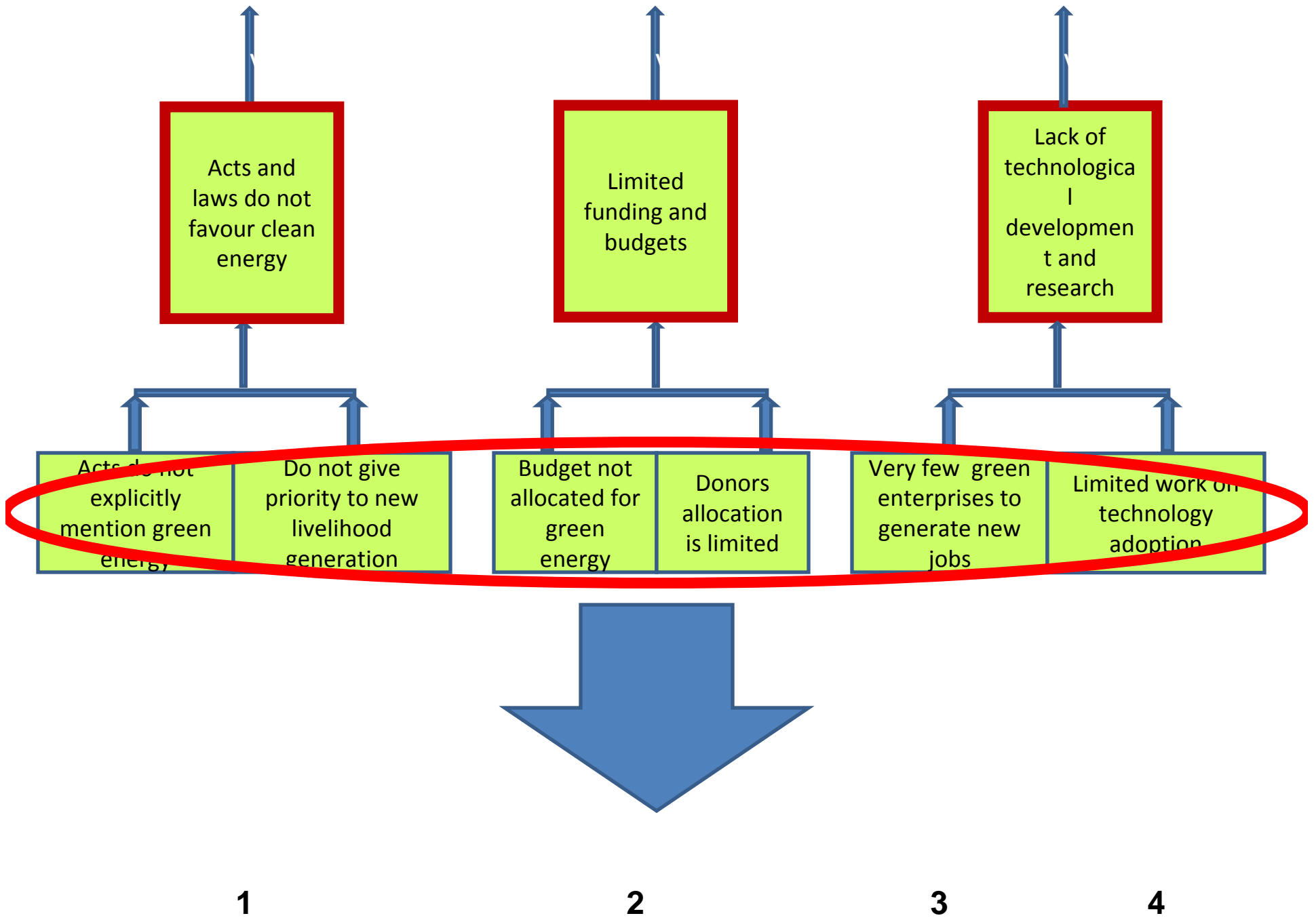
International level:

- Carbon emissions (small though)!









