

# EU ETS Roadmapping and the broad picture

Imre Csikós



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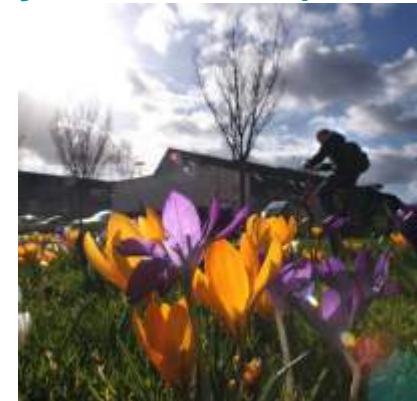
Project implemented by Human Dynamics  
Consortium

# Extreme climate events – first quarter 2014

## Warmest 3 january ever - Netherlands



Winter 2013- 2014:  
Only 10 days with  
frost (normally 40  
days with frost)



Warmest March ever  
(average 2°C above  
normal)



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# Extreme climate events – Second Q 2014

9 June 2014, East of  
Utrecht

26 June 2014, Ameland



19 May 2014, first time >  
30 Degrees in 2014

22 April 2014, 30 km east  
of Utrecht



9 June 2014, Panic at  
Pink Pop festival



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# Extreme climate events – third quarter 2014



August second  
wettest month ever  
recorded (record was  
in 2006)



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# Extreme climate events – fourth quarter 2014

2 and 3 November  
warmest month ever  
recorded

3 November was 22,3  
°C

October warmest month  
ever recorded (until to  
date)

18 October was 24,1 °C

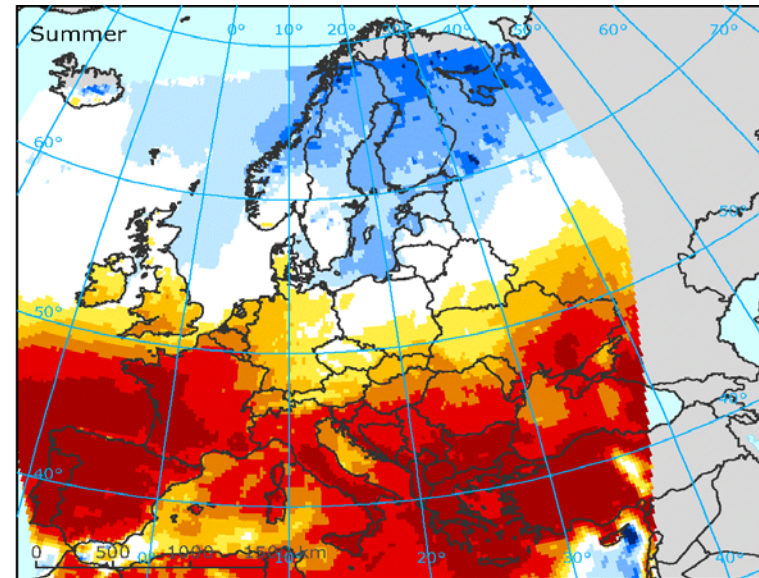
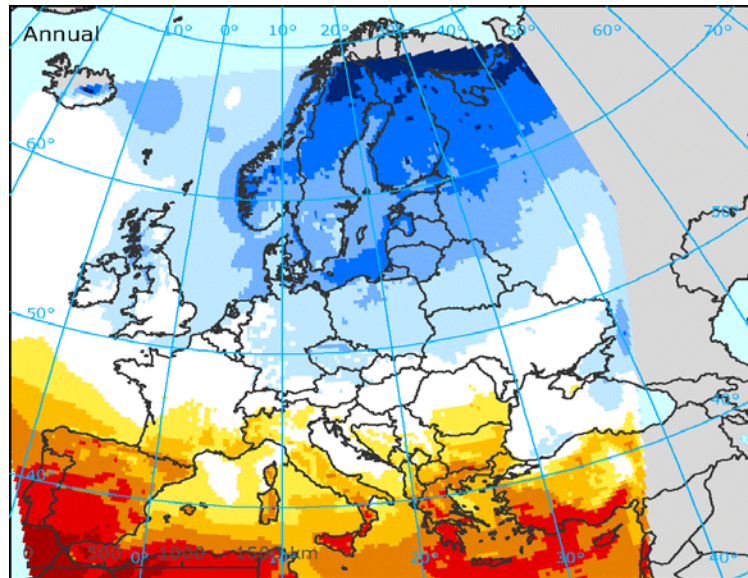


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# DANGEROUS CLIMATE CHANGE IS HAPPENING

Time is running out fast to prevent it



## Projected changes in precipitation

(%)



<-30  
-30 to -20  
-20 to -15  
-15 to -10  
-10 to -5  
-5 to 5  
5 to 10  
10 to 15  
15 to 20  
>20

No data



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# Challenges ahead: 2050 Decarbonisation

