



CLIMATE CHANGE  
ATELIER

# ***Mechanisms for tracking National Determined Contributions (NDCs)***

***Establishing Transparency Framework for the Republic of Serbia***

Juan José Rincón Cristóbal  
Climate Change Atelier, S.L.

Hotel Premier Aqua, Vrdnik (Serbia) 20/11/2019



# MAIN TOPICS



## Introduction to NDC's Tracking

Types of NDC  
Tracking in PA  
Conditional support  
Indicators  
Steps to implement



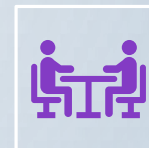
## Reporting progress towards NDC goals

MPGs  
Reporting formats in  
SBSTA 50



## NDC of Serbia

Target  
Mitigation actions



## Hands-on training

Exercises  
Measures  
Rules and roles



## Questions and answers

# **INTRODUCTION TO NDC'S TRACKING**

# TYPES OF NDC'S TARGETS

Absolute  
emission  
reductions

Absolute  
emission  
limits

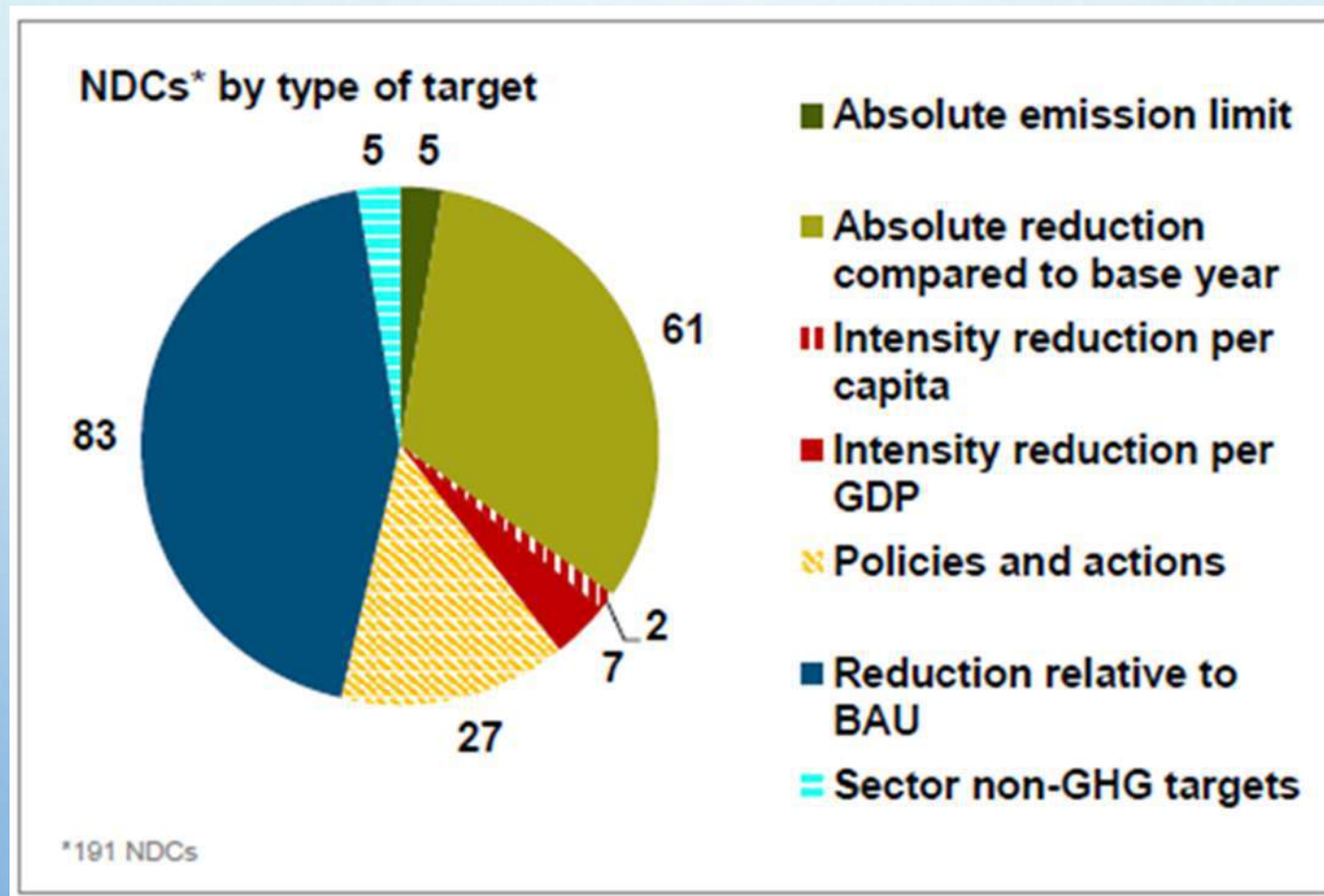
Reduction  
relative to  
a  
business-  
as-usual  
(BAU)  
scenario

