

# **Implementing** ***force majeure***

***Informal presentation by Australia and Canada***

***Tianjin, October 7 2010***

# Outline of presentation

- Steps for implementing *force majeure*
- Hypothetical example using wildfire to illustrate implementation

# Steps for implementing *force majeure*

Does *force majeure* apply?

- **Step 1** - Identify the lands affected by natural disturbances in a given year of the commitment period
- **Step 2** – Calculate the total emissions from natural disturbances for that year.
- **Step 3** – If the total emissions exceed the threshold, then these natural disturbances classify as *force majeure*.

# Steps for implementing *force majeure*

## Threshold met, what next?

- **Step 4** – Can the information requirements be met? (*This will be subject to current reporting and review processes.*)
- **Step 5** – **If yes**, the *force majeure* provision can be applied and the total force majeure emissions can be excluded from the accounting (these emissions will continue to be reported).

# Steps for implementing *force majeure*


## Ongoing requirements

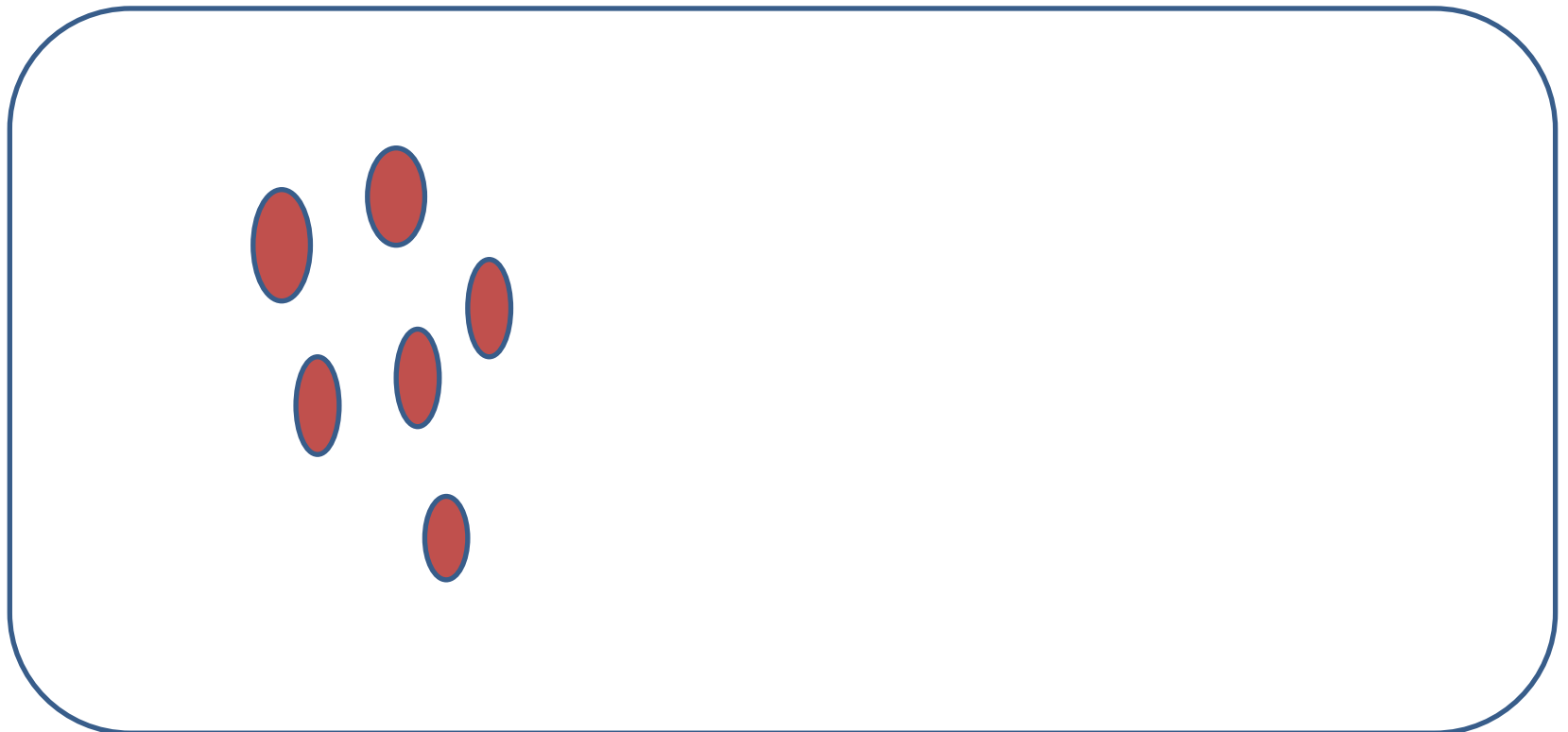
- **Step 6** – The areas affected by *force majeure* in the year continue to be monitored over time to report the emissions and removals and to show no land use change, salvage or harvesting have occurred.
- **Step 7** – When the removals (CO<sub>2</sub>) balance the CO<sub>2</sub> emissions from the *force majeure* events, any subsequent removals on the lands would come into the accounting.