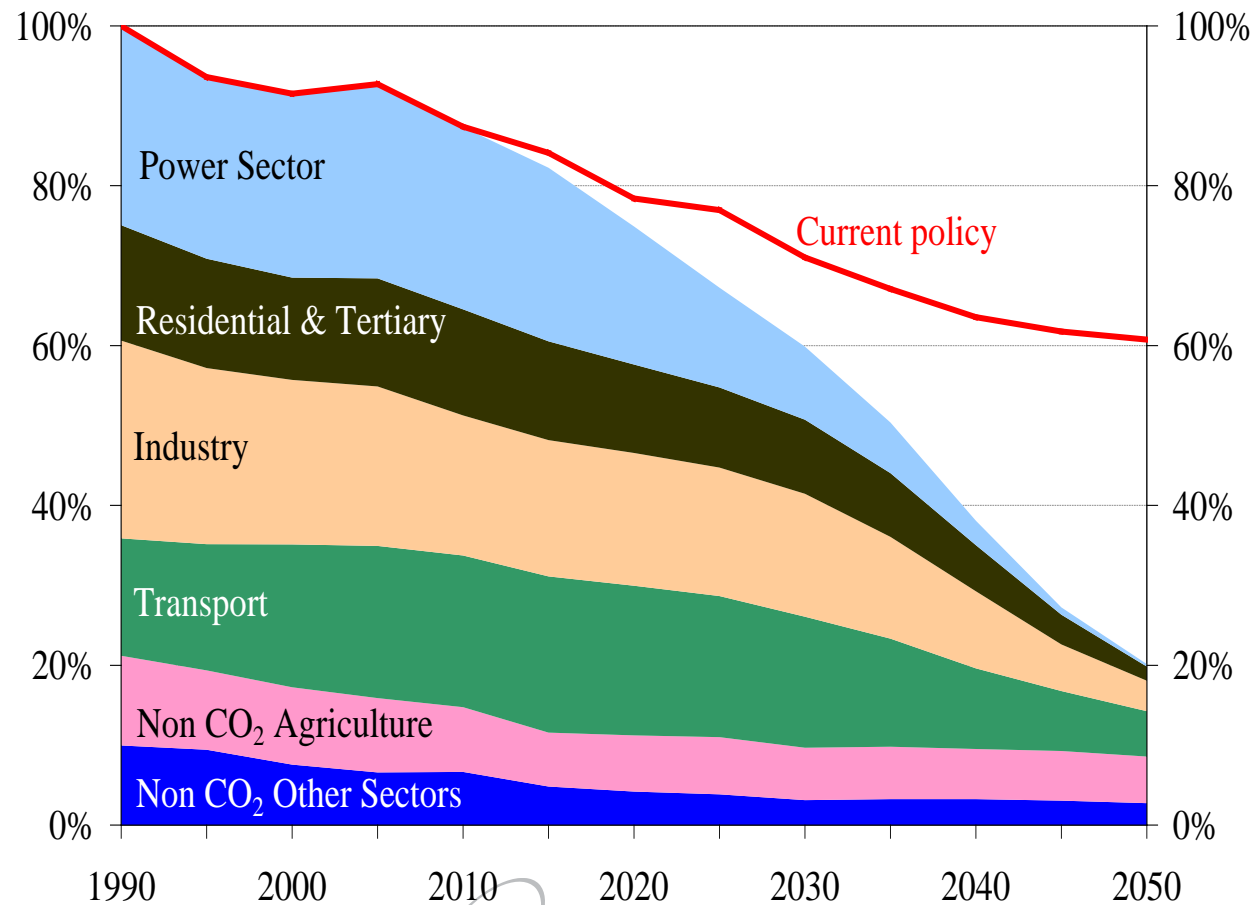
## Roadmap is needed to contain dangerous climate change

### 80% domestic reduction in 2050 is feasible:

- With currently available technologies,
- With behavioural change only induced through prices
- If all economic sectors contribute to a varying degree & pace.

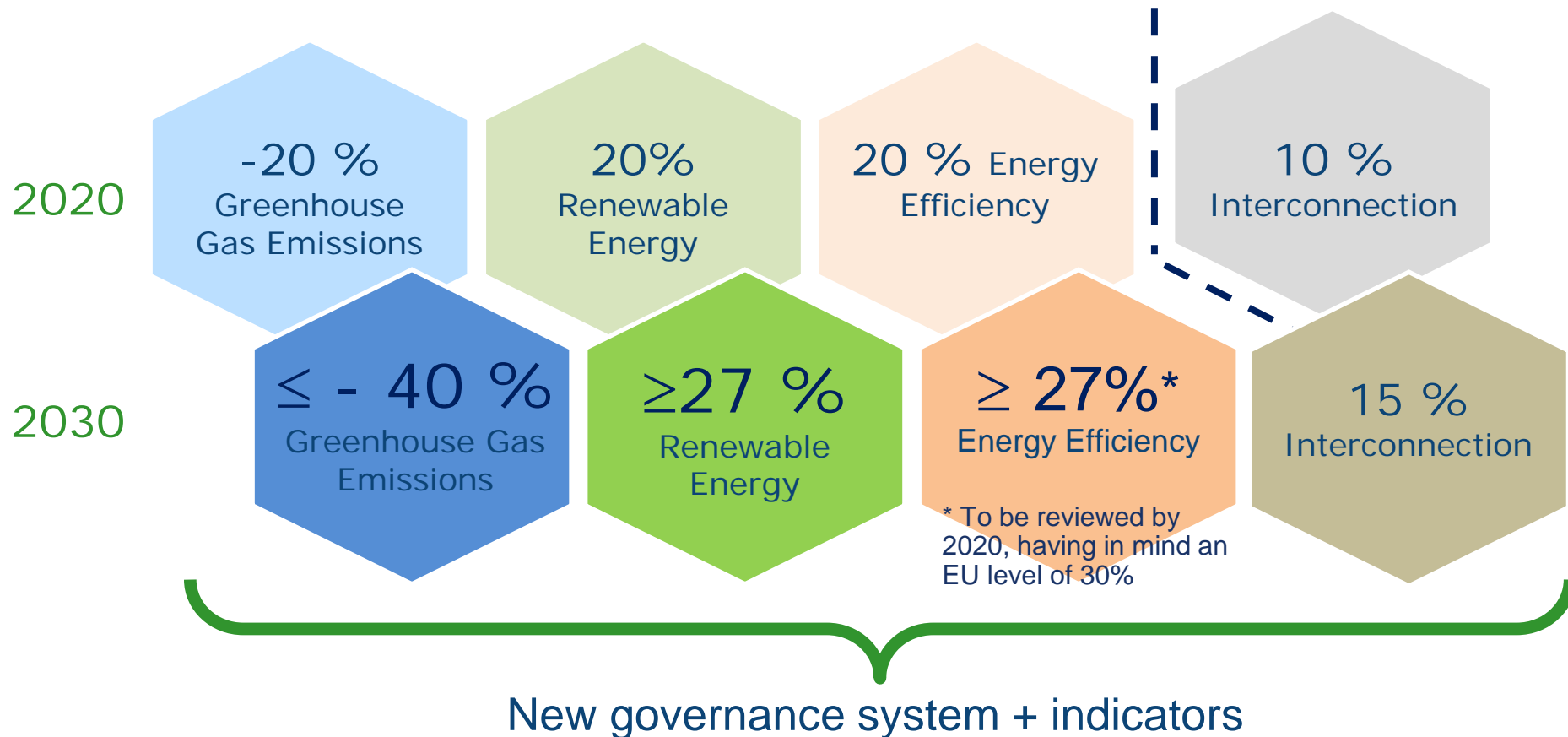
### Efficient pathway and milestones:

- -25% in 2020
- -40% in 2030
- -60% in 2040



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## 2030 Framework for Climate and Energy = basis for the EU INDC