Innovations

Objectives

Revise Acts

Provide additional
budget

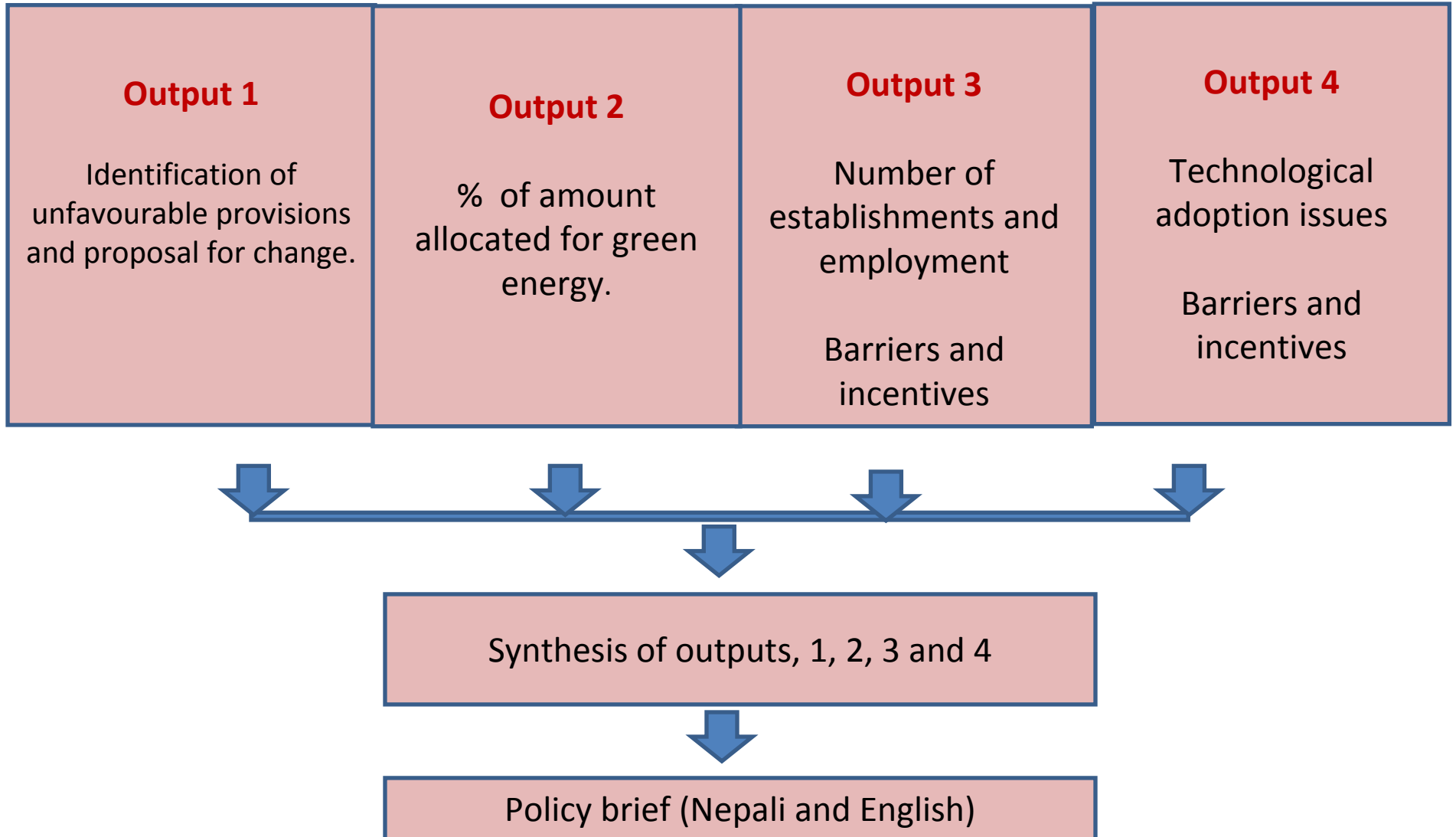
Provide stimulus to
establish new green
enterprises