Reduction  
of carbon  
or GHG  
intensity

Implement  
ation of  
policies  
and  
measures

Sectoral  
non-GHG  
targets.

# TYPES OF NDC'S TARGETS



# TRACKING TARGETS



## Annex I Parties under KP

Absolute emission reductions

GHG Inventory



## New targets under PA

Several types

GHG Inventory is not enough

New indicators

# TRACKING TARGETS

Paris Agreement contains both global and individual Party goals

National efforts must be aggregated to monitor progress towards the Agreement's long-term goals

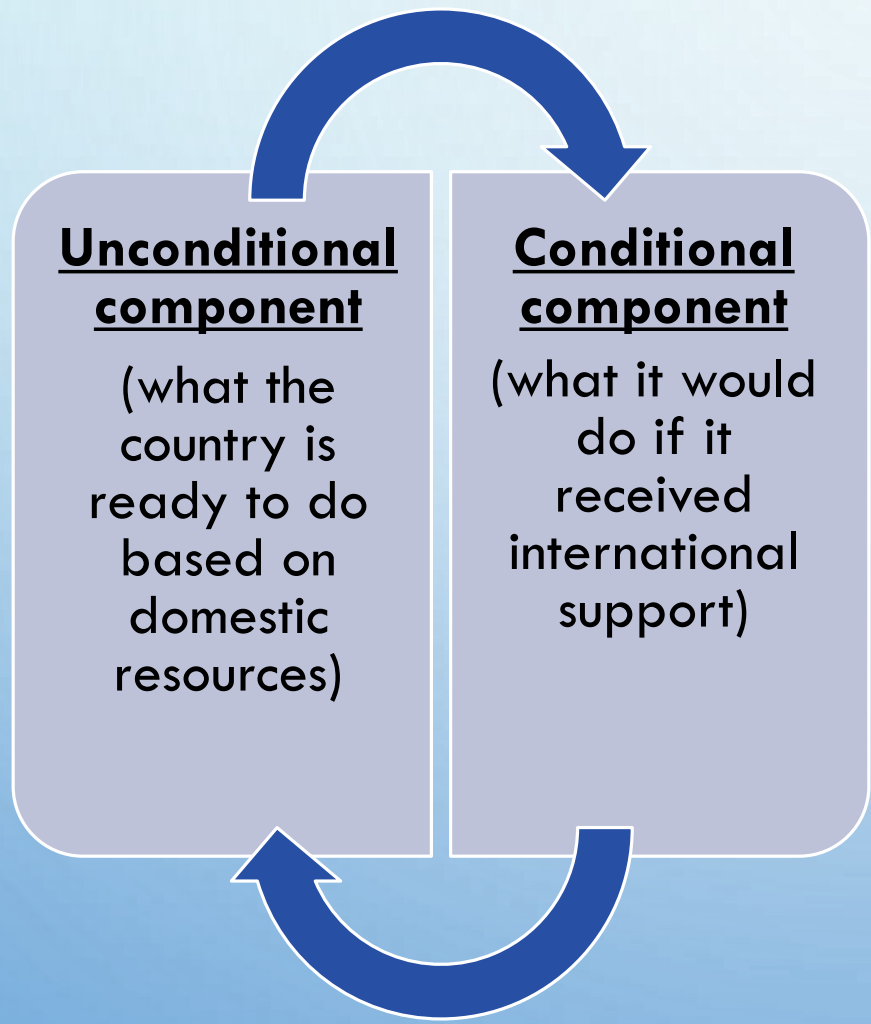
Development of a set of aggregable indicators