# Hypothetical example – Step 1

Assume country A has had a series of wildfires in a year in the commitment period on land under forest management (there are no other disturbances in that year)

Land under forest management

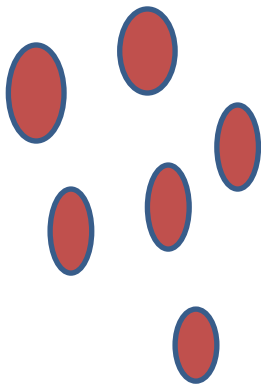
 = Land affected by wildfire



# Hypothetical example – Step 2

*Step 2 - Calculate the total emissions from the natural disturbances for that year*

Land under forest management = source of 50 CO<sub>2</sub>-e for that year (including the impact of management and fires)



Wildfire emissions = 70 CO<sub>2</sub>-e  
(60 CO<sub>2</sub>, 10 non-CO<sub>2</sub>)

Net removals on forest management  
lands not affected by wildfire = 20 CO<sub>2</sub>

Total forest management net emissions  
for year = 50 CO<sub>2</sub>-e

# Hypothetical example – Step 3

*Step 3 – If the total CO<sub>2</sub>-e emissions exceed the threshold, then these natural disturbances classify as force majeure.*

The negotiations will have defined the X% threshold.

If we assume, in this hypothetical example, that the % threshold for the country is equivalent to 25, then the threshold has been exceeded in the year because the emissions from wildfires were 70.



# Hypothetical example – Step 4

*Step 4 – Can the information requirements be met? (This will be subject to current reporting and review processes)*

Through its national greenhouse gas inventory report, the Party would provide information, including:

