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A compilation of questions to - and answers by – Croatia
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Question from: Brazil at Tuesday, 30 September 2014
Category: Progress towards the achievement of its quantified economy-wide emission reduction target
Title: Emissions scenario 2020 above 2011Even with "additional measures" (pg 245) your 2020 (28,278.50 ktCO2eq) scenario is above 2011 (31,389.19 ktCOeq).

Can the Party explain the reasons why even with additional measures it is not able to curb down the emissions?

Answered by: Croatia at Friday, 28 November 2014

Scenarios “with measures” and “with additional measures” show a decline in emissions until the year 2015 primarily due to the effects of current overall economic stagnation and decline in the industrial production and reduced energy demand in households, transport and services, but also as a result of penetration of the new renewable energy sources for the production of electricity and heat. It should be noted that emissions per capita in Croatia in 1990 is relatively small, 6,69 t CO2-eq, and Croatia has a high share of renewable energy from hydropower. Therefore potential for reduction of the emissions is quite limited.
A gradual increase in emissions after 2015 with the peak in 2020 occurs primarily due to the expected recovery of economy and the consequent increase in final energy consumption, as well as improving country’s security of electricity supply by building new production capacities (to be included in the EU ETS) which are expected to outweight effects of GHG emission reduction policies and measures. Stagnation of the increase in emissions is expected after the year 2020 in ‘with measures’ scenario and decrease in emissions in ‘with additional measures’ scenario.

Question from: Brazil at Tuesday, 30 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: Forecast Assumptions

In your forecast assumptions (Table CTF 5 page 243) is said that number of heating days and the value of degree-days heating are constant up to 2030. This is not in accordance with your records on section 6.1.2 or Table 6.2.5-2.

Can the Party explain the reason to keep it constant?

Answered by: Croatia at Friday, 28 November 2014

Calculation of the degree-days as a basis for projections of the heating energy consumption requires more accurate and consistent data of the future temperature

trends, particularly on monthly basis or during heating season, which are not available at the moment so the constant values were used as the best approximation.

Question from: Brazil at Tuesday, 30 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: Aviation under EU-ETS and Policy implementation

In pg 58, under MSP-1 (policy implemented) it is said regarding inclusion of aviation under EU-ETS that "This will include all flights within the Croatia and flights between the Croatia and countries outside the European Economic Area. " .

Could there be an explanation on this policy implemention?

Answered by: Croatia at Friday, 28 November 2014

For the Republic of Croatia 1 January 2014 was set as the date from which the EU ETS scheme would also cover all domestic flights within Croatia as well as flights between Croatia and non-EEA countries (hereinafter: additional flights). As a result of the extension of the EU Emission Trading System Croatia has through Air protection law (OG 130/11, 47/14) included the aviation sector into the emission allowance trading system by which the system is expanded to cover additional flights.

From 1 January 2013 ETS ETS in accordance with the Regulation (EU) No 421/2014 of the European Parliament and of the Council of 16 April 2014 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in view of the implementation by 2020 of an international agreement applying a single global market-based measure to international aviation emissions applies only on flights within European Economic Area. Croatia is not part of EEA but with article 28a (7) Regulation 421/2014 flights between aerodromes located in States of the EEA and countries that acceded to the Union in 2013 (Croatia) shall be considered to be flights between aerodromes located in States of the EEA.

Question from: Egypt at Tuesday, 30 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: GHG inventory assumption

what are the normal assumptions in transport and agricultural sector related to GHG inventory related to ipcc 1996 guidelines or 2006 guidelines ?

Answered by: Croatia at Friday, 28 November 2014

For the annual national inventory submissions made until 2014, including the information presented in the 6th National Communication/1st Biennial Report, Croatia use the Revised 1996 IPCC Guidelines.
The use of the 2006 IPCC Guidelines will start as from the 2015 GHG inventory submission only and will also be reflected in the next BR/NC.