Minimum set of mandatory requirements for the information to ensure their comparability

Some flexibility to enable all Parties to report given the differentiated national circumstances

# TACKLING WITH CONDITIONAL SUPPORT

What about Serbia?





# INDICATORS

Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor

## SMART

### Specific

The indicator should accurately describe what is intended to be measured and should not include multiple measurements in one indicator.

### Measurable

Regardless of who uses the indicator, consistent results should be obtained and tracked under the same conditions.

### Attainable

Collecting data for the indicator should be simple, straightforward, and cost-effective.

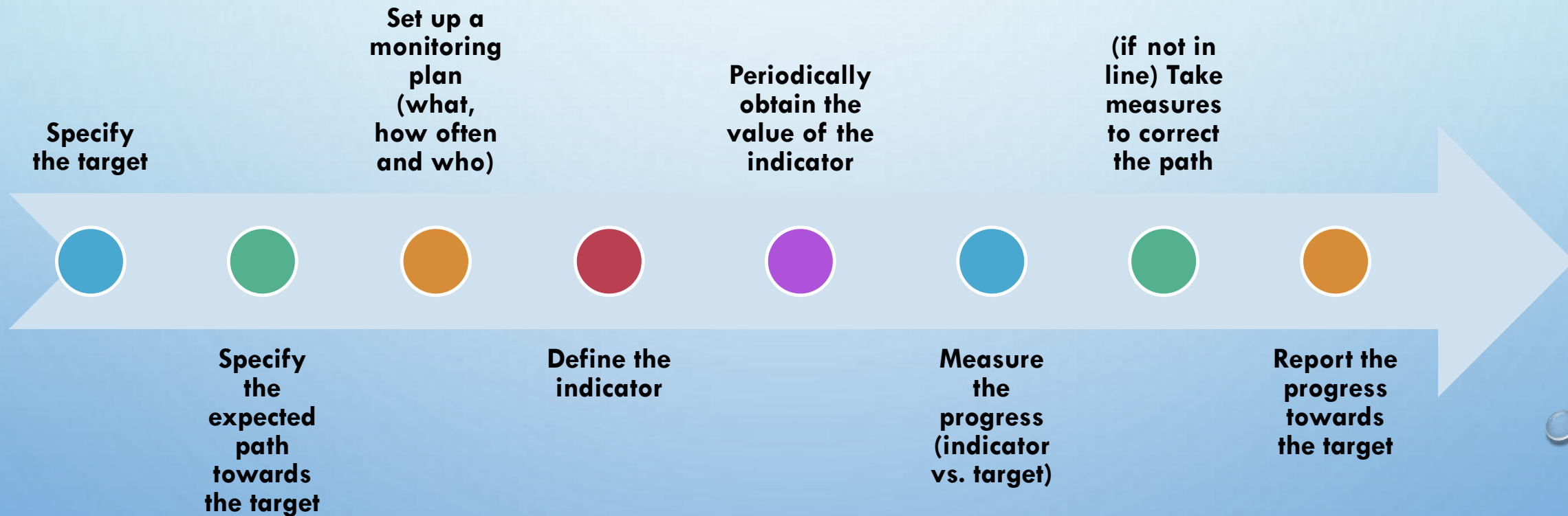
### Relevant

The indicator should be closely connected with each respective input, output or outcome.