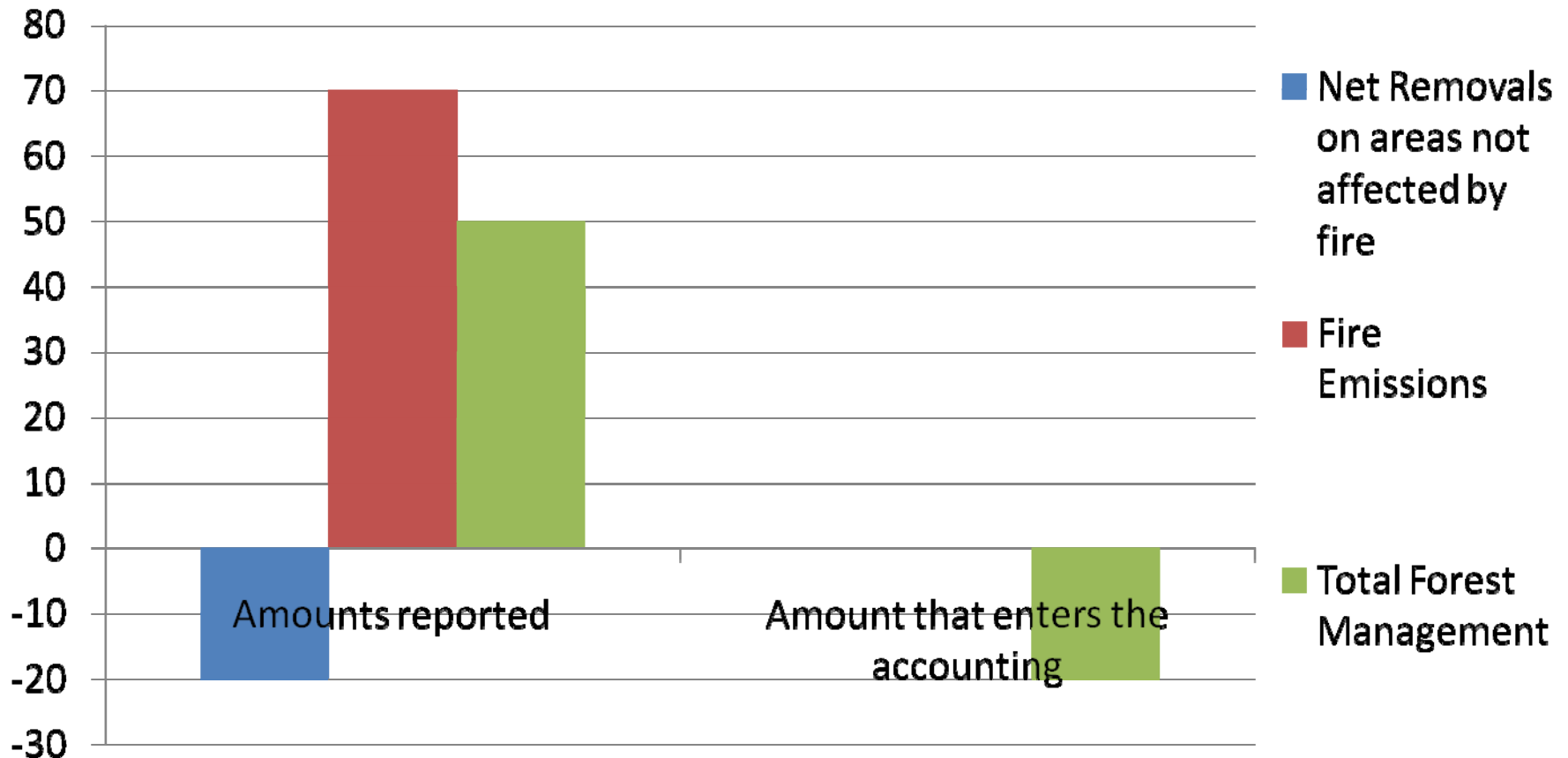
- Showing geo-referenced locations of the affected lands
- Showing that no land use change has occurred on the lands following the fires
- Showing that emissions from salvage were not excluded.
- Demonstrating that the fires were beyond the control of and not materially influenced by the Party.

# **Hypothetical example: showing “beyond the control of”**

- Describe any weather conditions that contributed to the fires (e.g. strong winds, high heat, low humidity, dry).
- Describe efforts to undertake fire suppression.
- Provide scientific evidence regarding the causes and/or characteristics of the fires.

# Hypothetical example – Step 5

Because the *force majeure* provision can be used, emissions of 70 CO<sub>2</sub>-e are reported but excluded from accounting.



