Assessment of Key National Allocation Plans for phase II of the EU Emissions Trading Scheme

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Introduction

WWF and Climate Action Network Europe present an assessment of 12 National Allocation Plans (NAPs) for Phase II of the European Emissions Trading Scheme (EU ETS): Bulgaria, Czech Republic, Finland, France, Germany, Hungary, Italy, Poland, Romania, Slovenia, Spain and United Kingdom. These countries' emissions cover over three quarters of overall EU-27 emissions[1], therefore the development of their NAPs is a key indicator for the future of EU emissions trends in the industry and power sectors. If NAPs are strict, representative of the covered sectors' contribution to climate change, and pursue a clear reduction in emissions, then the EU is on the right track towards complying with Kyoto commitments and achieving at least 30 per cent greenhouse gas reductions by 2020. If NAPs are weak, climate suffers and EU industry is stuck in the same old inefficient production pattern, neither achieving a competitive edge nor becoming more independent from fossil energy imports.

The assessment is not encouraging – clearly the Member States have disregarded the Commission's guidance. Caps of most NAPs are very weak and the "polluter pays" principle has not been respected. To name just a few of the major shortcomings: allowances are mostly allocated for free or based on benchmarks incentivising the most polluting technology (coal) and too many external credits can be used to comply with commitments without quality criteria for projects, undermining technological change in the EU.

WWF and CAN do not stand alone in its negative assessment. Deutsche Bank[2] and economists from the University of Cambridge[3] have analysed similar shortcomings: NAPs II will strongly lower the price of carbon, which disincentivises emissions reductions. The University of Cambridge report further states that the market could be flooded by projects credits.

WWF and CAN hope that the Commission will reject the underperforming NAPs and ensure that the EU ETS becomes what it is supposed to be: a cost efficient tool to significantly cut CO_2 emissions in the European Union.

[1] Of the EU-25 CO_2 equivalents 2004 overall emissions; Source: Annual European Community greenhouse gas inventory 1990–2004 and inventory report 2006 Submission to the UNFCCC Secretariat.
[2] Europe Utilities, 25 July 2006, Phase-2 NAPs under scrutiny, Mark-C Lewis, Richard Smith
[3] 27.9.2006, Emission projections 2008-2012 versus NAPs II1**,** Karsten Neuhoff, Federico Ferrario, Michael Grubb, University of Cambridge, *Available from www.climate-strategies.org*

Bulgaria (CAN/Agree.net analysis)
Cap for the energy sector is higher than the amount applied for (113%)!

As a new member state Bulgaria is obliged to prepare a NAP for 2007. This makes it impossible to estimate the development of the cap; however massive overallocation in the energy sector is a good hint that Bulgarian authorities will be using emissions trading to improve the playing-field for Bulgarian companies.

Massive overallocation but cap still in line with country's Kyoto target

The first NAP for Bulgaria (for 2007 only) was adopted on 2 November, 2006. The total NAP cap for this plan is 49.7 $MtCO_2$ allowances for the year 2007. To reach its Kyoto target, Bulgaria can emit 127.3 $MtCO_2e$. Figures published in 2005[4] project Bulgaria's actual emissions in 2005 to reach about 70 $MtCO_2e$, while for 2007 the projected actual emissions amount to roughly 80 $MtCO_2e$. Bulgaria's share of the EU ETS in reaching the target for 2007 is 61.5%.

For the consumer prices to stay down, the cap has to go up

Bulgaria's allocations were done from the bottom – up; using grandfathering and based on projections of installations' needs. The cap on allowances for the Bulgarian energy sector is higher than the amount applied for (113%)! The government justifies this by using the social argument of needing to keep consumer prices down. Despite the fact that projections of economic growth after EU accession dictates plans for increasing GHG emissions until 2012 - these are still below the Kyoto limit. Benchmarking is generally not used, except in cases of new entrants, although product-specific benchmarks are used.

NAP describes lengthy public consultations, while in reality there were hardly any

The public consultation procedure officially described in the NAP comprises the following:

- Information campaigns: Ministry of Regional Development and Public Works and Ministry of the Economy and Energy
- Seminars and training sessions
- Media articles
- Web sites of the Ministry of Environment and Water, Ministry of the Economy and Energy and the Ministry of Regional Development and Public Works

[4] http://www.moew.government.bg/recent_doc/international/climate/NAPCC_Final_English.doc

In practice, however, the procedure was only online for 20 days, but information was not sent out proactively to most environmental NGOs and no information was received by “Za Zemiata” about the seminars or any public hearing. There is also no available information on any comments received or incorporated, from these varied ‘consultations’.