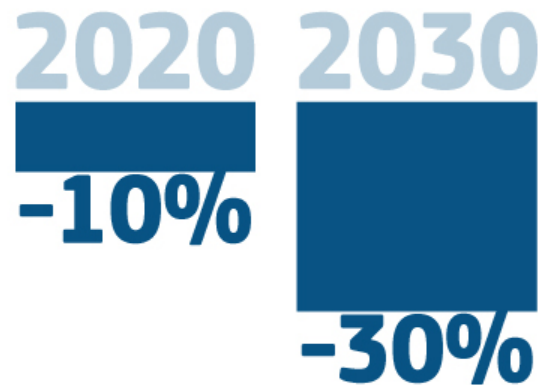




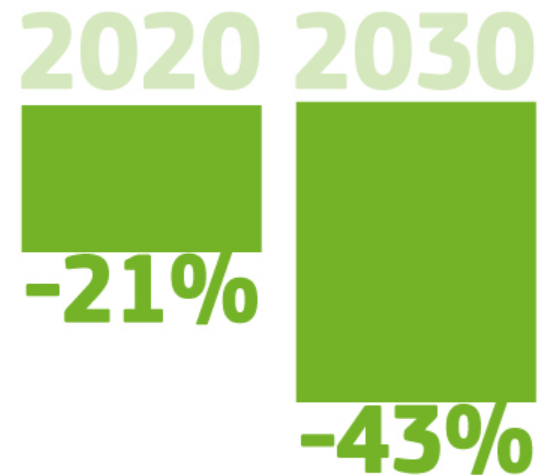
**GHG Emissions**

## Emission reductions in ETS and non-ETS

**EMISSION  
REDUCTIONS  
IN ETS AND  
NON-ETS**  
COMPARED TO 2005



**NON  
ETS**  
INCLUDING  
ROAD TRANSPORT,  
HOUSING,  
AGRICULTURE  
etc.



**ETS**  
INCLUDING  
POWER/ENERGY  
SECTOR & INDUSTRY

# Why does this make sense?

## Not only to fight dangerous climate change, but also

**Reducing** Greenhouse Gas Emissions  
(GHG) **cost-effectively**  
**2050** objective: -80% to -95% GHG

### **Security of EU energy supplies**

EU oil and gas imports:  
€ 400 billion per year

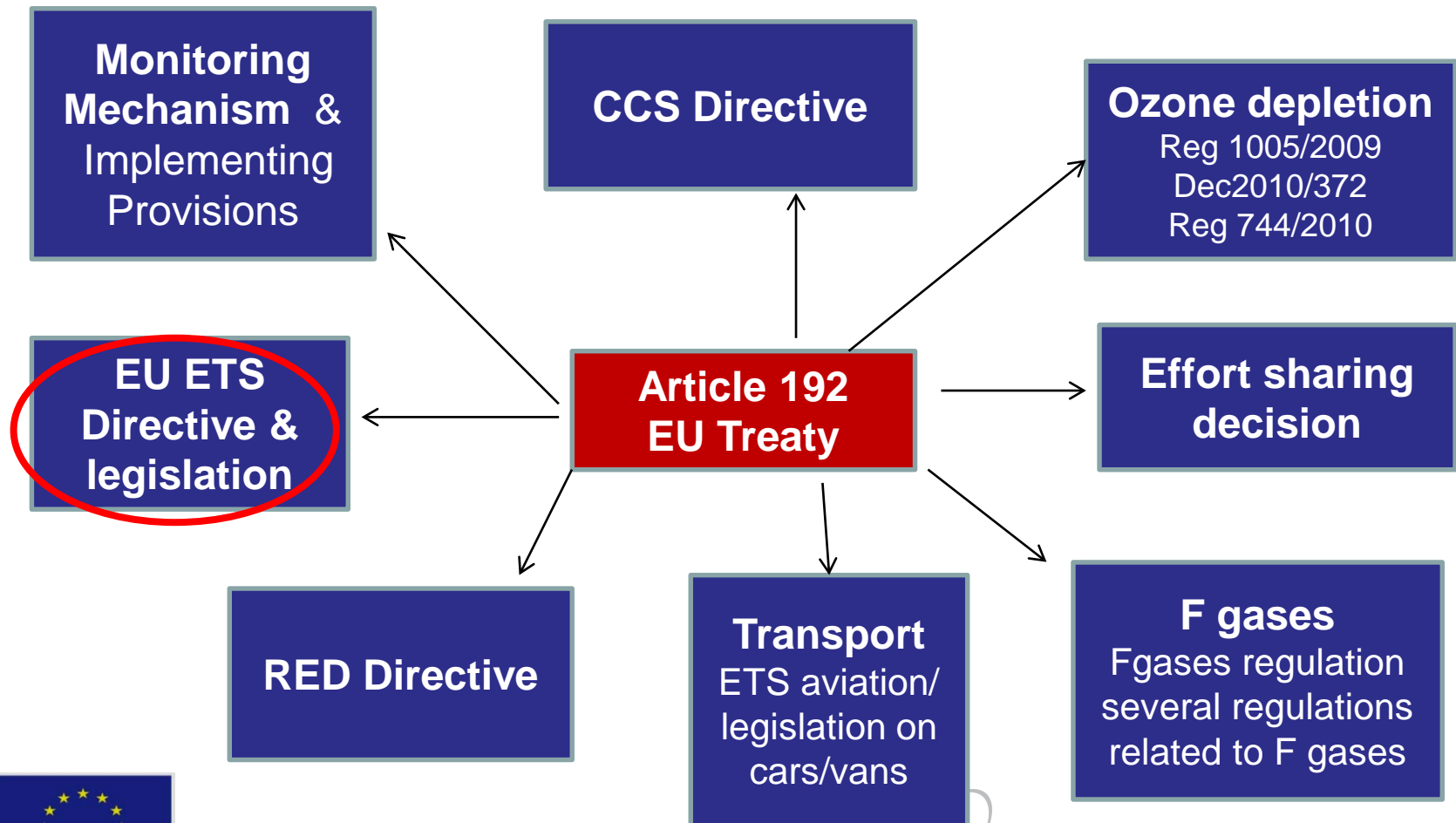
EU contribution to 2015  
**international climate  
agreement**

Competitive energy and new  
**growth and jobs**  
**Eco-industry already employs  
4.2 million**