# Hypothetical example – Step 6

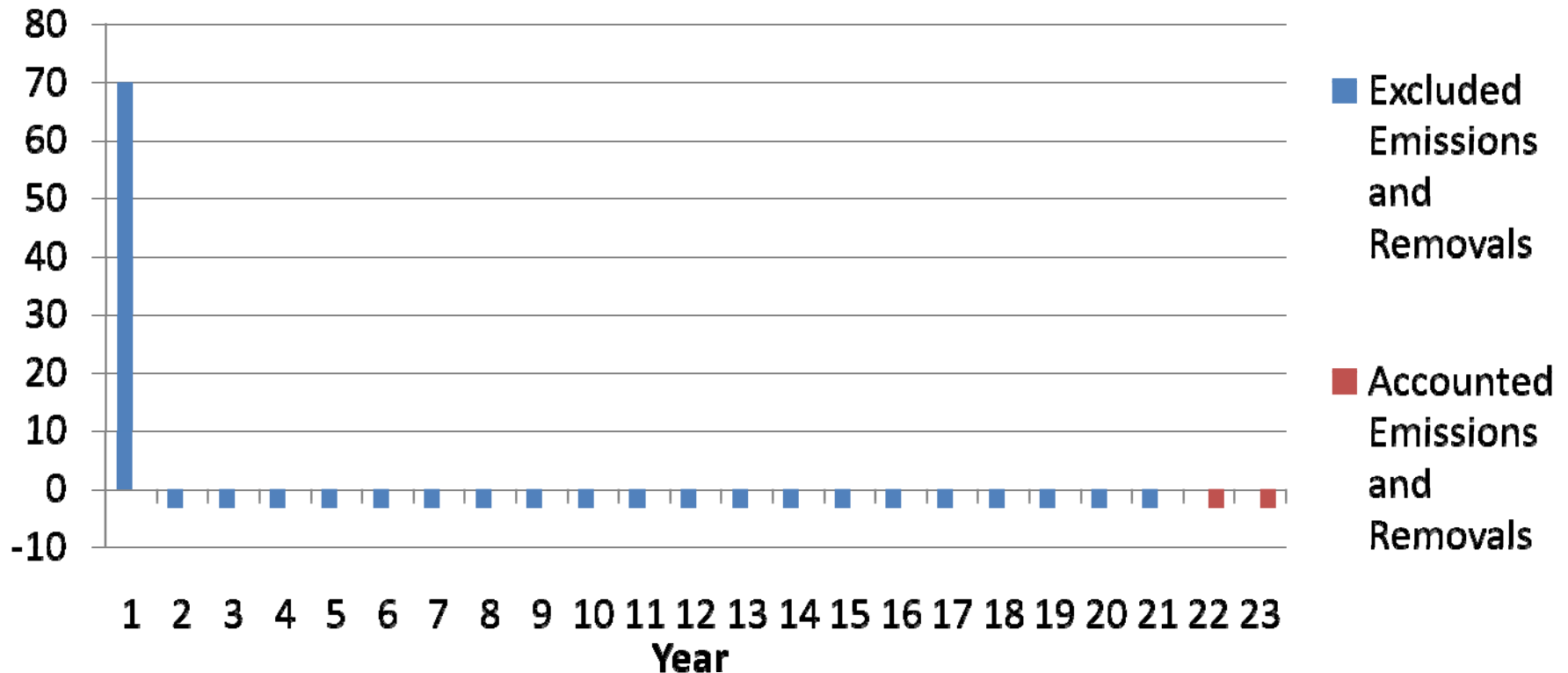
*Step 6 – The areas affected by fire in the year continue to be monitored to report the emissions and removals and to show no land use change, salvage or harvesting over time.*

The Party would need to ensure their monitoring and reporting systems can track what is occurring on the lands through time.