### Time-bound

The indicator should include a specific time frame

# STEPS TO TRACK PROGRESS





# REPORTING PROGRESS

# MPGs GUIDELINES

## National circumstances and institutional arrangements

Country characteristics and effect in the NDC

Institutional arrangements for tracking

Monitoring, reporting and archiving arrangements

## Describe their NDCs, including possible updates

Description

Target and target years

Referent points (e.g. base year)

Scope and coverage

Cooperative approaches

## Information necessary to track progress

Indicators for tracking progress

Description of indicators

Most recent value and comparison with expected path

Accounting method

## Mitigation policies and measures

Information narrative and tabular by sector

Information on adaptation actions or economic diversification plans

Expected and achieved GHG mitigation

Methodologies and assumptions (Annex BTR)

## Summary of greenhouse gas emissions and removals

If stand-alone NIR

Summary of its GHG emissions and removals

More recent year in tabular form

## Projections of GHG emissions and removals

Indicative of measure's future effect. Not to assess progress

WEM (shall), WAM and WoM (may)

Begin: most recent GHGI year. End: 15 years (next 0/5 year)

Projections of key indicators

# NDC'S REPORTING INFORMATION

## Information on **target(s), baselines and indicators**

- Key parameters, assumptions, definitions, data sources and models used;
- IPCC guidelines and metrics used;
- Approaches (if relevant) for natural disturbances, HWPs and effects of age-class structure in forests;
- Methodologies used to estimate mitigation co-benefits of adaptation actions and/or economic diversification plans;
- Methodologies associated with any cooperative approach;
- Methodologies used to track progress of measures;
- Conditions and assumptions relevant to the achievement of its NDC under Article 4;
- Relation of each indicator with the NDC;
- Consistency in methodologies with most recent NIR;
- How double counting of net GHG emission reductions has been avoided

# STRUCTURED SUMMARY INFORMATION

- Indicators:
  - Reference point(s), level(s), baseline(s), base year(s), or starting point(s);
  - Information for previous reporting years;
  - Most recent information identified.
- Information on GHG emissions and removals consistent with the coverage of its NDC;
- Contribution from the LULUCF sector;
- Additional information for Parties that participates in cooperative approaches;
- Adaptation actions and/or economic diversification plans:
  - Sectors and activities associated with the response and consequence measures;
  - Challenges in and barriers to addressing the consequences, as well as actions to address them.



# MEASURE'S REPORTING FORMAT (SBSTA 50)

<b>Information shall be provided, to the extent possible (para. 82(a–i) of MPGs)</b>	Name
	Description
	Objectives
	Type of instrument
	Status
	Sector(s) affected
	Gases affected
	Start year of implementation
	Implementing entity or entities
<b>Information may be provided (para. 83(a–c) of MPGs)</b>	Costs
	Non-GHG mitigation co-benefits
	Information on interactions of mitigation actions
<b>Information shall be provided, to the extent possible. Those developing country Parties that need flexibility in the light of their capacities are encouraged to report such information (para. 85 of MPGs)</b>	Estimates of expected and achieved GHG emission reductions (not cumulative in kt CO <sub>2</sub> eq)
	Target year(s) or period(s)
	Other year(s)
	Target year(s) or period(s)

Methodologies and assumptions in an Annex of the BTR

# **NDC OF SERBIA**



# SERBIA'S NDC

Absolute emission  
reductions

9.8% of GHG  
emissions reduction

Base-year:  
1990

Scope:  
All sectors

Gases:  
CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs,  
PFCs, SF<sub>6</sub>

# TRACKING SERBIA'S TARGET

1. Specify the target (already done in the NDC);
2. Specify the expected path towards the target by identifying a target reduction for the years 2020 to 2030;
3. Set up a monitoring plan establishing how often and who will be responsible to check the progress;
4. Define the indicator (net emissions in the GHG Inventory);
5. Annually obtain the value of the indicator (from SEPA);
6. Measure the progress comparing the indicator with the path towards the target;
7. (if not in line) Identify the reasons of the lower progress by analysing the progress of the individual mitigation actions and take the appropriate measures to correct the path;
8. Report the progress towards the target as required in the future reporting guidelines, as well as any corrective measure, if needed.