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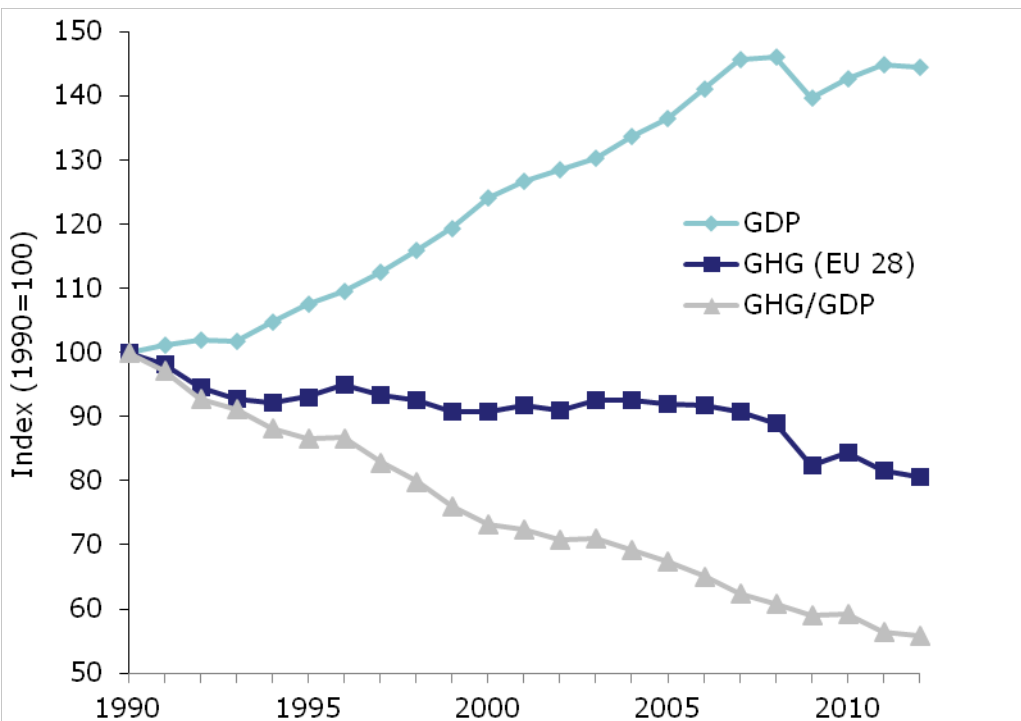
# Overview EU Climate Change Law





## NEED TO STEP UP EFFORT

...while the EU economy continues to grow



**Decoupling between economic growth and GHG emissions:**

- **EU GDP growth 1990-2011: 45%**
- **Emissions decreased by 18.3 % during the same period**
- **2010/2011 → EU-28 GDP increased by 1.4% while emissions fell by 3.3%**



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## Summary main points EU ETS Directive

- **Centralised EU-wide cap** on emissions that reduces annually by 2.2% per year
- **Full auctioning** is the rule for electricity generators (with temporary deviation options)
- In other sectors **allocations for free will be phased out progressively** (40% auctioning in 2013 to 70% in 2020)
- **Carbon leakage installations** will receive 100% of the benchmarked allocation for free



## Summary main points EU ETS Directive

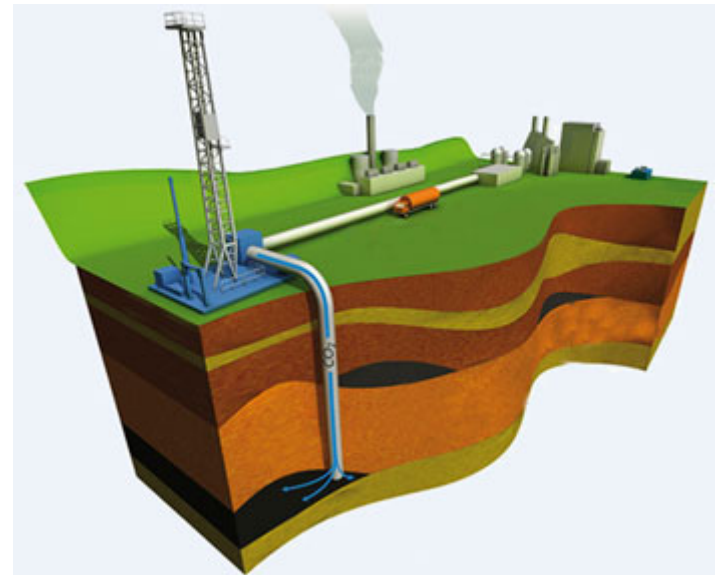
- **Backloading** of 900 million **allowances** from 2013-2015 until 2019-2020
- **Access to project credits** from outside the EU will be limited to no more than 50% of the reductions.
- Half of the revenues from auctioning to be used for climate change projects
- Allowances for free allocated on the basis of **benchmarks**