Support development
of green energy
system

Meeting the above objective requires

<p>Review of Acts</p> <ul style="list-style-type: none">• 2001 Hydropower Development Policy,• 1992 Electricity Act,• 1993 Electricity Regulations,• 1996 Development Committee Act governing Alternative Energy Promotion Centre (AEP),• 28 June, 1998 Buy-back rates,• 2003 Community Electricity-by-laws	<p>Status report on amount allocated to green energy development</p> <p>By government's plans and budget.</p> <p>Disbursement record of major donors</p>	<p>Status report of</p> <p>Green enterprises and the employment they support</p> <p>Incentives and barriers</p>	<p>Status report of coverage and cost of adoption of</p> <p>Solar, wind, hydro power and biogas energy systems</p> <p>Actors involved [government, private sector, NGOs, others]</p> <p>Incentives and barriers</p>
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Outputs



contribute to meet larger goal

Raising up of human dignity via:

- Green energy access for all Nepalis (reliable supply at lower cost).
- Create new employment opportunities.
- Building capacity of Nepali societies to overcome the risks from climate variability and climate change as when they emerge.
- Without undermining the essential functioning of the Himalayan ecosystem system.

Stakeholders

Private sector (Suppliers, traders, consultants, contractors)

Parliament/
Constitution
Assembly

Pol. parties

Bilateral
donors

Multilateral
banks

INGOs

Universities/
Think Tanks
(NWCF)

Government departments

AEPC

NPC

MoWR

WECS

MOLD

NEA

MOE

NGOs, CBOs, Associations, User federations
(NACEUN),

Local government units , local groups

Stakeholders role

<p>Decisions</p> <p>CA</p>	<p>Decisions</p> <p>Donors</p>	<p>Decisions</p> <p>Donors, government and private sector</p>	<p>Decisions</p> <p>Donors, government and private sector</p>
<p>Support/Obstruct</p> <p>Petroleum lobby, Conventional mindset</p>	<p>Support/Obstruct</p> <p>Sympathetic actors Unconcerned skeptics</p>	<p>Support/Obstruct</p> <p>Powerful departments</p>	<p>Support/Obstruct</p> <p>Sympathetic actors Unconcerned skeptics</p>
<p>Affected by decisions</p> <p>Departments</p>	<p>Affected by decisions</p> <p>Recipient departments</p>	<p>Affected by decisions</p> <p>Recipient departments</p>	<p>Affected by decisions</p> <p>Recipient departments</p>
<p>Who feel affected</p> <p>Users, NGOS, federations, associations</p>	<p>Who feel affected</p> <p>Users, NGOS, federations, associations</p>	<p>Who feel affected</p> <p>Private sector, associations</p>	<p>Who feel affected</p> <p>University researchers, associations</p>

No free lunch

In the long term disposal of wastes (chromium and mercury).

Handling and disposal challenges .

New type of stresses.

