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Introduction of Additionality Tool

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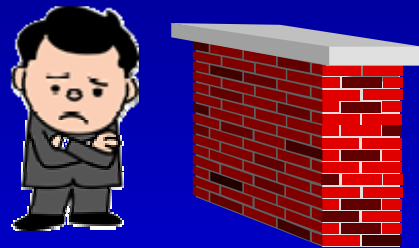
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What is additionality in the CDM?

Biomass power generation



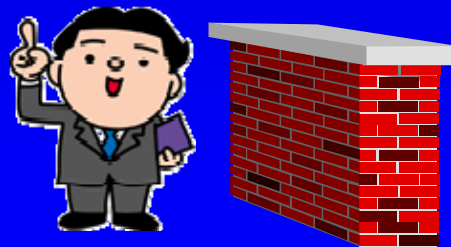
Without CDM



without credits
without additional income
without good image
PP may not implement the project because of barriers

This is additionality

With CDM



with credits
with additional income
with good image
PP will implement the project

What is “additionality tool”?

- ◆ A general framework for demonstrating and assessing additionality
- ◆ CDM executive board has developed
- ◆ NOT mandatory to use
- ◆ Many project proponents tend to use the tool

Steps of additionality tool

Step 1. Identification of alternatives to the project activity consistent with current laws

☞ Show the project activity is NOT only complying with laws and regulations with which there is general compliance

Step 2. Investment Analysis

☞ Determine whether the project activity is the economically or financially less attractive without CERs

Step 3. Barrier Analysis

☞ Determine the project activity faces barriers which prevent a wide spread implementation

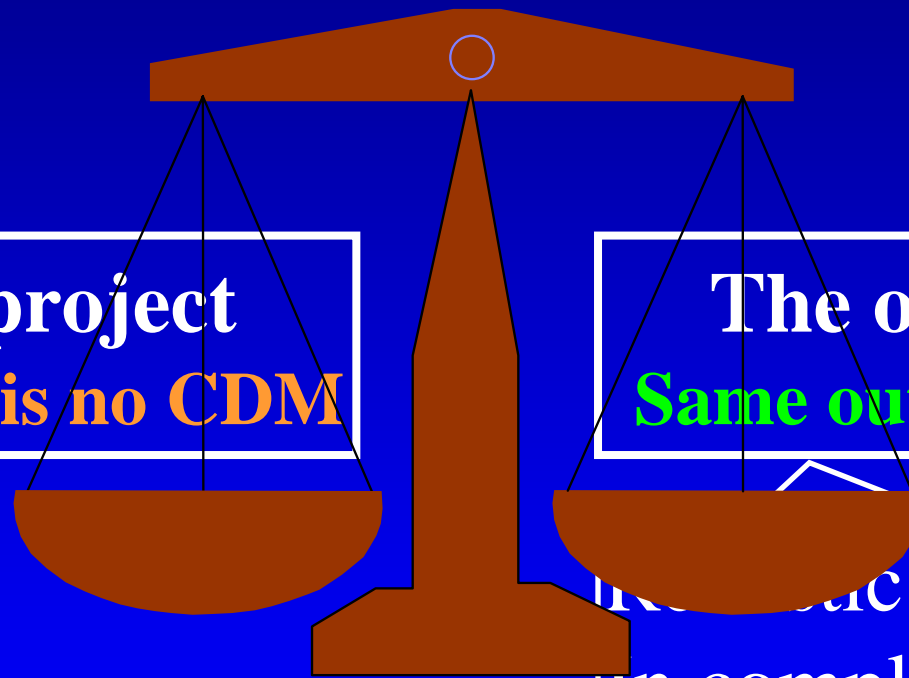
Step 4. Common Practice Analysis

☞ Identify the project type has NOT diffused in the relevant sector and region.