Transport sector
Civil aviation: Emissions from domestic aviation are estimated by using drivers such as ratio of domestic/international passengers, taking into account average km traveled for passengers on domestic/international routes. Total jet kerosene consumption from Energy balance was divided to domestic and international aviation according to average km traveled per passenger on domestic/international routes. Data were obtained from Statistical yearbooks and Energy balance. Since average km traveled per passenger on domestic/international routes for 1990 is not included in available Croatian statistical publications, this value was estimated using linear extrapolation from the period 1991-2006.
Road transport: Emissions of CO_2 from liquid fuels in the latest inventory submission were calculated on the basis of the amount and type of fuel combusted using tier 1 (top-down) approach which is in line with the IPCC good practice guidance.
Emissions of $CH_4$and N_2O were calculated using the COPERT 4 model because emission factors depend on vehicle technology, fuel and operating characteristics (vehicle-kilometres, average trip speed, driving share on urban, rural and highway roads, etc.).
Main activity data provider is Ministry of Interior, which is responsible for compilation of national motor vehicle database with detailed information on each registered vehicles in Croatia. Fuel consumption data were taken from national energy balance and average monthly temperatures from statistical yearbooks. Additional data, like highway, rural and urban transport mileage, average speed of different kind of vehicles and different road types, average daily trip distance and beta value (the fraction of the monthly mileage driven before the engine and any exhaust components have reached their nominal operation temperature) are expert judgments or default data from the COPERT model.
There were two assumptions/adjustments applied in the COPERT model:
Gasoline or diesel oil tank-filled abroad and consumed in Croatia is equal to amount of same type of fuels tank-filled in Croatia and consumed abroad (this is due to a large number of tourist destination and transit trips in Croatia), so effect of this consumption pattern in neutral to fuel balance.
Fuel consumption calculated by COPERT, taking into account number of vehicles and annual average vehicle mileage, should be to a highest possible degree equal to consumption of fuels from the national energy balance (the difference should not be greater than 1%).

Railways: The GHG emissions from sub-sector Railways were calculated using Tier 1 approach based on fossil fuel consumption data (from national energy balance) and default IPCC emission factors.
Navigation: The GHG emissions from Navigation sub-sector were calculated using Tier 1 approach, based on fossil fuel consumption data (from national energy balance) and default IPCC emission factors.
Agriculture
IPCC default emission factors, manure management distribution rates and some other calculation parameters are assumed to be acceptable for national emissions calculation since country-specific values are in the process of estimation.
Burning of agricultural residues is an activity strictly prohibited by the domestic legislation, so it is also assumed that this emission source is NO (not occuring).

Question from: Algeria at Monday, 29 September 2014
Category: All emissions and removals related to its quantified economy-wide emission reduction target
Title: Assumptions, conditions and methodologies related to the attainment of its quantified econ

Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
[1]. According to the BR1, Croatia chooses 1990 as base year for its emission reduction target as shown in Table 2(a), however, in Table 2(f) Croatia committed to limit the expected increase in emissions in relation to the verified emissions from the 2005. Could Croatia provide more clarification on its base year?
[2]. As a member of EU bubble, Croatia doesn't pledge a national mitigation target under the UNFCCC. Croatia reported in its BR1 that for those sectors not covered by EU-ETS, the emission limitation target is 11% increase compared to the verified emissions from the 2005. However, it is thus not clear how much effort Croatia is going to make on sectors covered by EU-ETS, nor the effort as a whole, compared with its base year level. What additional information would Croatia provide in order to make its effort transparent?
[3]. Since Croatia has been a Member State of the EU, will Croatia make an update to the UNFCCC secretariat for its 2020 emission reduction target as contained in FCCC/SB/2011/INF.1/Rev.1?

Answered by: Croatia at Friday, 28 November 2014

Question No 1
With accession to the EU in 2013, Croatia has taken a common European objective of reducing the greenhouse gas emission by 20% by 2020 compared to 1990.
The Climate and Energy Package sets a 20% GHG emission reduction target for EU-28 by 2020 compared to 1990. This is equivalent to -14% compared to 2005.
This effort is divided between EU ETS and non-ETS sectors as follows:
(a) 21% reduction in EU ETS sector emissions by 2020 compared to 2005 (include major sources of greenhouse gases); and

(b) the Effort Sharing Decision sets binding annual emissions allocations for each Member States for the sectors not covered by the EU ETS. This represents for the EU a reduction of around 10% by 2020 compared to 2005 (limitations based on absolute targets at the level of each Member States). The Effort Sharing Decision mainly covers emissions from transportation, buildings, small businesses and services, agriculture and waste. Non-ETS target is differently distributed to the EU member states.

The reason why year 2005 was taken as a reference year is that from this year onward verified data from the instalations included in EU ETS are available. Also this contribut to greater transparency, accuracy related to fulfillment of the obligations as well as monitoring, reporting and verification.

