

Conferência sobre Impactos das Mudanças Climáticas na gestão sustentável dos Recursos Naturais:

“Por uma gestão Participativa e Sustentável dos Recursos Naturais
em prol da Resiliência Climática”

Painel III: Gestão Sustentável dos Recursos Naturais e do Ambiente e das
Questões de Género

INCLUSIVE GROWTH IN MOZAMBIQUE

- scaling up research and capacity

Mechanisms to ensure sustainable management of natural resources and the environment in the context of global climate change.

Best practices, experiences and lessons from the extractive industry

Agenda

- Definitions
 - Sustainable management
 - Sustainable management of natural resources and the environment
- The situation:
 - Consequences of Climate Change for the Extractive Industry and host countries
 - The impact of the Extractive Industry on the environment
 - The impact of the Extractive Industry on the environment in the context of climate change
- Mechanisms to protect and preserve the environment
- What works?

Definitions

- Sustainability is defined as:
 - Sustainability consists of fulfilling the needs of current generations without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care and social well-being.
- Different interpretation of this definition exists:
 - Narrow interpretation: no consumption of non-renewables
 - Wider interpretation: keep living-standards at least constant

Definitions: Sustainable management of

Natural resources:

- Narrow interpretation: Sustainable management is not possible. After using them they are gone.
- Wider definition: NR generate income which can be used in a sustainable way
 - investments in education, sustainable development or by saving (SWF)
- **Not focus here**

Environment

- Ecosystem: Water, air, land, animals, plants, humans ...
- During mining: Local sustainable management not possible, but compensatory measures in other places could be an option
- After mining: Restoration of the environment to its original state

The situation

- Around 200-250 years ago the industrial revolution started
- Demand for energy increased and the extractive industry supplied the needed energy
- GHG emissions increased
- Climate change: Warmer global temperature, more extreme weather events ...
- Acceptance that climate change is human made
- Initiatives to prevent/reduce the impact of climate change (Paris agreement, COP ...)
- Official target: limit global temperature rise to 2 degrees Celsius
- Energy transition: Away from fossil fuels to low GHG technologies (PV, Wind, ...)

Consequences of Climate Change for the Extractive Industry and host countries

- Extractive industry
 - Shift in demand
 - Less demand for fossil fuel and more demand for minerals needed for the energy transition
 - Extreme weather events
 - More scarce production resources
- Host countries
 - The group of resource rich countries will change
 - Opens new opportunities for mineral countries, closes opportunities for oil and coal countries (resources stay in the ground)
 - Old risks remain (Dutch disease, political resource curse, economic resource curse ...)
- Host countries in Africa
 - Extractive industry is risk averse (political risk reduces willingness to invest)
 - Most resources that will stay in the ground are in Africa
 - Most minerals could be extracted from Africa

The impact of the Extractive Industry on the environment



- Mining has negative impact on the environment,
 - Pollutes water, air and land
 - (Temporarily) destroys the existing ecosystem
 - Negative is an old issue
 - How does this change because of Climate change?
 - Shift in demand will lead to more mining in developing countries
 - Developing countries have weaker institutions, legal frameworks, more artisanal mining
- ⇒ More pollution of the environment, with negative consequences on health and wealth for the local population

What can be done against it? Why is sustainable management of the environment so difficult to be implemented?

The impact of the Extractive Industry on the environment in the context fo Climate change



What can be done against it? Why is sustainable management of the environment so difficult to be implemented?

- To answer this question, we first have to understand the actors and their incentives not to use sustainable management practices?
- Actors: Government, mining company, shareholders (including lenders), local population
 - Faced by trade-off between economic benefit and the environment
 - How to change this?

Mechanisms to ensure sustainable management of the environment



Mechanisms to ensure sustainable management of the environment

Government

- Mineral and other rights are granted under a regime.
- The regime defines protective requirements for the environment
- Distinction between ‘licensing’ vs. ‘contractual’ regimes
- Licensing: One law covers all the companies
 - Pro:
 - Law writing follows participative or democratic process
 - Easier to monitor, reduces opportunities for corruption
 - Contra:
 - ‘laws on the books’ and ‘laws in practice’
 - Weak institutions, corruption, and lack of political will can undermine any kind of agreement on rights and obligations, including those that rely on existing law.