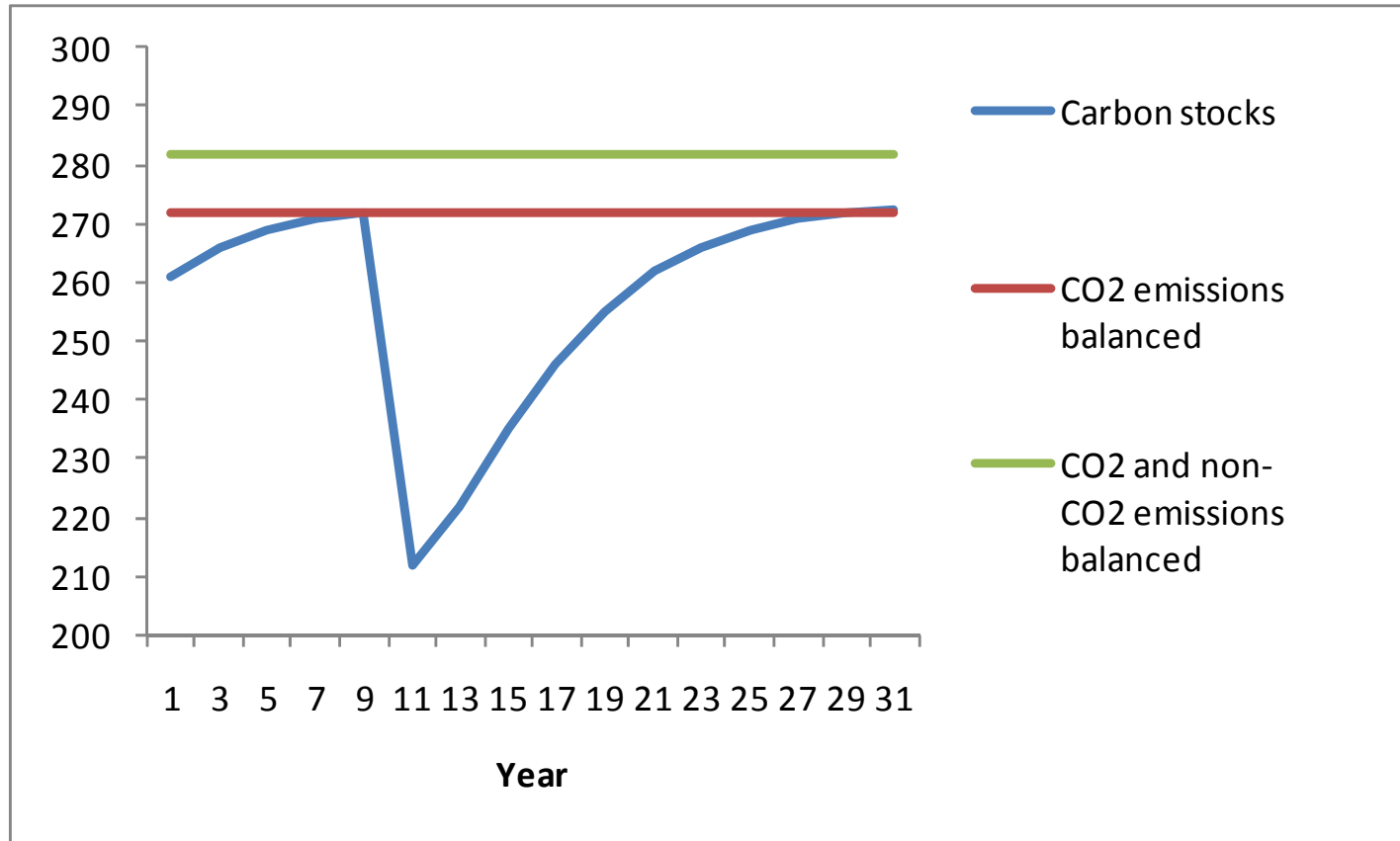
# Hypothetical example – Step 7

Assume, in this hypothetical example, that the burned areas regrow at 3 CO<sub>2</sub> per year.

Once CO<sub>2</sub> removals balance CO<sub>2</sub> emissions excluded (60 CO<sub>2</sub>), the subsequent removals on the land are brought into the accounting (i.e. after 20 years of removals in this hypothetical example)



# Example of recovery from a fire in a forest near maturity



Fire in year 9, with emissions of 60 CO<sub>2</sub> and 10 non-CO<sub>2</sub>.  
Carbon stocks recovered in 20 years.  
CO<sub>2</sub> removals will never equal CO<sub>2</sub> and non-CO<sub>2</sub> emissions.

# **Force Majeure:**

## **Consistency with forest management reference level**

Consistency is important to avoid unearned credits or debits, as a result of force majeure being treated differently between the reference level and the commitment period.