# TRACKING SERBIA'S TARGET

Overall target

GHG Inventory

Particular targets

Mitigation actions monitoring systems

Monitoring MoEP

- Easy to maintain.
- Able to detect deviations from the expected path

Monitoring line  
ministry

- Detailed, need more resources to maintain.
- Able to identify directly the progress and barriers to the adequate development



# MITIGATION MEASURES IN THE 2ND BUR



## Energy & IPPU

1. Implementation of the emissions trading system (and implementation of equivalent measures)
2. Increasing the use of RES in electricity production
3. Improving energy efficiency and increasing use of CHP and RES in district heating systems
4. CO2 tax and excise duties on energy
5. Improving energy efficiency in industry
6. Increasing use of RES in the industry
7. Improving thermal integrity of households
8. Energy efficiency, improvement of heating and cooling infrastructure and promotion of use of RES in households
9. Improving energy efficiency and use of RES in the Tertiary sector
10. Improving thermal integrity in the Tertiary sector
11. Renewal of the passenger fleet and promotion of sustainable passenger transport
12. Renewal of the freight fleet and promotion of sustainable freight transport
13. Implementation of the F-gas regulation and MAC directive



## AFOLU

14. Winter cover crops
15. Increased legume share in fodder area
16. Breeding for higher milk yields
17. Afforestation
18. Close to Nature Forest Management and Climate Smart Approach to Forestry
19. Conversion of coppice to high forest
20. Short Rotation Plantations
21. Regeneration of over mature stands



## Other

22. Definition of guidelines for the reduction of negative biotic and abiotic factors
23. Research, training and awareness raising programme for the enhancement of the carbon sink and of the resilience of the Serbian forest to climate change
24. National plan for climate change education, training for new skills and awareness raising

# EXAMPLE OF MEASURE: SHORT ROTATION PLANTATIONS

**TYPE OF MEASURE:** REGULATORY, INCENTIVES, EDUCATIONAL-INFORMATIONAL

**MAIN GHG GASES AFFECTED:** CO<sub>2</sub>

**EXPECTED INCREASE IN CARBON SEQUESTRATION BY 2030:** 654,9 KT CO<sub>2</sub>

**SECTORS AFFECTED:** NON-ETS, LAND USE LAND USE CHANGE AND FORESTRY (LULUCF)

**IMPLEMENTING ENTITY:** MINISTRY FOR AGRICULTURE, FORESTRY AND WATER MANAGEMENT, RESEARCH INSTITUTIONS, DIRECTORATE FOR AGRARIAN PAYMENTS, ORGANIZATIONS RESPONSIBLE FOR THE FOREST MANAGEMENT, PRIVATE FOREST OWNERS