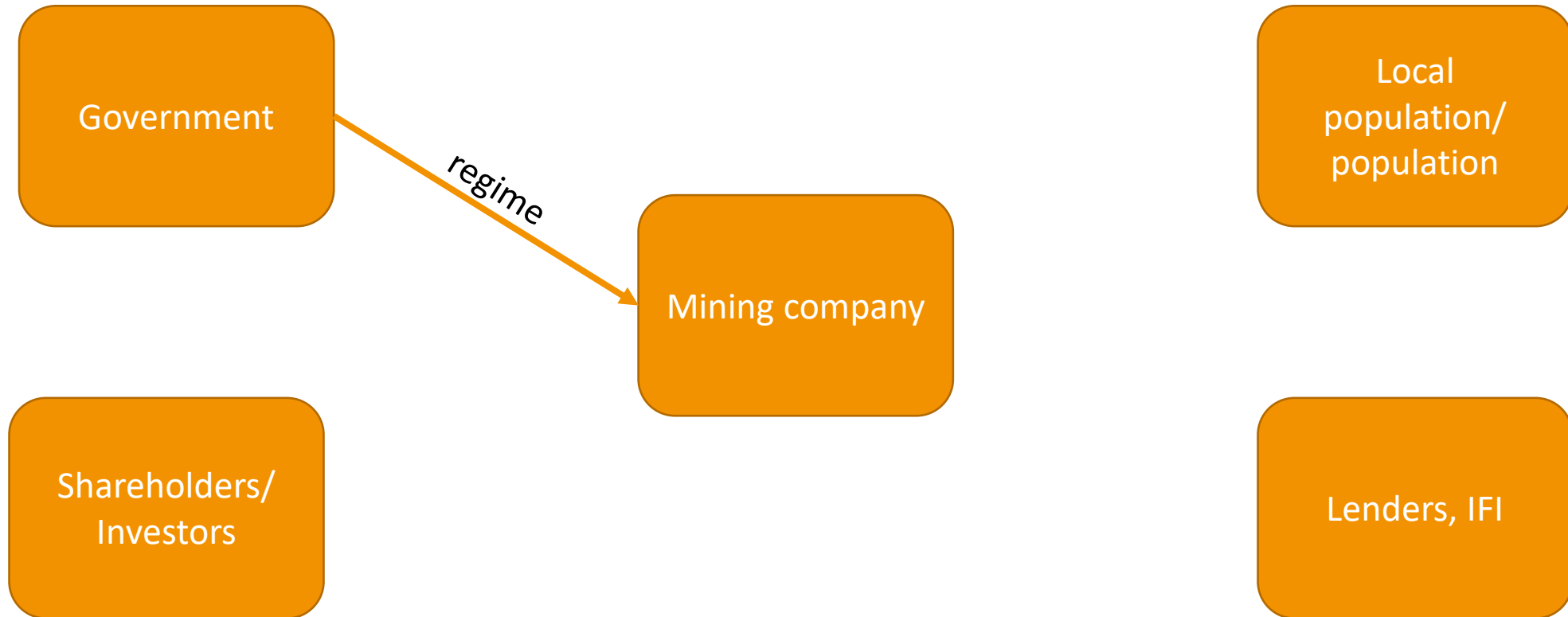
Mechanisms to ensure sustainable management of the environment

Government

- Contractual
 - Pro:
 - Substitutes for weak institutions
 - Allows to spell out the obligations of the company directly
 - Contra:
 - Missing capacity for negotiations
 - Harder to monitor each individual project
 - Less transparent

Success of any regime will depend on institutions, capacity and the willingness of the government to enforce the rules