Question No 2

Installations covered by the EU ETS shall comply with the EU-wide rules taking into account cost-effectiveness of mitigation measures (-21 % reduction compared to 2005).
The EU-wide cap under the EU ETS is determined for all EU Member States and the three EEA EFTA States (Iceland, Norway and Liechtenstein) without reflecting a specific share for each Member State.
The allocation of allowances takes place through auctions and free allocation. The share of allowances auctioned on behalf of each Member State in each year is public and can be obtained from the relevant auction platforms.
However, free allocation is provided on the basis of EU-wide rules to installation operators within a certain limit. For each of the nearly 12.000 installations in the EU ETS, the allocation has been calculated based on the common rules. A breakdown of the amounts per Member State is not available.
It is therefore difficult to project actions which will be taken by individual installations to comply with the overall EU ETS reduction target, since this is a market-based instrument based on agreed total emission cap.
Commitments to reduce or limit the increase in emissions for EU members in non-ETS sector are based on the principle of solidarity. Economically developed countries, whose gross domestic product per capita is higher than the EU average, have committed to reduce emissions by up to 20% (thenegative limit), while the less developed countries, including the Republic of Croatia committed to limit the expected increase of emissions up to 20% (the positive limit) relative to the verified emissions from the 2005th year. Positive limit for Croatia from sectors not covered by the emissions trading system is 11% compared to the verified emissions from the 2005th year. In this regard, for each year of the period 2013-2020, the amount of greenhouse gases emitted from sectors not covered by the emission trading scheme is limited to the amount of annual national alocation as determined by Decision 2013/162/EU and Decision 2013/634/EU.
Croatian installation operators and aircraft operator are connected to the EU ETS scheme from 1 January 2013. Participants in the EU ETS system can buy emission allowances by auction. The collected funds from the sale of emission allowances shall be paid to the Fund for Environmental Protection and Energy Efficiency. Air

Protection Act provides that 95% of available funds (with the exception of 2014 and 2015 when it allocates 85% of funds) used for mitigation and adaptation to climate change.
Ministry of Environmental and Nature Protection made a Plan of usage financial resources received from the sale of emission allowances through auctions in the Republic of Croatia for the period from 2014 to 2016, which has been adopted. Measures under the Plan will be used for non-ETS sectors for the increasing of share of renewable energy, for increase of energy efficiency, to reduce emissions from road transport, for the waste management sector, for the activities within the framework of research and development and professional support and financing projects in developing countries.
In determining priority areas and measures for the use of the collected funds, a very important criterion is the cost-effectiveness of the use of available funds obtained from the sale of emission allowances through auctions, ie achieving the best possible efficiency measures to reduce greenhouse gas emissions and adaptation measures to climate change.
Emision reduction measures in period 2013-2017 Government has adoprted by the Decision on the adoption of the Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 – 2017 period, (OG No. 139/13).
Implemented, adopted and planned policies and measures for GHG emission reduction in other sectors and their effects are listed and explained in the chapter 4 of the 6th National Communication.
Also Croatia is in the process of development of its Low carbon Strategy that is planned to be adopted in 2015.

Question No 3
Yes, it is already included in Doha Amendment to the Kyoto Protocol. Croatia has committed its participation together with EU and Island in the implementation of Doha Amendment to the Kyoto Protocol, and the joint fulfilment of commitments thereunder.

Question from: China at Monday, 29 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: 2020 target

Since Croatia has become a Member State of the EU, will Croatia make an update to the UNFCCC secretariat for its 2020 emission reduction target as required in FCCC/SB/2011/INF.1/Rev.1?

Answered by: Croatia at Friday, 28 November 2014

Yes, it is already included in Doha Amendment to the Kyoto Protocol. Croatia has committed its participation together with EU and Island in the implementation of Doha Amendment to the Kyoto Protocol, and the joint fulfilment of commitments thereunder.

Question from: China at Monday, 29 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: clarification on the target

As an EU member, Croatia has not pledged a national mitigation target under the UNFCCC. Croatia reported in its BR1 that for sectors not covered by the EU-ETS, the emission limitation target is 11% increase compared to verified emissions from 2005. However, it is not clear how much effort Croatia is going to make on sectors covered by neither the EU-ETS, nor the efforts as a whole, compared with its base year level. Additional information is needed from Croatia in order to make its effort transparent.