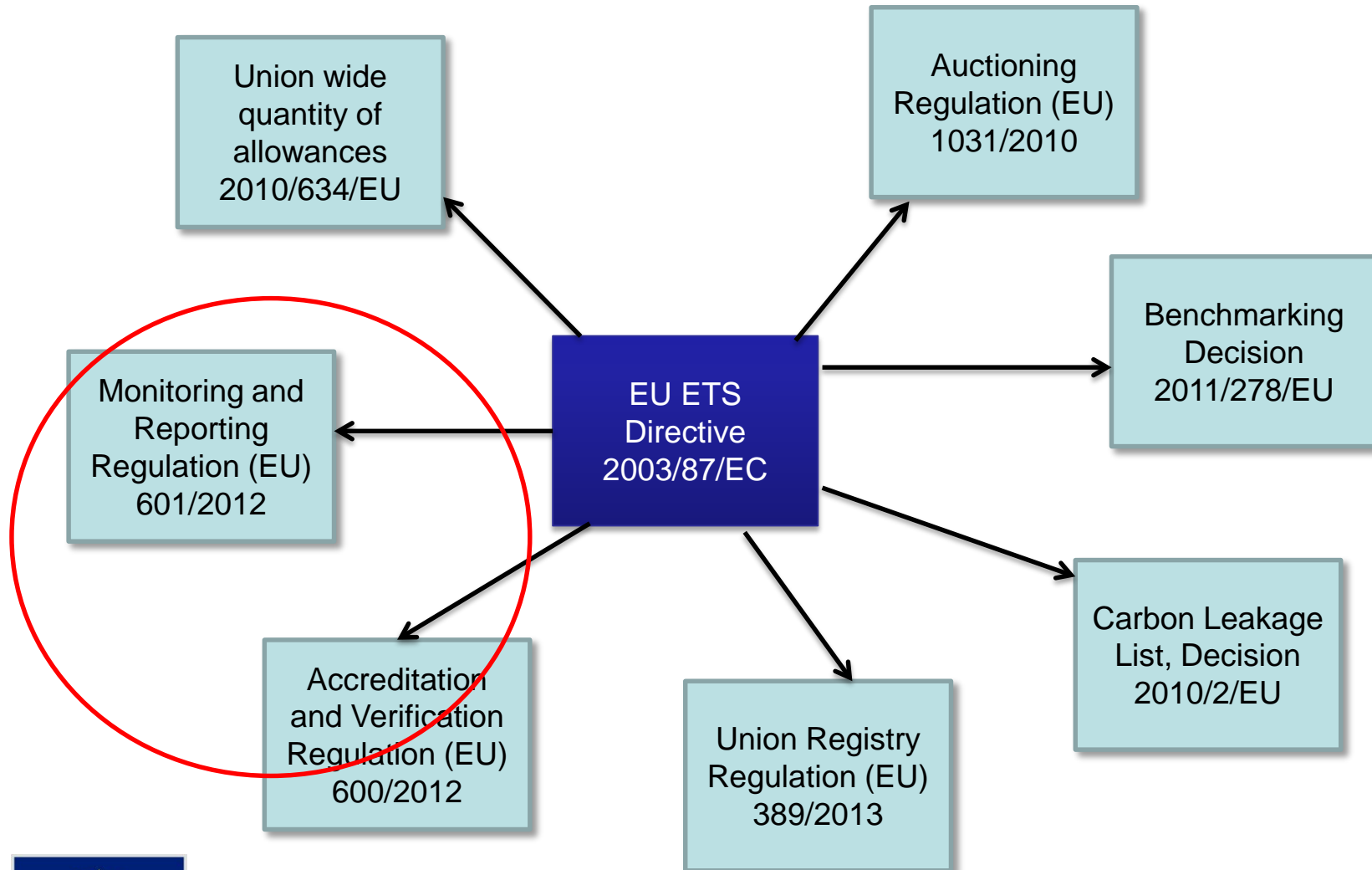
## Summary main points EU ETS Directive

- Up to 300 million allowances from the new entrants reserve of the EU ETS will be used to support **innovative renewable energy technology** and **carbon capture and storage** demonstration projects

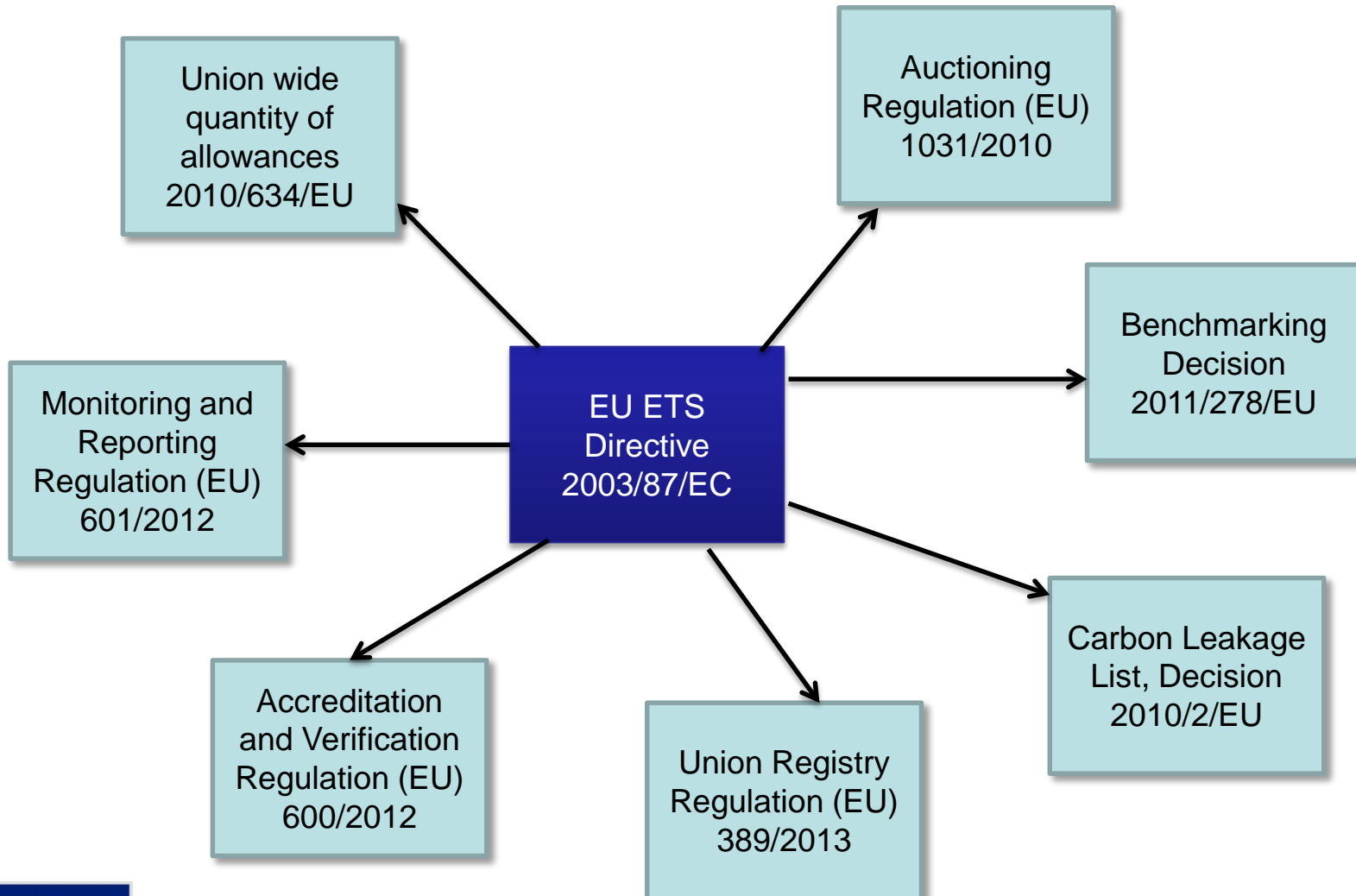


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# Complementary legislation to the EU ETS Directive (2003/87/EC)