Mechanisms to ensure sustainable management of the environment



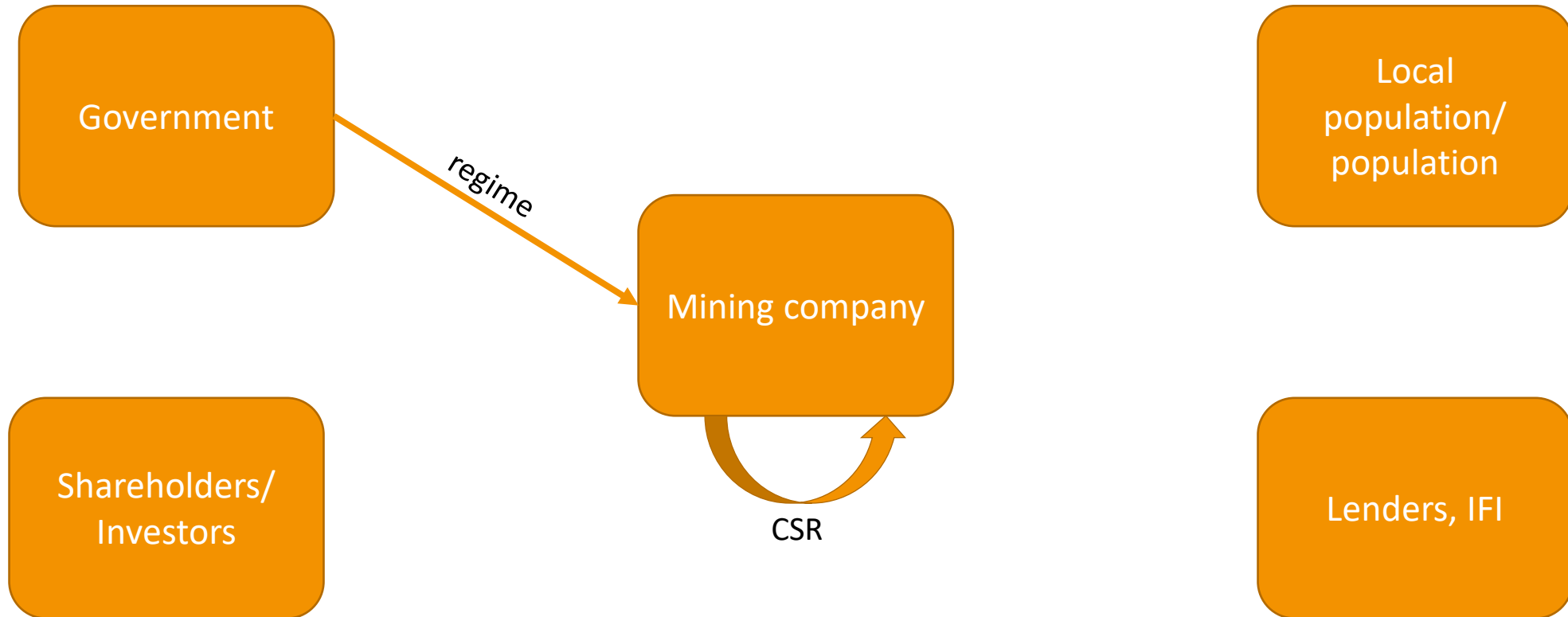
Mechanisms to ensure sustainable management of the environment

Mining company

- How to make the mining company to follow the rules laid out in the regime or go even beyond?
- Mining companies are driven by profit, hence any threat to profit can incentivize the company to ensure sustainable management practices
 - Reputation and image
 - Self-regulatory approach
 - Corporate Social Responsibility

Approaches are voluntary and self-regulatory, which means that success is completely depended on the willingness of the mining company.
Creates incentives to support show-off projects.

Mechanisms to ensure sustainable management of the environment



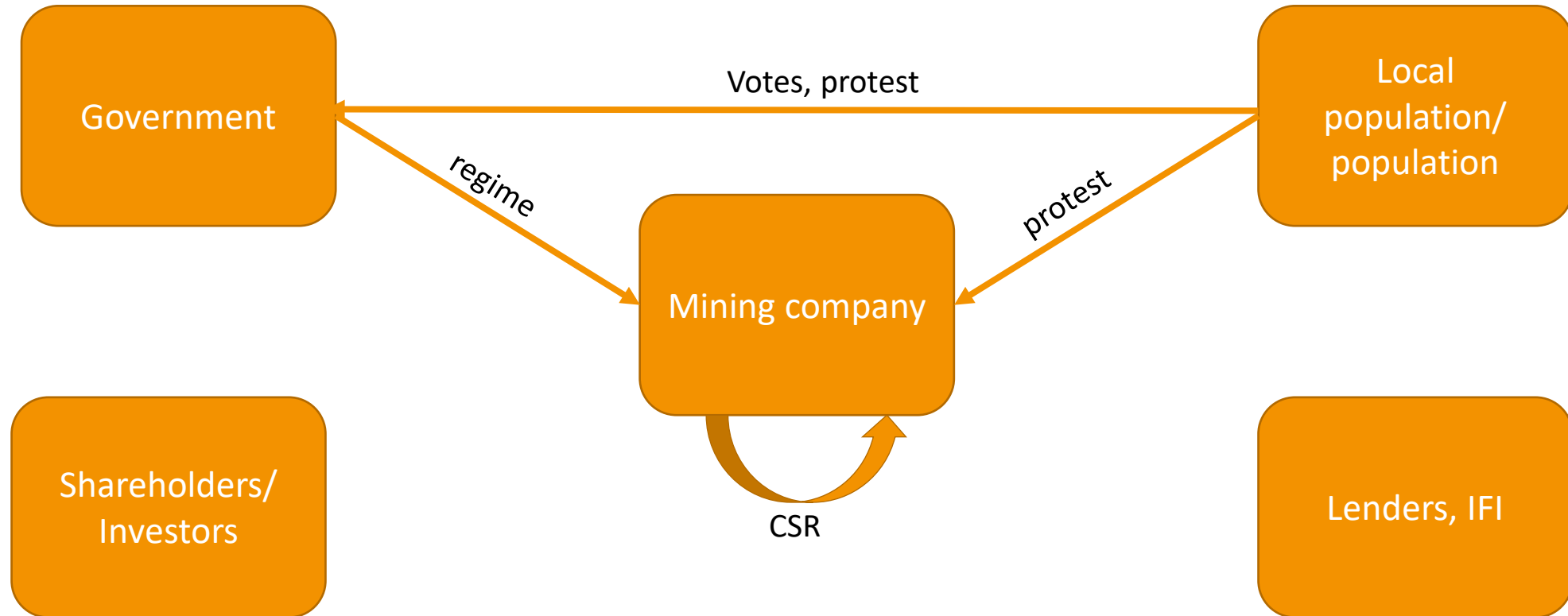
Mechanisms to ensure sustainable management of the environment