Even business as usual developments are within Kyoto limits

In Bulgaria’s climate protection, some progress has been made in terms of renewables: preferential feed-in tariffs for renewables and compulsory grid connection for electricity producers from renewable energy sources are included. Apart from these positive aspects, Bulgarian energy policy is nuclear-oriented. Bulgaria still plans to decommission two reactor blocks at the Kozloduy nuclear power plant (as part of its EU accession conditions), but will build a new nuclear power plant at Belene. There are also plans for a new coal-fired power station at Maritza East 4.

Bulgaria’s business as usual position however still keeps its reductions within Kyoto limits, so incentives for serious emission reduction measures do not ensure sufficient motivation for policy improvement.

Czech Republic (CAN/Agree.net analysis)
Made by Czech Cheating Ltd.

The Czech Environment and Industry Ministries' draft allocation plan for the period 2008 - 2012 proposes a sharp increase in carbon dioxide emissions from the country's coal power stations, metallurgy, chemical plants and other industries.

Massive increases in pollution levels

Emissions have maintained at about 91 $MtCO_2$/yr for several years, and decreased to 82.5 $MtCO_2$ in 2005 - the first year of EU ETS. The proposal of the ministries would allow industry however to produce almost 102 $MtCO_2$ annually, starting from 2008. The draft NAP even proposes an increase in pollution against the current National Allocation Plan that is in place for the first trading phase. In this plan, polluters were allowed to produce 97.5 $MtCO_2$/yr. The increase against last year's 82 $MtCO_2$ to the planned 101.9 $MtCO_2$ would be more than the total emissions of Estonia or Slovenia.

Czech Republic chose the 'free rider' role

With 12 tons of emissions per capita, the Czech Republic is one of the worst CO_2 polluters in the European Union. Yet, the underlying assumption for massive increase of allocation in the proposed second allocation plan is presented as business as usual. From the point of fulfilling our Kyoto target, this approach might be perfectly justifiable – the country is now about 25 % below the target. From an environmental point of view, there is certainly no justification for such an approach. But the presented BAU scenarios are nothing but a mask for the hidden agenda: Czech Republic chose the free rider role.

This is due to the fact that one big industry indicated publicly that it will use the profits from sold excess quotas for environmental investments. Apart from this statement, the government has no indication or any guarantee that these investments will ever take place and exaggerates the expectation that other companies will follow suit. No rules or criteria exist, no contract was signed. With this misguided hope in mind Czech industry is heavily subsidised with allowances that cheat the ETS scheme.

One government official unexpectedly pointed out the simplicity of the premise of the "Czech Emissions Cheating Scheme'' in a national daily newspaper, when he explained: "increase of allocation does not lead to increase of emissions". For sure Czech businesses do not need that many allowances to cover their emissions, but why stop them from making

windfall profits? The reality that the allowances from inflated Czech caps will lead to an increase of emissions elsewhere is obviously not within the horizon of the NAP drafting team.

Overallocation topped with excessive use of external credits

On national level, up to 33% from the total allocation for five years (e.g. 509.5 $MtCO_2$) can be covered by Kyoto flexible mechanisms credits. Not only do Czech companies receive a generous amount of free allowances, but they also receive an open invitation to use external credits. The Czech Republic also fails to provide any methodology or criteria that would ensure environmental quality of external credits used by companies for EU ETS compliance.

Auctioning only for unused NER

The Czech NAP does not plan for any auctioning of the allowances. Only the unused allowances from the new entrants reserve may be auctioned. There is currently no proposal on how the incomes gained from auctioning should be spent.

No benchmarking and pure grandfathering

Benchmarking is not used for allocation in any sector. Allocation is made through pure grandfathering based on historical emissions in 1999-2001 (average of two highest years) and projections for 2008-2012. Emissions of 2005 are taken into account: if the allocation formula leads to a situation in which the installation would get less allowances than were its real emissions in 2005, then the"individual correction rule" is applied: installation gets allowances according to its 2005 emissions plus 5% more.

Unseen delay in NAPII publishing

The Czech Republic has committed to an unprecedented delay in publishing its first draft of NAPII. The proposal was the last to be presented to the public of all EU Member States and public participation lasted only 1 month. The allocation plan was published online, accompanied by a press release. A day before official release of NAP both industry and NGO representatives (though separately) were invited for a presentation of allocation plan by the Energy and Industry ministries. Further consultations were scheduled to take place in special committees which include NGO representatives. Since then this committee has met only once and one more meeting is scheduled before the end of the consultation period.