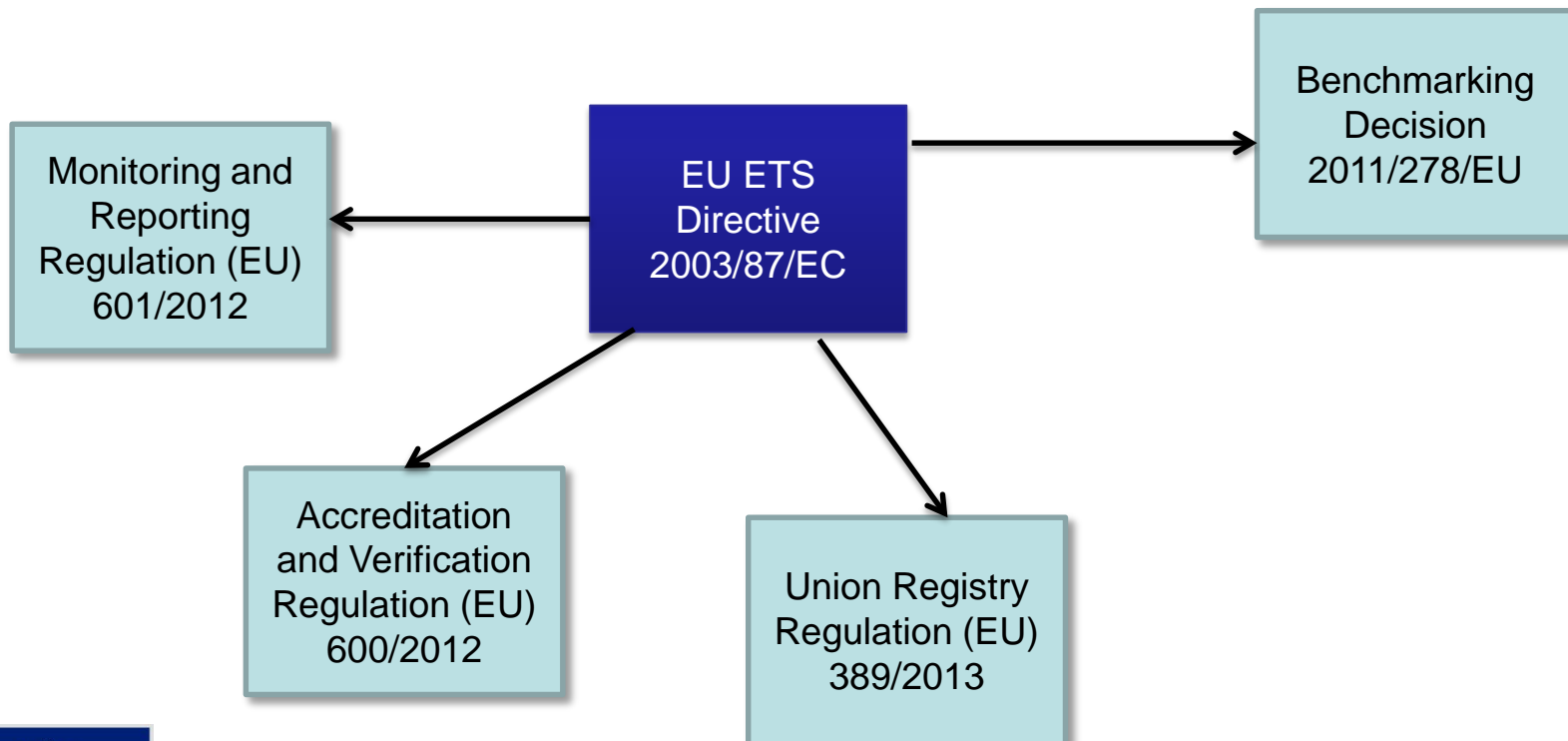


# Where to start???



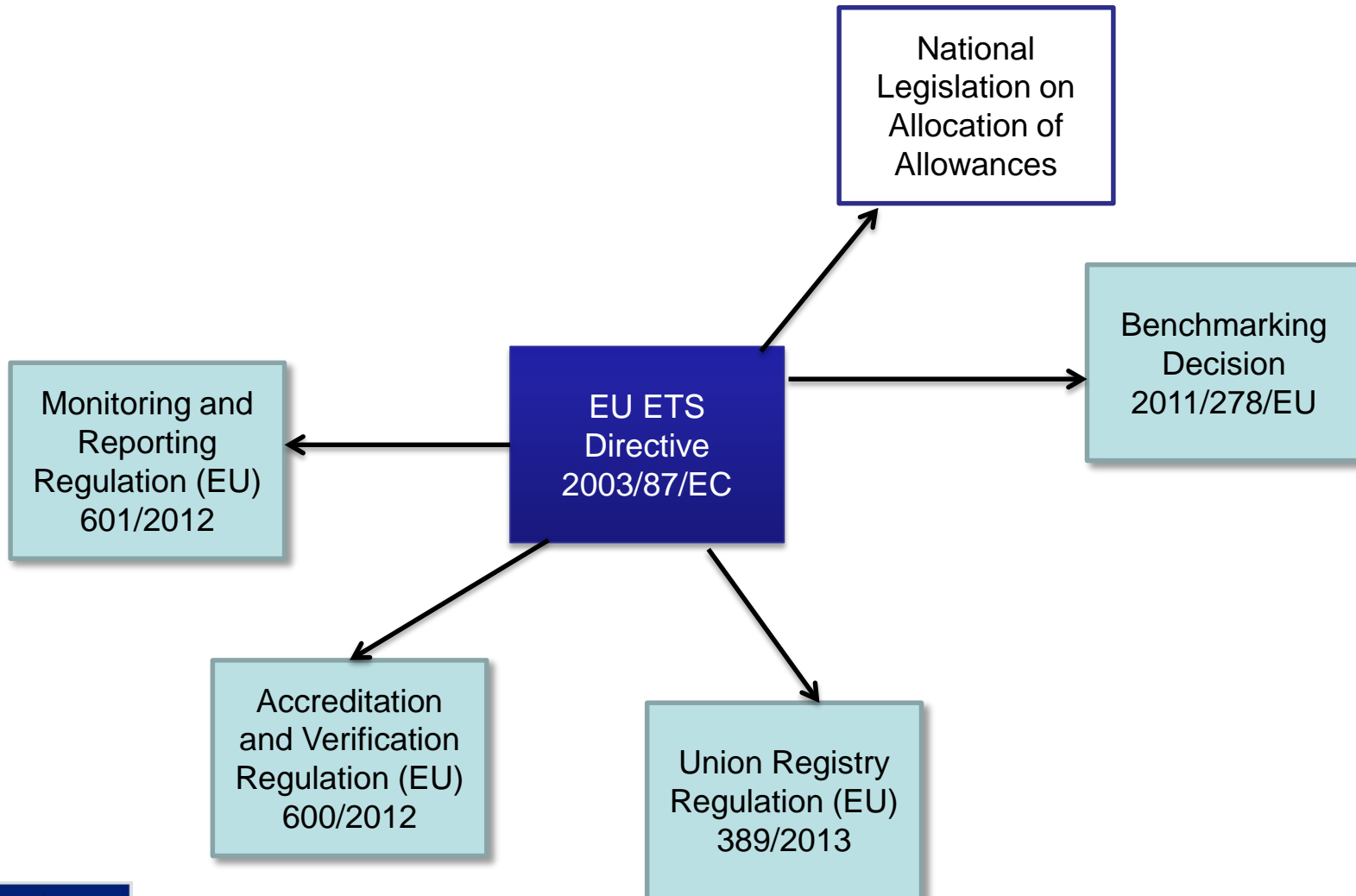


# Where to start???



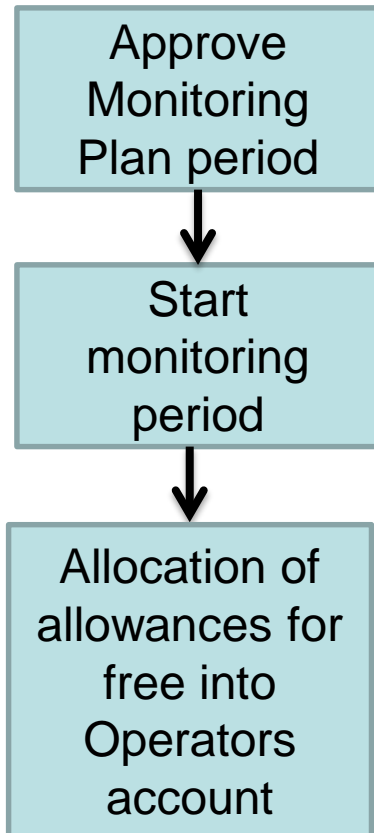
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# Where to start???

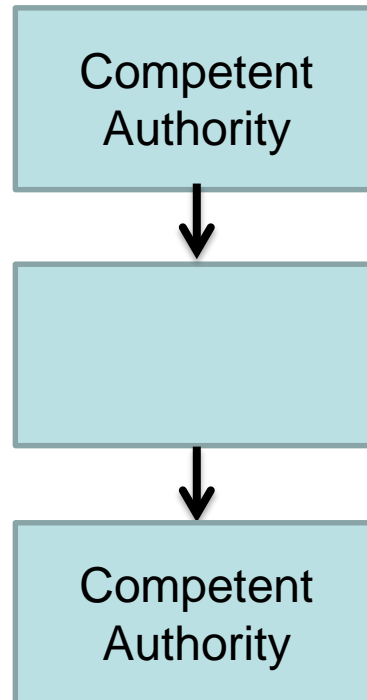