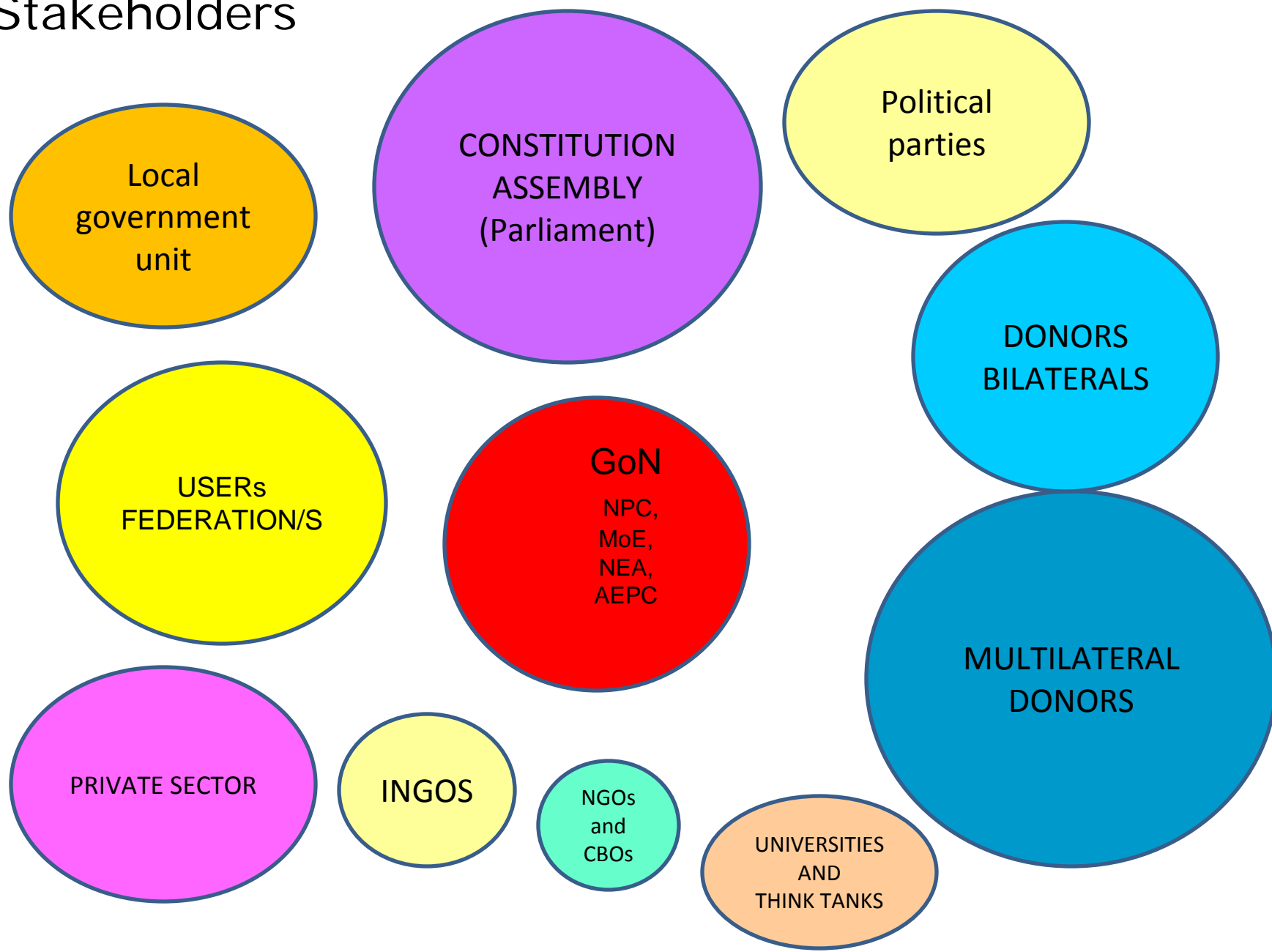
Stakeholders analysis

Power: Ability to influence others by and use resources {economic wealth, political authority, ability to use force or threats of force, access to information (knowledge and skills), and the means to communicate} to achieve goals.

Interest: Gains and losses based on the results of existing or proposed actions which affect access to power, legitimacy, or social relationships.

Urgency: How serious each is concerned to meet interest.