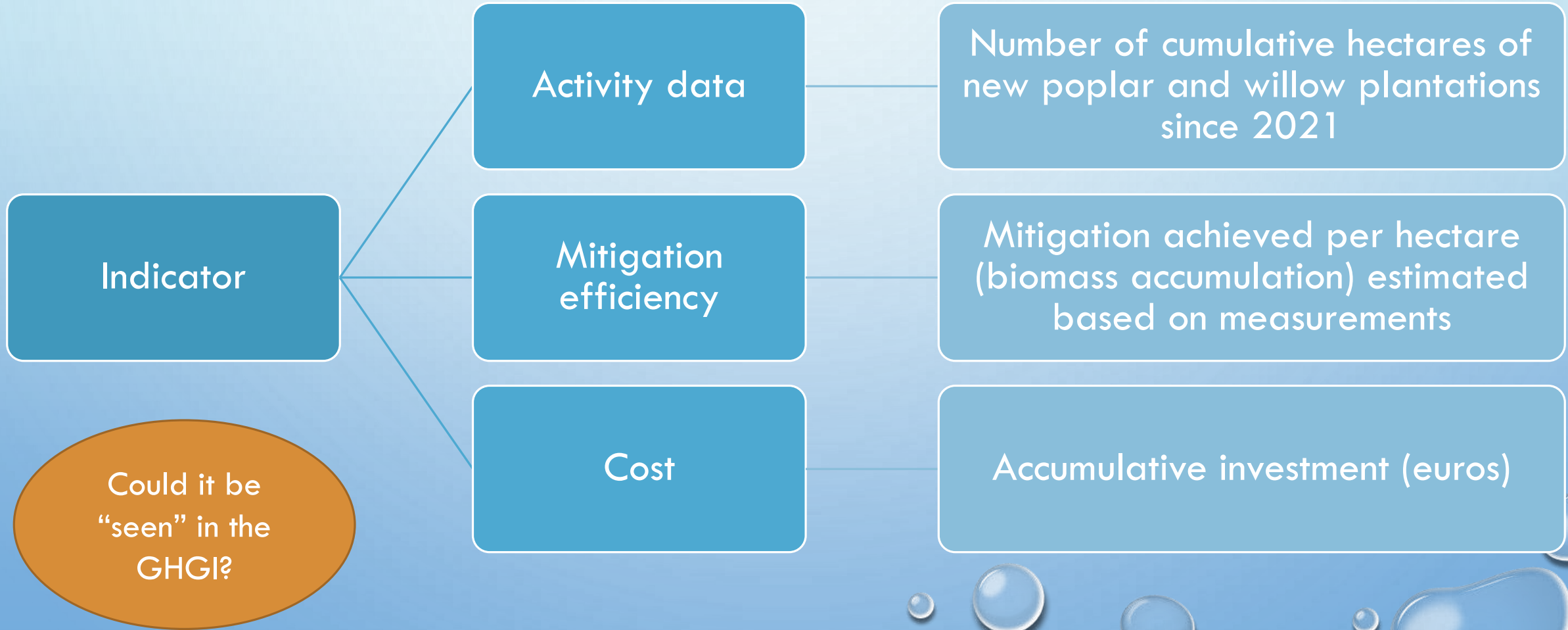
**ACTIVITIES AND IMPLEMENTATION TIMELINE:** ESTABLISHMENT OF ADDITIONAL 1.500 HECTARES OF FOREST ANNUALLY USING POPLARS AND WILLOWS AS THE MAIN TREE SPECIES (START 2021)

**COSTS FOR THE IMPLEMENTATION OF MEASURE:** THE ADDITIONAL INVESTMENT COSTS ASSOCIATED WITH THIS MEASURE ARE 18MIO EUR (2021-2030)

**FINANCING OF THE MEASURE:** THE INCENTIVE REQUIRED FOR THIS MEASURE AMOUNTS TO 5,4MIO EUR (BFF, REPLENISHED WITH INNOVATIVE SOURCES OF FINANCING SUCH AS ETS REVENUES)

**TARGET VALUE FOR 2030:** CUMULATIVELY 15.000 HA

# EXAMPLE OF MEASURE: SHORT ROTATION PLANTATIONS



Indicator

Activity data

Mitigation efficiency

Cost

Number of cumulative hectares of new poplar and willow plantations since 2021

Mitigation achieved per hectare (biomass accumulation) estimated based on measurements

Accumulative investment (euros)

Could it be "seen" in the GHGI?