# Monitoring, Reporting, verification and accreditation

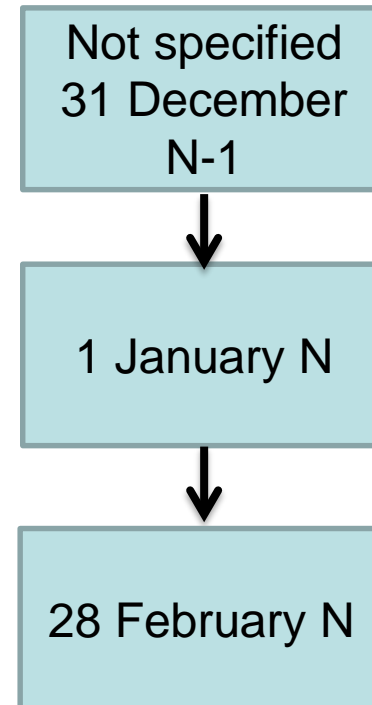
## What?



## Who?

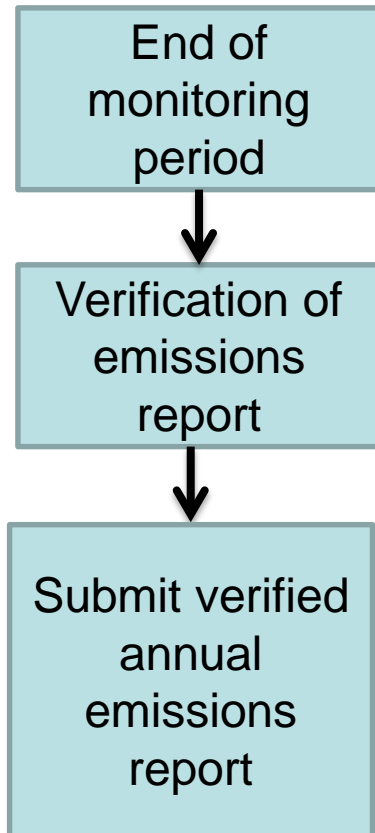


## When?

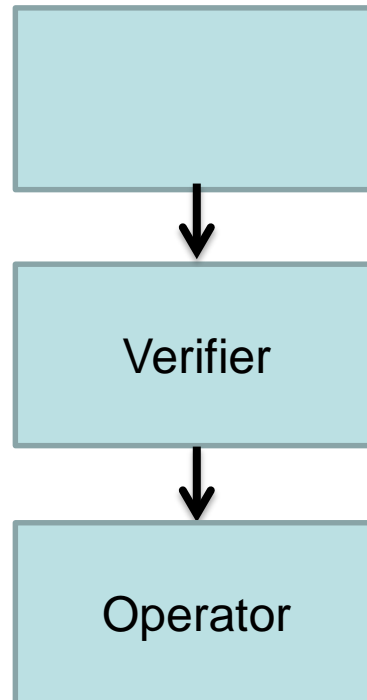


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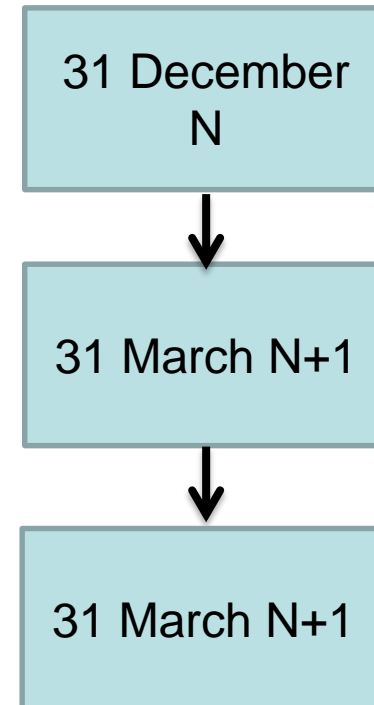
## What?