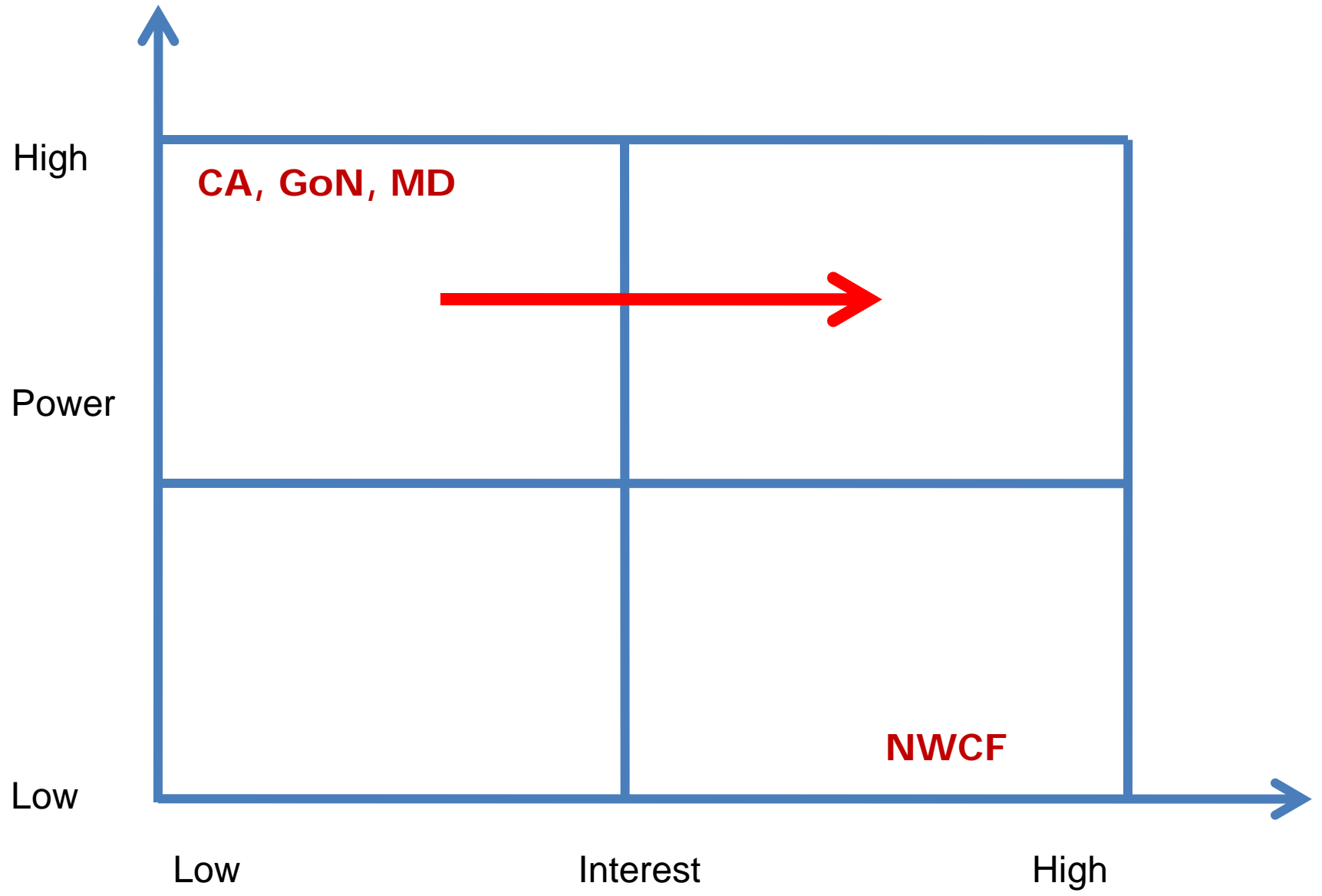
Stakeholders



Stakeholders matrix

Stakeholders category	Power			Interest	Urgency
	Economic resource	Political authority	Knowledge		
Constitution Assembly	L	H	L	L	L
Government of Nepal	L	H	L	L	L
MoWR	L	H	L	L	L
WECS	L	M	M	M	L
NEA	H	M	L	L	L
AEPC	L	L	M	H	L
NPC	L	M	M	M	L
Political parties	L	H	L	L	L
Multilateral donors	H	M	H	L	L
Bilateral donors	M	M	H	M	M
Universities and Think Tanks (NWCF)	L	L	M	L	M
Private sector	L	L	M	L	M
NGOs	L	L	L	H	H
Users Federations (NACEUN)	L	L	M	M	M
Local government unit	L	M	L	L	M