Local Population

- Local population is the group mostly affected by the environmental damage of the mine
- It is also the group with least bargaining power and most difficult to organize
- Mechanisms include:
 - Protesting locally and globally
 - Voting in a democracy
 - Legal actions

Success of voting and legal actions depend on institutions.
Success of protests depends on the kind and size of the group and the organizational skills of the people.

Mechanisms to ensure sustainable management of the environment



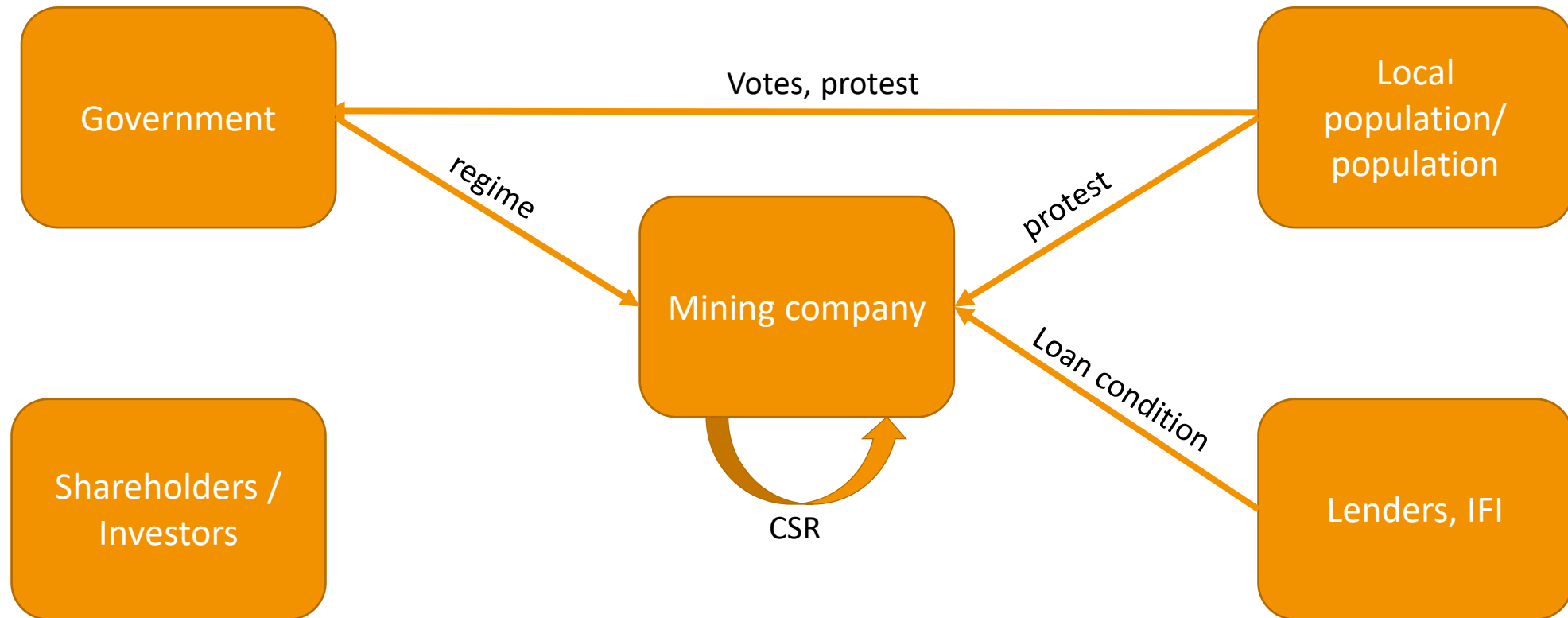
Mechanisms to ensure sustainable management of the environment