Answered by: Croatia at Friday, 28 November 2014

With accession to the EU in 2013, Croatia has taken a common European objective of reducing the greenhouse gas emission by 20% by 2020 compared to 1990.
The Climate and Energy Package sets a 20% GHG emission reduction target for EU-28 by 2020 compared to 1990. This is equivalent to -14% compared to 2005.

This effort is divided between EU ETS and non-ETS sectors as follows:
(a) 21% reduction in EU ETS sector emissions by 2020 compared to 2005; and
(b) the Effort Sharing Decision sets binding annual emissions allocations for each Member States for the sectors not covered by the EU ETS. This represents for the EU a reduction of 10% by 2020 compared to 2005 (limitations based on absolute targets at the level of each Member States). The Effort Sharing Decision mainly covers emissions from transportation, buildings, small businesses and services, agriculture and waste.

The reason why 2005 year was taken as reference year is that from this year onward verified data from the instalations included in EU ETS are available. Also this contribut to greater transparency, accuracy related to fulfillment of the obligations as well as monitoring, reporting and verification.
Installations covered by the EU ETS shall comply with the EU-wide rules taking into account cost-effectiveness of mitigation measures (-21 % reduction compared to 2005). It is therefore difficult to project actions which will be taken by individual installations to comply with the overall EU ETS reduction target, since this is a market-based instrument based on agreed total emission cap.

The EU-wide cap under the EU ETS is determined for all EU Member States and the three EEA EFTA States (Iceland, Norway and Liechtenstein) without reflecting a specific share for each Member State.
The allocation of allowances takes place through auctions and free allocation. The share of allowances auctioned on behalf of each Member State in each year is public and can be obtained from the relevant auction platforms.
However, free allocation is provided on the basis of EU-wide rules to installation operators within a certain limit. For each of the nearly 12.000 installations in the EU ETS, the allocation has been calculated based on the common rules. A breakdown of the amounts per Member State is not available.
It is therefore difficult to project actions which will be taken by individual installations to comply with the overall EU ETS reduction target, since this is a market-based instrument based on agreed total emission cap.
Commitments to reduce or limit the increase in emissions for EU members in non-ETS sector are based on the principle of solidarity. Economically developed countries, whose gross domestic product per capita is higher than the EU average, have committed to reduce emissions by up to 20% (the negative limit), while the less developed countries, including the Republic of Croatia committed to limit the expected increase of emissions up to 20% (the positive limit) relative to the verified emissions from the 2005th year. Positive limit for Croatia from sectors not covered by the emissions trading system is 11% compared to the verified emissions from the 2005th year. In this regard, for each year of the period 2013-2020, the amount of greenhouse gases emitted from sectors not covered by the emission trading scheme is limited to the amount of annual national alocation as determined by Decision 2013/162/EU and Decision 2013/634/EU.

Croatian installation operators and aircraft operator are connected to the EU ETS scheme from 1 January 2013. Participants in the EU ETS system can buy emission allowances by auction. The collected funds from the sale of emission allowances shall be paid to the Fund for Environmental Protection and Energy Efficiency. Air Protection Act provides that 95% of available funds (with the exception of 2014 and 2015 when it allocates 85% of funds) used for mitigation and adaptation to climate change.
Ministry of Environmental and Nature Protection made a Plan of usage financial resources received from the sale of emission allowances through auctions in the Republic of Croatia for the period from 2014 to 2016, which has been adopted. Measures under the Plan will be used for non-ETS sectors for the increasing of share of renewable energy, for increase of energy efficiency, to reduce emissions from road transport, for the waste management sector, for the activities within the framework of research and development and professional support and financing projects in developing countries.
In determining priority areas and measures for the use of the collected funds, a very important criterion is the cost-effectiveness of the use of available funds obtained from the sale of emission allowances through auctions, ie achieving the best possible efficiency measures to reduce greenhouse gas emissions and adaptation measures to climate change.

Emision reduction measures in period 2013-2017 Government has adoprted by the Decision on the adoption of the Plan for the protection of air, ozone layer and climate change mitigation in the Republic of Croatia for the 2013 – 2017 period, (OG No. 139/13).
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Also Croatia is in the process of development of its Low carbon Strategy that is planned to be adopted in 2015.

Question from: China at Monday, 29 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: base year

According to the BR1, Croatia has chosen 1990 as the base year for its emission reduction target as shown in Table 2(a); however, in Table 2(f), Croatia committed to limit the expected increase in emissions in relation to the verified emissions from 2005, instead of 1990. Clarification on its base year is needed from Croatia.