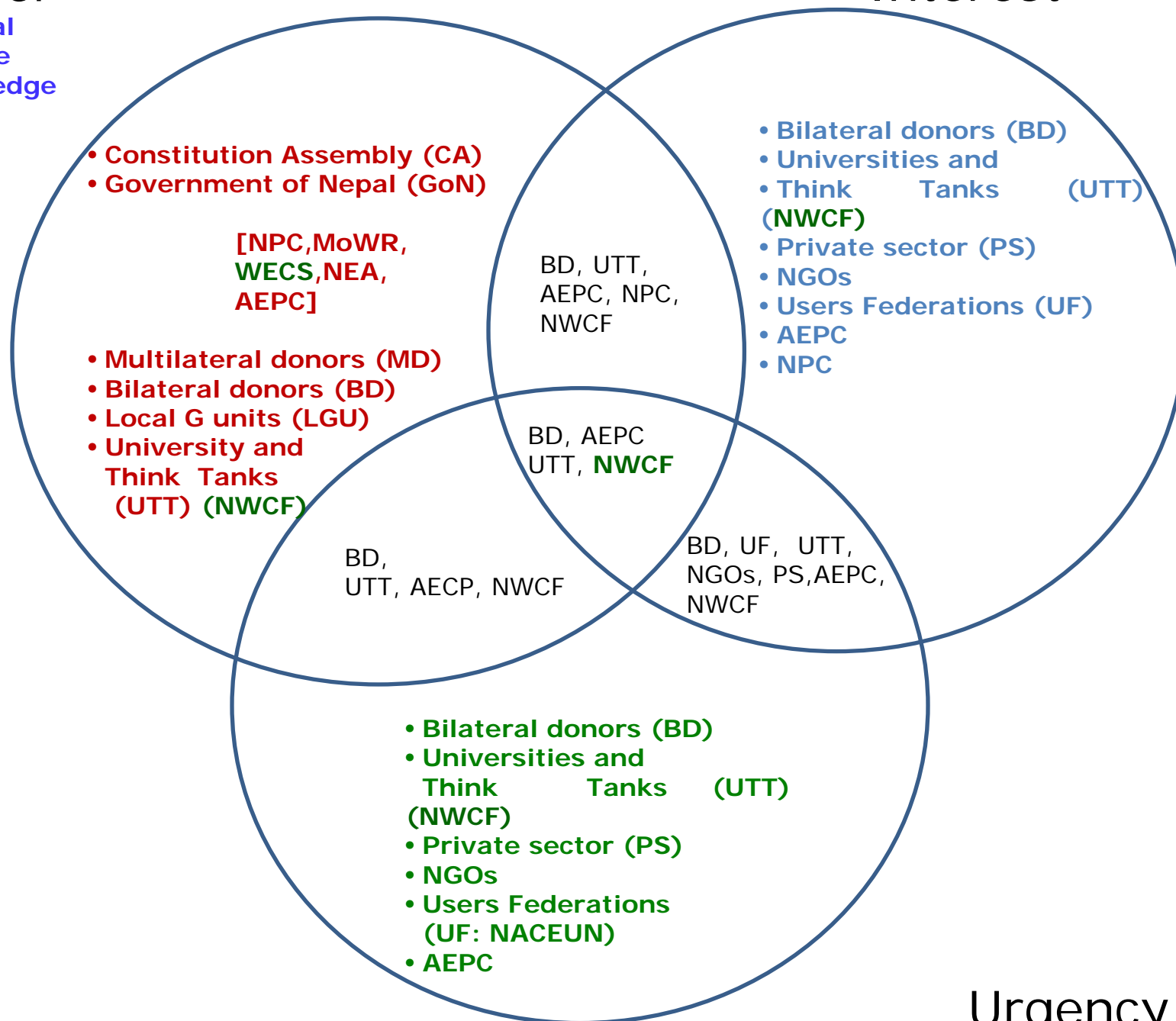
High: H
 Moderate: M
 Low: L



Power

Political
Finance
Knowledge

Interest

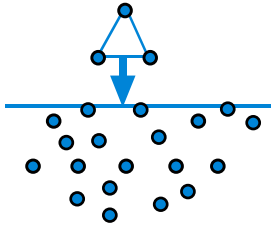


Thinking about Interest, ideology, information an Institutional structure

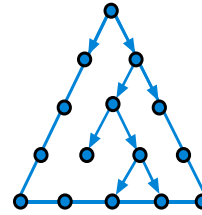
Four Is	Government	Advocacy coalition	Private sector	Common people
Interest	Control; tested methods, by in-house expertise	Social justice	Profit	Survival
Ideology	Minimise risk	Highlight high risk	Take risk	High risk always exist
Information	Registration	Charismatic boundary	Data picking	Broadcast
Institutional structure	Hierarchic (Top down)	Every body is equal	Freedom	Unorganized

According to four worldviews

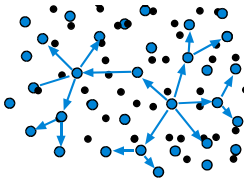
Common people
not organised
(Tandok)