Lenders (International Financial Institutions, commercial banks, donors)

- Mining companies are huge, but still need external funding
- Banks and financial institutions provide these loans.
- Mechanisms
 - Loan condition including environmental good practices
 - IFC standards/ Equator principles

Approaches are voluntary and self-regulatory, which means that success is completely depended on the willingness of the banks.

Mechanisms to ensure sustainable management of the environment



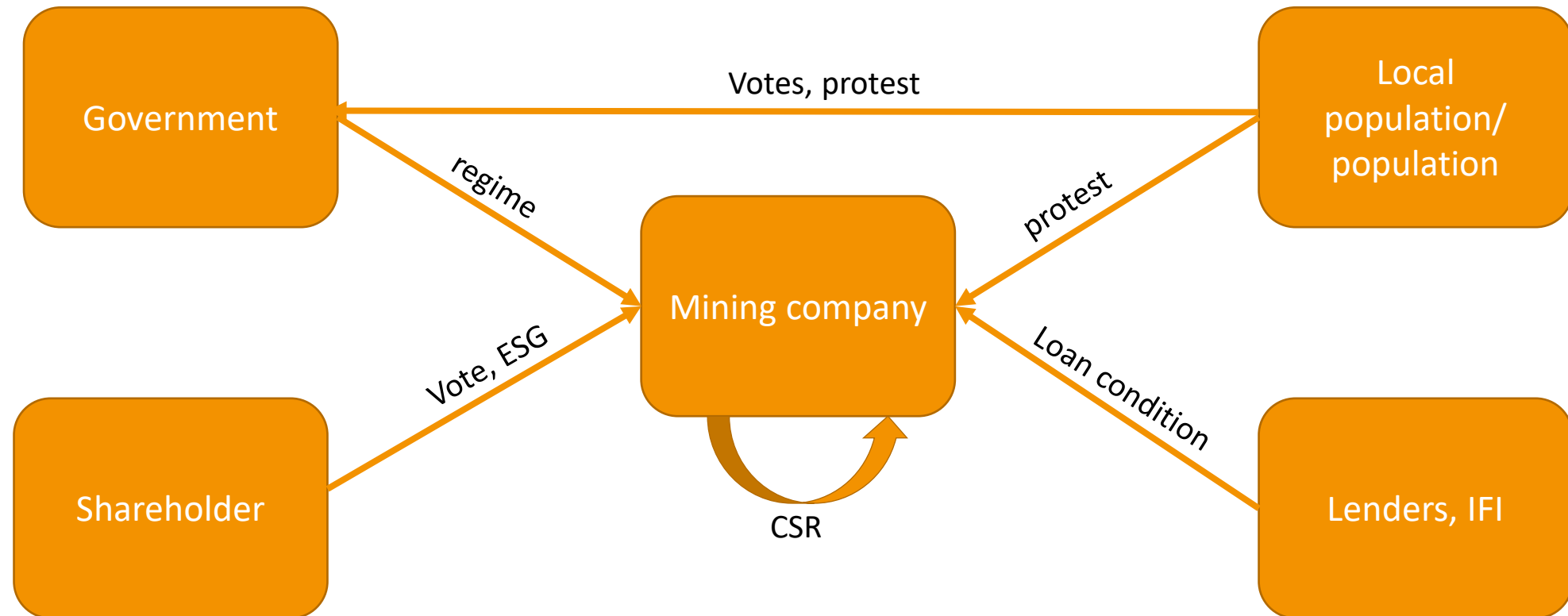
Mechanisms to ensure sustainable management of the environment

Shareholders/ Investors

- Shareholders are the owner of the mining company
 - Allowed to talk at the General Assembly
- Investors take new measures into consideration, not just returns of dividends
- Mechanisms
 - General assembly
 - ESG standards

To have an impact at the General Assembly requires a lot of shares.
Risk of Green washing

Mechanisms to ensure sustainable management of the environment



What works?

- Everything and nothing
- Evidence is not clear
 - Mechanisms are used simultaneously

Success of any mechanism is project, country and time specific

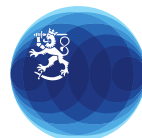


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