The project activity is additional

Step 1: Identification of alternatives

Compare

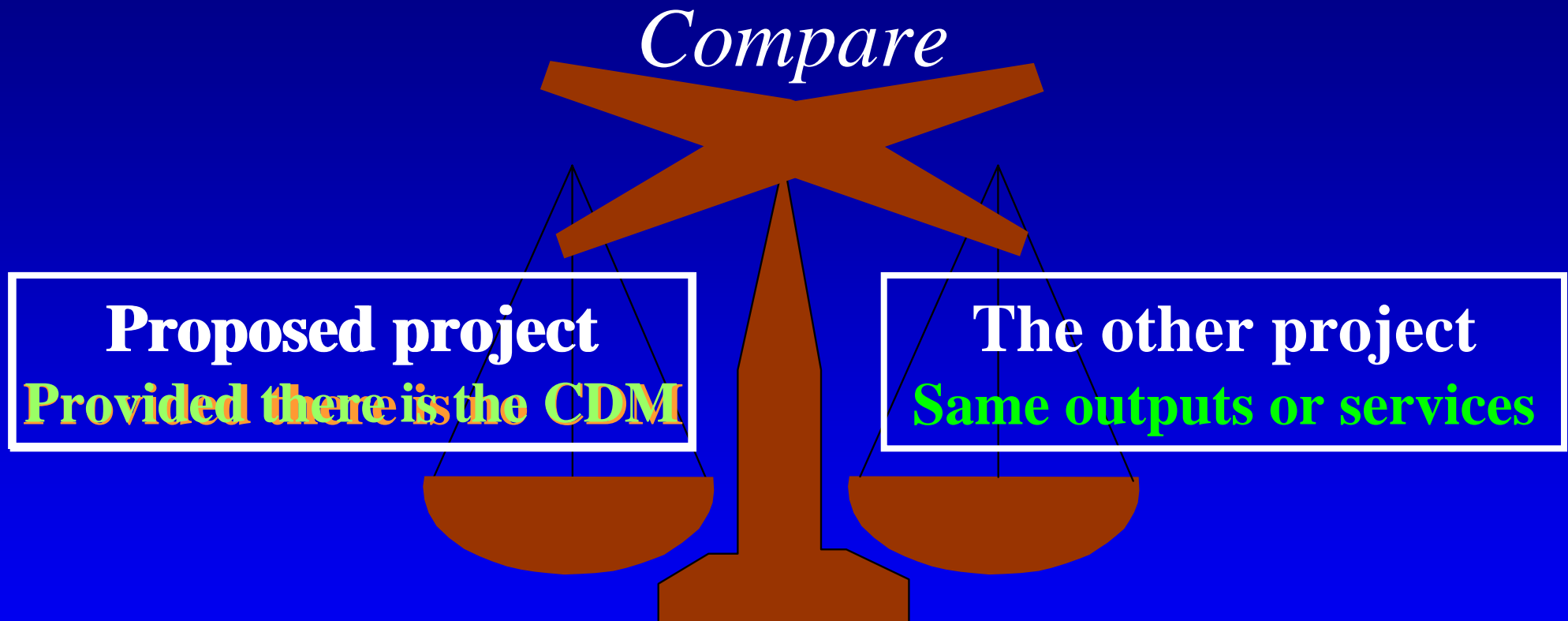


Proposed project
Provided there is no CDM

The other project
Same outputs or services

Investment & Credible
in compliance with laws

Step 1: Identification of alternatives

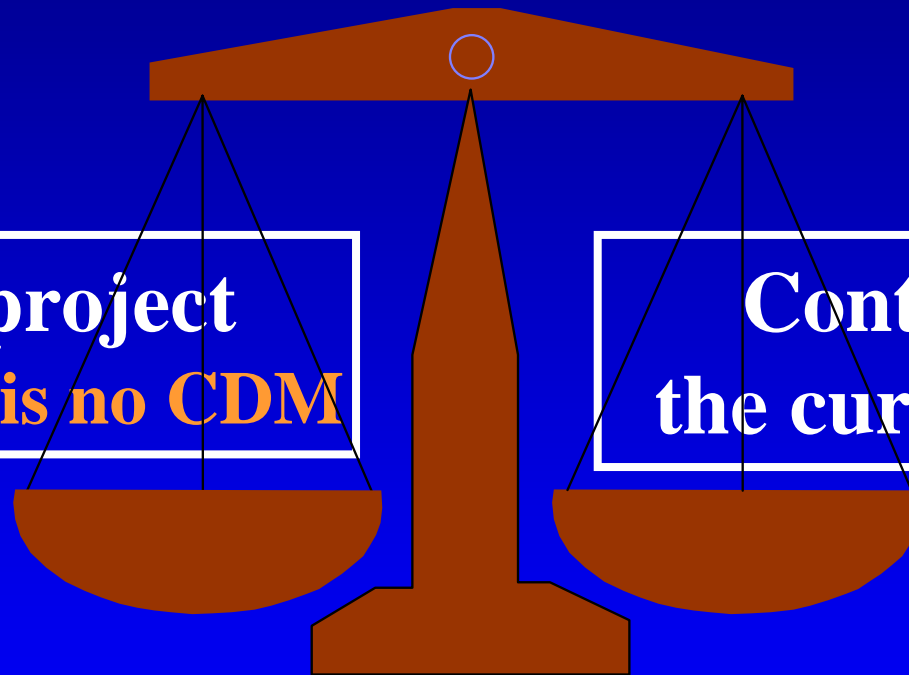


Step 1: Identification of alternatives

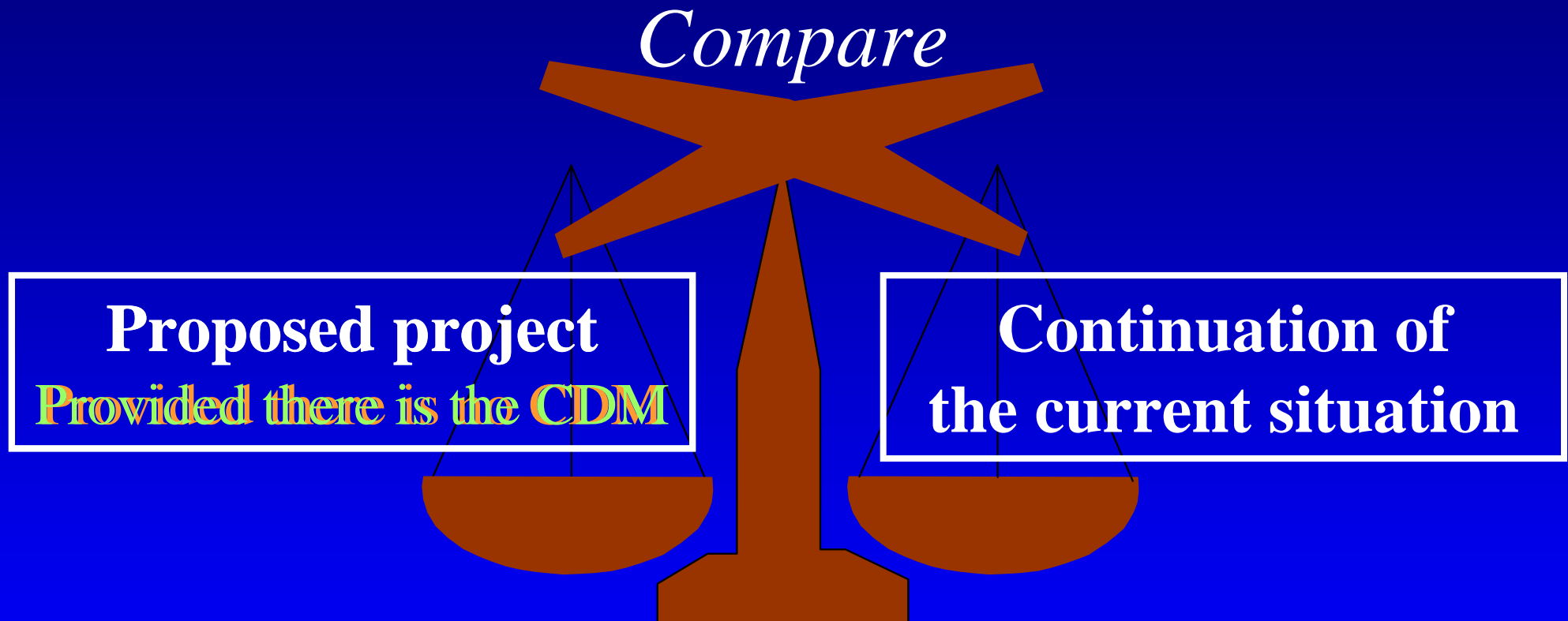