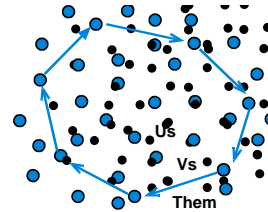
Government



Private sector



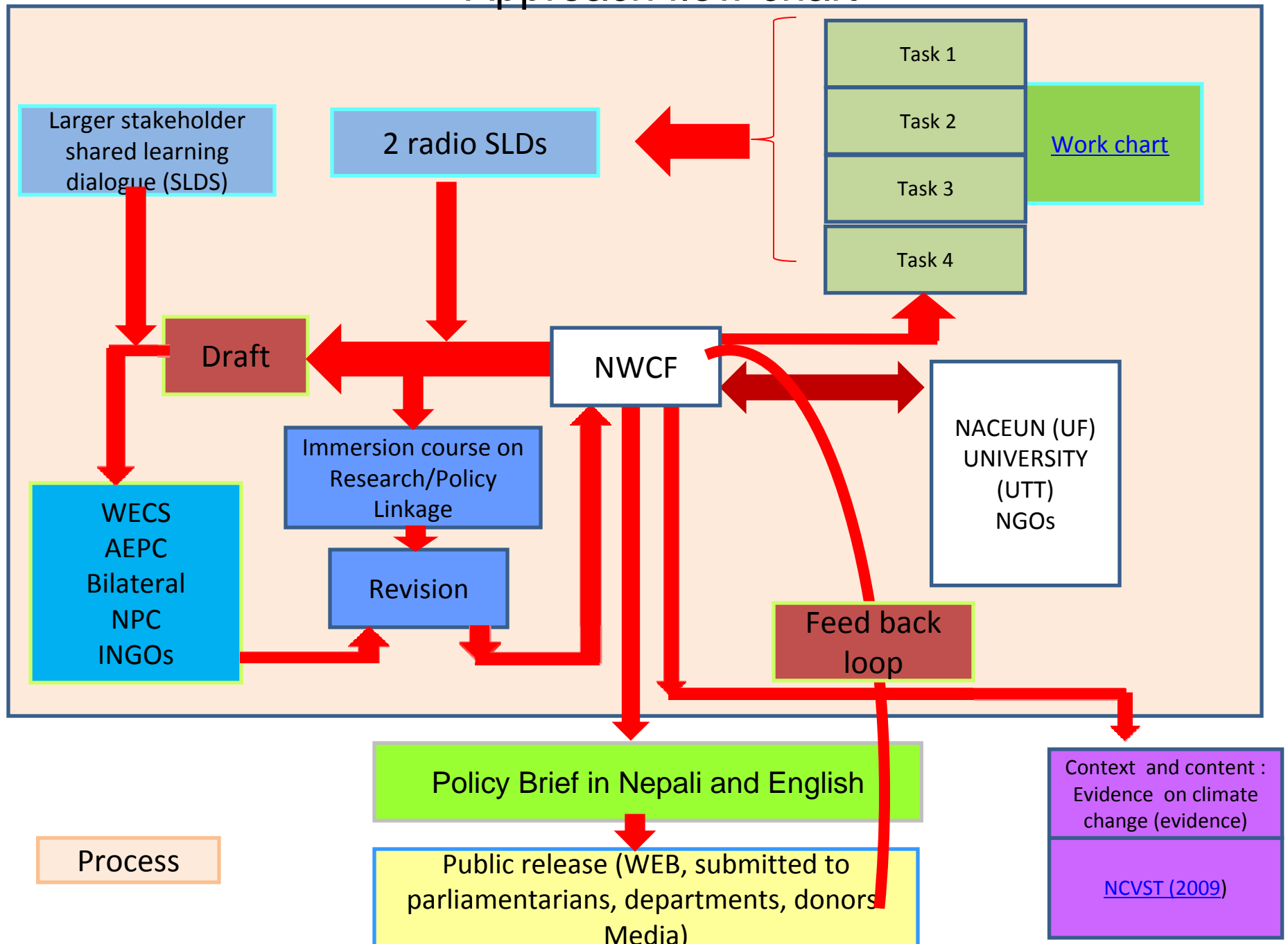
Advocacy coalition



Objective

By the end of February 2011, NWCF will prepare a policy brief on clean energy pathways for Nepal

Approach flow chart



Thank you