# EXAMPLE OF MEASURE: SHORT ROTATION PLANTATIONS

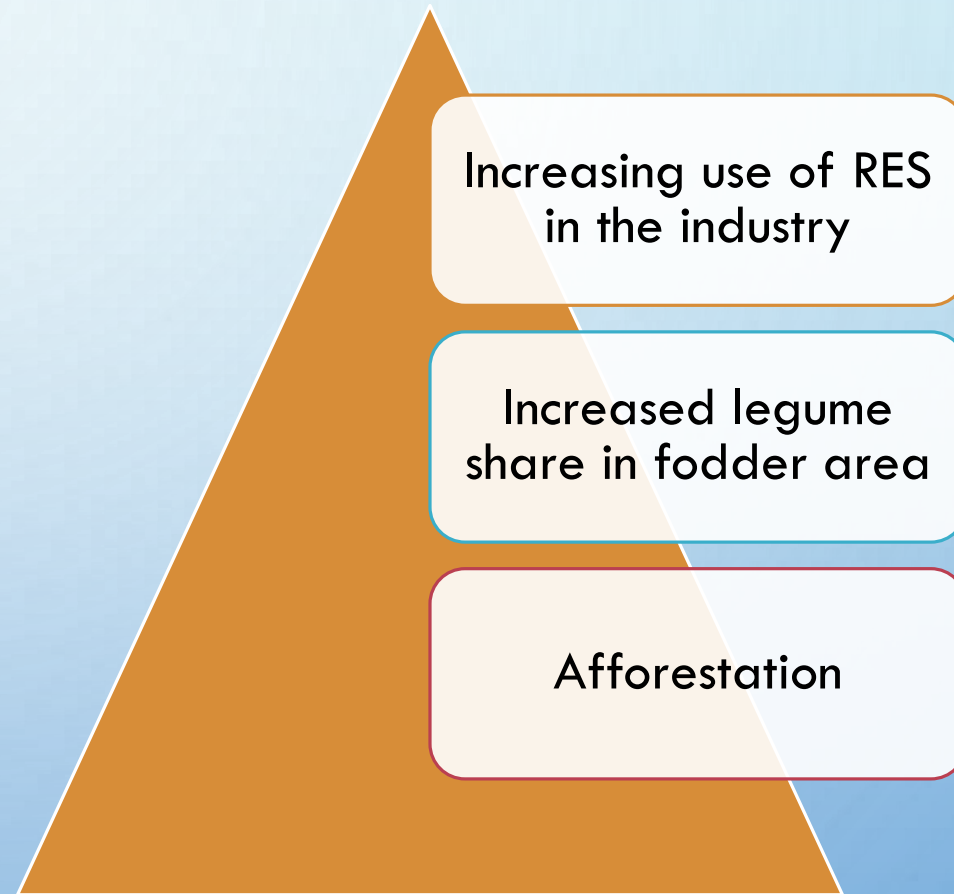
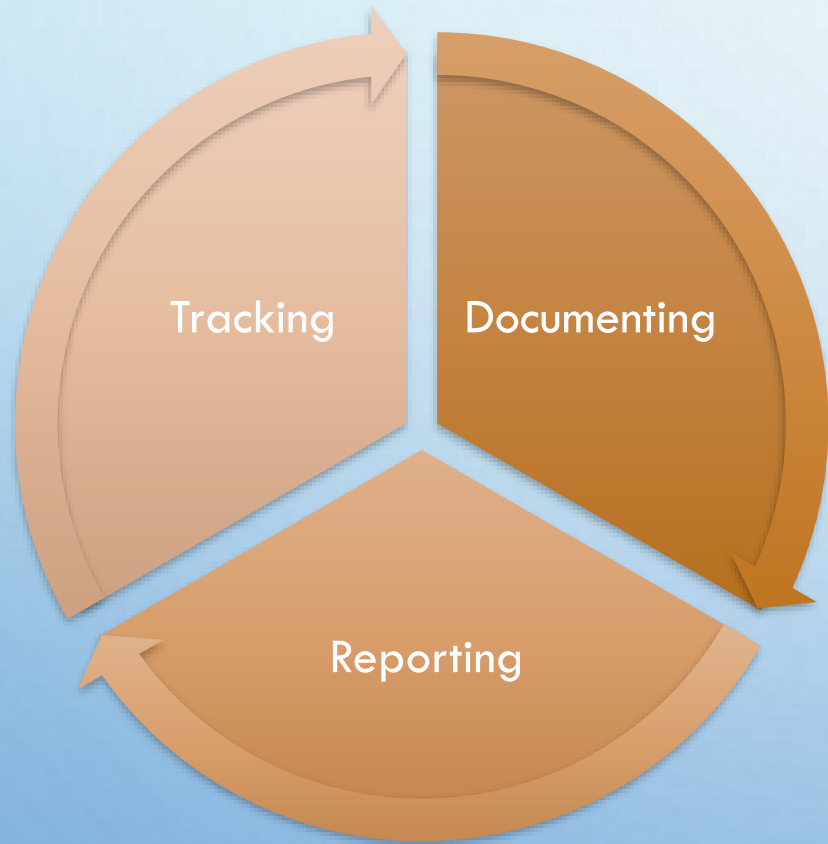
Activity	Cost	Mitigation	Possible problem
<b>New area planted as expected</b>	Cost per hectare as expected	Measurement shows that the trees are not growing as much as expected	Even though the area of new plantation is achieved, the final mitigation will be smaller.
<b>New area planted as expected</b>	Cost per hectare are higher than expected	Capture of C per hectare is as expected	The budget will not allow to reach the expected area of plantation not allowing to reach mitigation target.
<b>New plantation area is smaller than expected</b>	Cost per hectare as expected	Capture of C per hectare is as expected	If the annual planted area does not increase in the following years, the mitigation target would not be reached.