Compare

Proposed project
Provided there is no CDM

**Continuation of
the current situation**

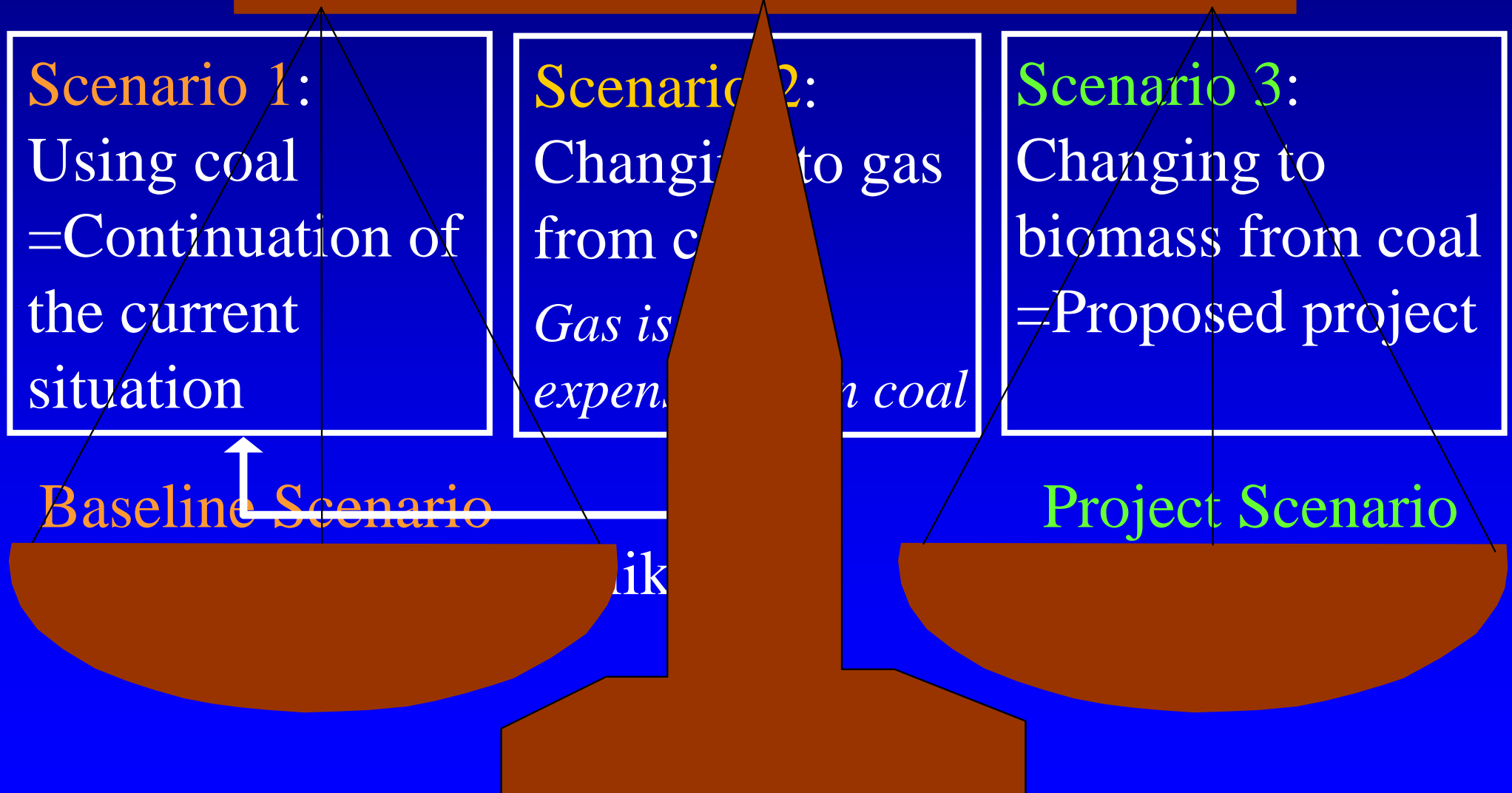


Step 1: Identification of alternatives



Step 1: Identification of alternatives

Replacement of coal production with gas production



Step 1: Identification of alternatives

Co-generation of landfill gas (LFG)

Scenario 1: No collection of LFG
=Continuation of the current situation

**Baseline
Scenario**

Scenario 2: Collects and flares LFG, but no
power generation

Scenario 3: Installs waste incineration plant

Scenario 4: Installs composting facility

Scenario 5: Collects and co-generation of
LFG = Proposed project

**Project
Scenario**

Step 1: Identification of alternatives

Hydroelectric power generation (30MW)

Scenario 1: Diesel power generation (30MW)