Answered by: Croatia at Friday, 28 November 2014

With accession to the EU in 2013, Croatia has taken a common European objective of reducing the greenhouse gas emission by 20% by 2020 compared to 1990.
The Climate and Energy Package sets a 20% GHG emission reduction target for EU-28 by 2020 compared to 1990. This is equivalent to -14% compared to 2005.

This effort is divided between EU ETS and non-ETS sectors as follows:
(a) 21% reduction in EU ETS sector emissions by 2020 compared to 2005; and
(b) the Effort Sharing Decision sets binding annual emissions allocations for each Member States for the sectors not covered by the EU ETS. This represents for the EU a reduction of 10% by 2020 compared to 2005 (limitations based on absolute targets at the level of each Member States). The Effort Sharing Decision mainly covers emissions from transportation, buildings, small businesses and services, agriculture and waste

The reason why 2005 year was taken as reference year is that from this year onward verified data from the instalations included in EU ETS are available. Also this contribut to greater transparency, accuracy related to fulfillment of the obligations as well as monitoring, reporting and verification.

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: missing data issues

1. Which estimation methods have proven as most suitable in your case, if data for a specific calculation period are missing, i.e. data on emissions, production levels, heat and electric output, etc?

Answered by: Croatia at Friday, 28 November 2014

Regarding energy sector, Croatia has the complete time-series from 1990 to 2012. Activity data are provided from national energy balance, emission factors which are used are in most sectors default ones. In energy sector, only in civil aviation subsector, linear extrapolation was used to estimate of share of domestic use of fuels in 1990. Detailed analysis can be found in NIR 2014 section 3.2.8.2., Methodological issues-Civil aviation (page 56).
If data are missing sectorial experts are making assumption and also reliability of data. Those experts are members of the Committee for inter-sectoral coordination for a national system for monitoring greenhouse gases that has been established by the Governmental decision in 2014 (OG 6/2014).

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: LULUCF GHG calculation

1. Could you provide us with detail steps for LULUCF GHG calculation (what is considered as forest land, how is growth rate calculated for different types of land etc...)?

Answered by: Croatia at Friday, 28 November 2014

Following definition of Forest land set by the IPCC (GPG 2003) and definition of forest set by national legislation, Croatia defined that Forest land in the national greenhouse gas inventory should be consisted of high forests, coppice forests and maquies and shrub forests.
Thresholds defined by Croatia for the purposes of Kyoto protocol reporting and forest management activity are in line with the definition of Forest land used for the UNFCCC reporting.
Detailed information on defining areas under each land use category within the LULUCF sector, as well as all other data and information relevant for the GHG estimations in this sector are presented in Croatian NIR 2014 (Chapters 7 and 11) and available at:

https://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8108.php

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Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: emission reduction goals

1. How do you set your emission reduction goals (do you use some type of software of expert judgment etc.) ad how do you follow up on these goals?

Answered by: Croatia at Friday, 28 November 2014

With accession to the EU in 2013, Croatia has taken a common European objective of reducing the greenhouse gas emission by 20% by 2020 compared to 1990. This common objective is divided into two parts, the first of which includes major sources of greenhouse gases which are liable to the European emissions trading system (EU ETS), and the other so-called non-ETS covers other, relatively smaller, distributed sources of emissions by energy, transport, industrial processes, agriculture and waste management sectors. A special area is a sector of land use, land-use change and forestry. The goal that was set for the EU ETS sector is to reduce emissions by 21% compared to 2005, while for the non-ETS sectors, the total reduction of 10% compared to 2005, but it is differently distributed in the EU countries.
Also EU has established policies and measures for all sectors such as energy efficiency, transport, agriculture, and renewables.
Based on these targets, Croatia has applied bottom-up and top-down simulation models which includes forecasts of main macro-economic variables and expected emission reduction technology developments, which are to some extent based on expert judgements. Simulation models project effects of policies, instruments and measures in the future for different scenarios.

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: All emissions and removals related to its quantified economy-wide emission reduction target
Title: key uncertainties and elaborate plans for recalculations and improvements related to GHG i

1. Can you identify key uncertainties and elaborate plans for recalculations and improvements related to GHG inventory in the sectors of waste management and transport?