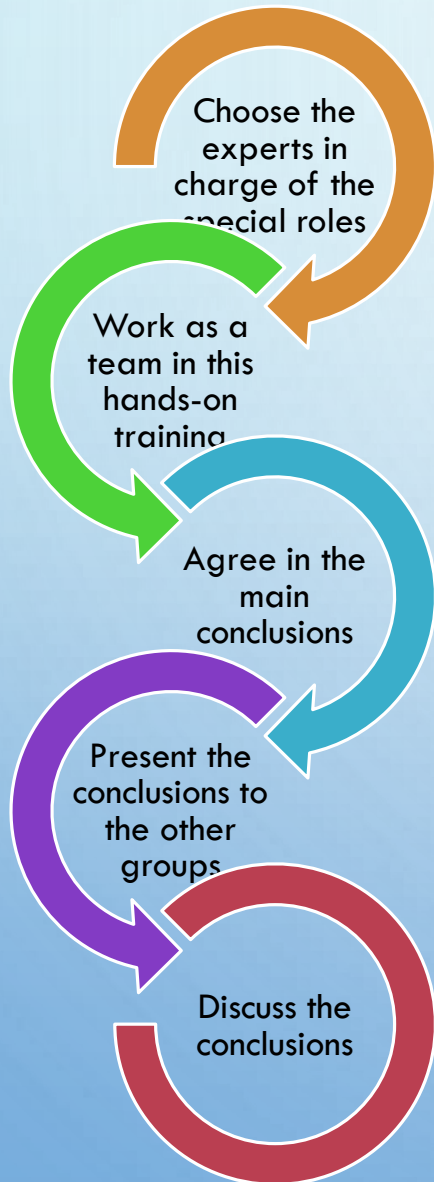
# HANDS-ON TRAINING



# HANDS-ON TRAINING



# RULES FOR THE WG



- BEFORE STARTING, ONE VOLUNTARY WILL SUMMARIZE THE OBJECTIVES OF THE EXERCISE, AS WELL AS THE STEPS AND MATERIALS TO BE USED.
- 3 ATTENDANTS WILL ASSUME SPECIAL ROLES IN THE GROUP:
  - **FACILITATOR**: ENSURES THAT THE DISCUSSION IS FOCUSED IN THE OBJECTIVES, THAT ALL PEOPLE ARE PARTICIPATING AND THAT ALL OPINIONS ARE TAKEN INTO CONSIDERATION
  - **TIME KEEPER**: MONITOR THE USED AND REMAINING TIME. HE/SHE SHALL ALERT THE GROUP IF THEY ARE BEHIND SCHEDULE
  - **SPEAKER**: IN CHARGE OF PRESENT TO THE WORKSHOP THE MAIN CONCLUSION OF HIS/HER GROUP
- PLEASE, FEEL FREE TO CONTACT ME FOR ANY QUESTION.

# QUESTIONS AND ANSWERS





CLIMATE CHANGE  
ATELIER

**JUAN JOSÉ RINCÓN CRISTÓBAL**  
**CLIMATE CHANGE ATELIER, S.L.**  
[juanjose.rincon@ccatelier.es](mailto:juanjose.rincon@ccatelier.es)

THANKS FOR YOUR  
ATTENTION!!!