**Baseline
Scenario**

Scenario 2: Hydroelectric power generation
(30MW) = Proposed project

**Project
Scenario**

Step 2: Investment analysis

Compare

**Biomass power
generation without CDM
IRR = 8%**

**Diesel power
generation
IRR = 10%**

Step 2: Investment analysis

Compare



Proposed project
Generation with the CDM
IRR = 12%

Diesel power
generation
IRR = 10%

Step 2: Investment analysis

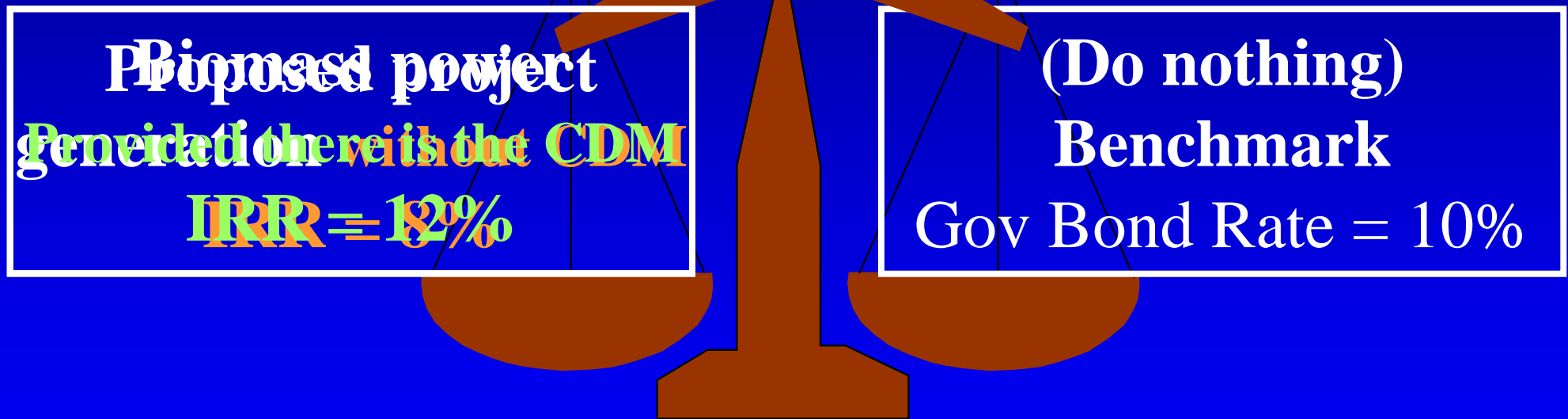
Compare

**Biomass power
generation without CDM**
IRR = 8%

**(Do nothing)
Benchmark**
Gov Bond Rate = 10%

Step 2: Investment analysis

Compare



Step 3: Barrier analysis

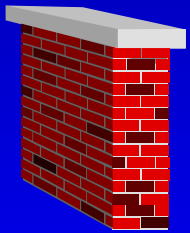
Replacement of coal by biomass in cement production

Project Scenario:

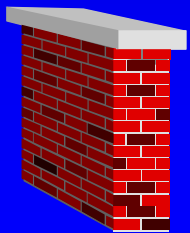
Changing to biomass from coal = Proposed project

Baseline Scenario:

Using coal = Continuation of the current situation

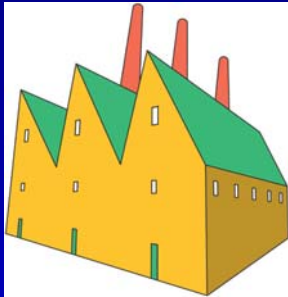


No technology are available to handle biomass in kilns.
= Technological barrier

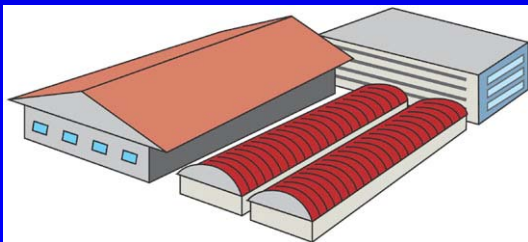
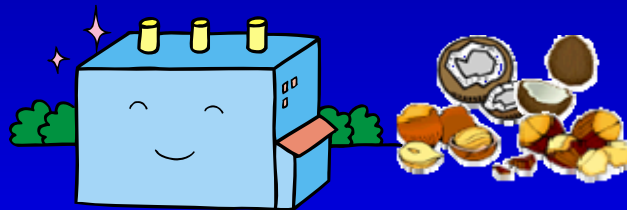
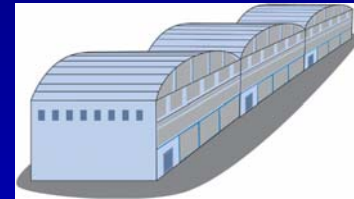


It is difficult to collect biomass constantly.
= Barrier due to prevailing (common) practice

Step 4: Common practice analysis



Proposed project



The tendency of “additionality”

- ◆ Since there have been some criticisms to the CDM, such as existing CDM projects would have been implemented anyway without the CDM.
- ◆ To respond to those criticisms, DOEs as well as the CDM-EB are checking additionality in a rigorous manner.
- ◆ Especially for projects which already have started.
- ◆ Investment analysis, which is optional, may be required to apply.

*Thank you
khoop khun khrap*