## Who?



## When?

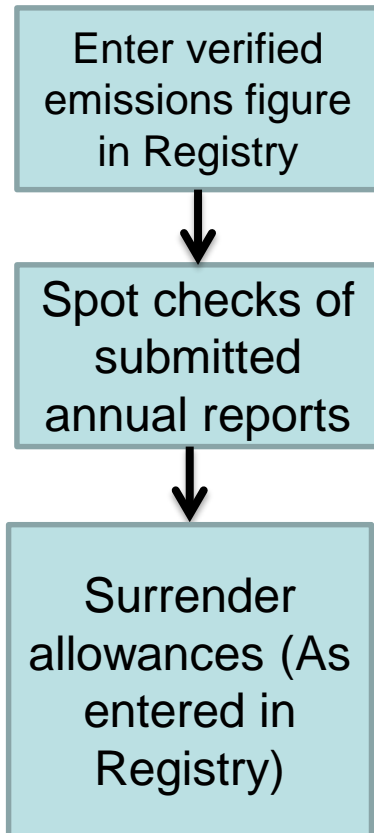


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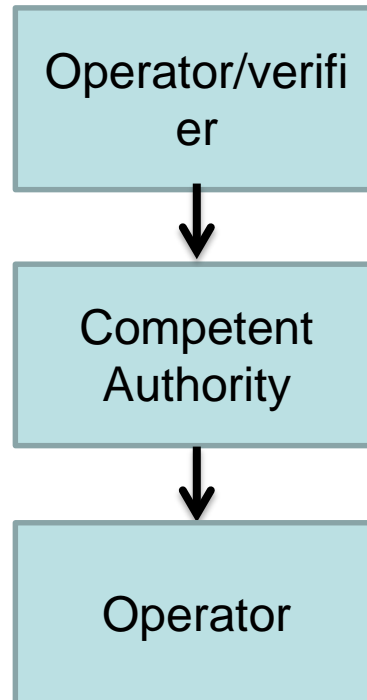


# Monitoring, Reporting, verification and accreditation

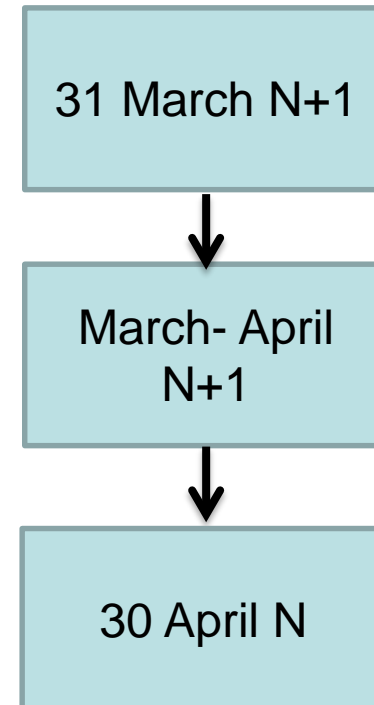
## What?



## Who?



## When?



# Monitoring, Reporting, verification and accreditation

## What?

Submit report on improvements of Monitoring plan



Further checks of submitted annual reports

## Who?

Operator



Competent Authority

## When?

30 June N+1



Not specified



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# Planning and Preparation - Where to start?

## 1. ETS Implementation Plan to determine

- Required tasks, costs and associated staffing
- Identify the list of activities (operators of stationary installations of Annex I and Aircraft operators)

## 2. Designate the Competent Authority to implement/regulate

- Auctioning (decide to work with own or existing platform)
- Issuing of permits and allowances
- National Implementation Measures (NIMs)
- Monitoring, reporting, verification, accreditation
- Registry work (Union Registry)
- Organise internal and external information streams including public access to information



# Planning and Preparation - Where to start?

## 3. Develop necessary legislation :

- Recommend to start with MRAV legislation and permitting legislation

Following that start developing legislation that regulates

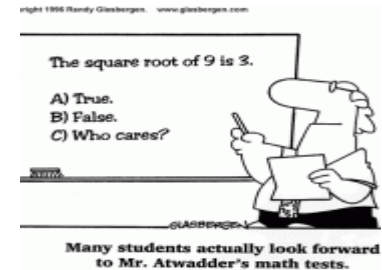
- Inclusion of stationary installations (Annex I) and aviation sector
- Allocation and issuing of allowances (NIMs)
- Registry functioning
- Transfer, surrender and cancellation of allowances
- Use of credits (accept only credits from LDCs and not from nuclear installations and not from LULUCF and not from large hydropower)
- Auctioning (own platform or existing platform)
- Public participation and access to information



# Planning and Preparation - Where to start?

## 4. Determine Capacity Building requirements for implementation

- For Authorities
- For operators !!!
- Information campaigning to explain in simple terms to general public



## 5. Assess

- Installations that are considered carbon leakage prone
- Installations that may receive emission allowances for free (based on efficiency benchmarking)





## Planning and Preparation - Where to start?

### 6. Consider to start as a first step with Monitoring, Reporting, Verification and Accreditation

- Prepare Guidance Materials (use the existing guidance and templates)
- Develop an IT based system (electronic reporting) (recommended for large market)!
- Accreditation body to accredit verifiers

### 7. Learn the actual trading

- Consider as a first step to use monopoly money (to learn)
- Establish a National Registry (modelled along the requirements of the Union Registry so that linking with the ITL through the EUTL is possible)
- Consider national or regional trading



# Planning and Preparation - Where to start?

## 8. Set up compliance structures:

- Inspectorates to check verified emission reports
- Ensure secure trading through national registries
- Training of inspectorates



## What can ECRAN offer?

- Assistance in guidance through the above steps of planning and preparation
- Formulate together TAIEX expert missions of Member State experts (such as from Emission Authority, accreditation agency, verifiers)
- Assistance in legislation drafting, IPA Project development, guidance documents, further training



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Project implemented by Human Dynamics Consortium

# Next event

- ETS Operators training 2015
- ECRAN/TAIEX Missions ETS roadmapping