Answered by: Croatia at Friday, 28 November 2014

Following the IPCC good practice guidance, Croatia undertakes a key category analysis using tier 1 and tier 2 level and trend methods and uncertainty analyisis using tier 1 and tier 2 approach which are reported in the NIR.
Key category analysis and uncertainty analysis provides the baseline for making plans on improvements. Priorities in our Improvement plan are consideration of the emission sources and sink which are the key categories with the highest combined uncertainty.
Details on planned improvements in transport and waste could be found in the chapter 10.3 of the NIR.
Inventory development process in general encompasses inventory planning, preparation and management and each of these components have to be periodically assessed and improved. Basis for planning of improvements to the inventory are: QA/QC programme, QA/QC plan, recommendations identified by Committee for inter-sectorial coordination for national system and recommendations identified by the expert review teams in the course of inventory review process. In continuation, recommendations from the latest ARR are addressed with indication of feasible timeline for their accomplishment (long-term indicates period which lasts more than 2 years in order to apply specific recommendation).
Recommendations for Transport sector:

- Road transportation
  - Use a tier 1 approach to estimate CO2 emissions from road transportation for all fuels (recommendation for NIR 2014)
- Other mobile
  - Report mobile fuel combustion (military) under other mobile (recommendation for NIR 2014)
  - If data are not available, use the notation key “IE” to report the emissions (recommendation for NIR 2014)

Recommendations for Waste sector:

- Sector overview
  - Strengthen QA/QC procedures to avoid errors and provide more detailed information on sector-specific QA/QC activities (recommendation for NIR 2015)
- Solid waste disposal on land (CH4)
  - Provide information on the type of waste disposed to solid waste disposal sites and ensure that all types of solid waste, including industrial waste, sludge and construction and demolition waste, disposed to solid waste disposal sites are considered in the emission estimation (recommendation for NIR 2015)
- Wastewater handling (CH4)
  - Provide more information on wastewater flows and treatment systems (Long-term goal)
  - Provide and explain the data used in the estimation to estimate CH4 emissions from industrial wastewater treatment (recommendation for NIR 2014)
- Waste incineration- add gases (N2O)

- Identify the technologies applied in the incineration of hazardous waste and estimate and report the associated N2O emissions (recommendation for NIR 2015)

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target
Title: rreducing emissions from agriculture

1. Do you have a plan, based on specific studies, for reducing emissions from agriculture? If such plan exists, please provide some examples of proposed mitigation measures.

Answered by: Croatia at Friday, 28 November 2014

Croatia has made Rural Development Plan which is in process of harmonization with the European Commission. This document contains measures for emissions reduction in agriculture sector related to lower consumption of fertilizers, usage of renewable energy sources and increasing energy efficiency.
The Plan for the Protection of the Air, the Ozone Layer and Climate Change Mitigation in the Republic of Croatia (OG 139/13) stipulates preparation of the Feasibility study for implementation of emission reduction measures in the Agriculture sector with the deadline in 2015 (measure MSP-4).
In the process of preparation Low carbon development strategy that is planned to be adopted in 2015 measures related to reduction emissions/ increasing removals in agriculture sector will be additionally assesed. Furtheremore, by an Action plan implementation and means of implementation will be set.

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: Progress towards the achievement of its quantified economy-wide emission reduction target
Title: national circumstances affecting GHG emissions and removals

1. To what extent changes in national circumstances affect GHG emissions and removals in your country and what are the ways to show that process in more transparent way in your NCs, Updated Biannual Reports and other documents?

Answered by: Croatia at Friday, 28 November 2014

National circumstances have the strong effect on GHG emissions and removals trend, particularly population, climate, economy and energy structure. In order to increase the transparency of effect of circumstances on emissions and removals

trends one could develop a set of characteristic indicators which connect drivers (national circumstances) and state (emissions and removals).

Question from: Bosnia and Herzegovina at Thursday, 25 September 2014
Category: All emissions and removals related to its quantified economy-wide emission reduction target
Title: data for share of nitrogen

1. What are your sources for activity data for share of nitrogen in different types of fertilizers?

Answered by: Croatia at Friday, 28 November 2014

All macronutrient (NPK) fertilisers are labeled with an NPK analysis based on the relative content of the chemical elements nitrogen (N), phosphorus (P), and potassium (K) (ie., NPK 10-20-20 contains 10%N, 20%P, 20%K). This allows for the N percentage (and thus N kg/yr) to be calculated for each NPK fertilizer separately. For the rest of the activity dataset, fertilizer manufacturers supplied the nitrogen percentage information. Additionaly, nutrient percentages in fertilizers is a publicly available information on the manufacturers website, brochures etc.