Ambitious national targets are not reflected in NAPII

In March 2004, the Czech government approved both a new energy policy and climate change programme. None of these programmes assume an increase of domestic GHG emissions. On the contrary, a decrease of emissions equivalent to 18% between 2000-2010 is expected in the National Climate Change Programme, and a 13% decrease by the National Energy Policy. According to the National Climate Change Programme, the overall target to be met is a "decrease in emissions of CO2 per capita by 30% in the years 2000-2020 with this trend continuing on to 2030". The Fourth National Communication to UNFCCC (2005) assumes that the Czech Republic will be 26% below its Kyoto target in 2010 and minimum 38% below in 2020. Projections used for the National Communication also do not assume any GHG emissions growth.

Finland (WWF analysis)
The good guys get bad

As the country that holds the current EU Presidency, Finland should be making strong commitments tackling climate change through the Emission Trading Scheme, setting an example for other member States. Its plan for Phase 2 has the potential to comply but a number of skeletons lurk in the closet: no use of auctioning, accounting for emissions reductions from a nuclear power plant that will not be completed until the end of Phase 2, and wide use of project credits.

A cap that will miss the target

Finland's NAP I covered 595[5] installations with an overall cap set at 134 $MtCO_2$/yr and an additional 2.5 $MtCO_2$ reserve for new entrants. During Phase 1, annual average allocation was at 44.7 $MtCO_2$. When compared to the verified emissions in 2005 of 33.1 $MtCO_2$, a massive overallocation of 26% is evident. This is mainly due to (i) the high percentage of hydropower in Finnish power generation, (ii) an increase in electricity imports from Sweden and Norway, and (iii) a mild winter.

Some emission reductions have been achieved, through shifting fuels from peat to wood and from coal to gas and through new investments in mineral sector. Just in the mineral sector alone, emissions have lowered by 14%. Taking these reductions into account, the proposed NAP II cap of 39.6 $MtCO_2$/yr - although 13% lower than that in Phase I - lacks ambition and commitment towards tackling climate change.

Under the burden sharing agreement, Finland needs to maintain its emissions at 1990 level, i.e., 71.1 $MtCO_2$/yr, over the period of 2008-2012. Emissions in 2005 tallied close to the country's emissions target, but long-term trends are showing rising emissions, particularly in the ETS sector. If Finland is to maintain or even reduce its emissions, it looks like it will have to put up a good fight.

No auctioning, yet

Finland has not planned to use any auctioning to allocate allowances during Phase II of the ETS though all Member States are under pressure from the Commission and stakeholders across Europe to make use of this option up to the maximum extent possible, i.e. 10%. Auctioning is an effective method to set the price on carbon and to make big polluters pay more. Furthermore, it generates revenues that can be used to finance in environmentally

[5] Source: EEA report No 9/2006: "Greenhouse gas emission trends and projections in Europe 2006"

friendly projects that would further encourage emissions reductions, and in covering the administrative costs of the ETS.

New entrants: biomass and peat but still no auctioning

A reserve of 7 $MtCO_2$ or 3.5% of the total cap has been set aside for new entrants. They will be issued for free on a "first come, first served" basis. Should the reserve run out, new entrants would have to buy the allowances from the market. Allowances are based on fuel-specific benchmarks. Installations with solid fuels, i.e. biomass and peat, will receive more allowances than those that are liquid- or gas-fired. Between the two solid fuels, peat is heavily subsidised at the expense of biomass, contrary to the need to encourage the use of the best available technology. This is mainly designed with the new installations in the north of the country in mind, where peat is an abundant resource which is technically renewable but takes thousands of years to be renewed.

No need to reduce emissions: just build nuclear power plants and buy project credits

The ETS sector cap is 39.6 $MtCO_2$/yr whilst the projected emissions are around 48.3 $MtCO_2$/yr. Therefore, the overall reduction effort of the ETS sectors is 8.7MtCO2/yr. Industries will be allowed to purchase around 65%[6] of that reduction commitment through JI/CDM project units, corresponding to almost 6 $MtCO_2$/yr, thus setting the real amount of emissions reduction to only 2.7 $MtCO_2$/yr, which is hardly a serious effort. Against the "polluter pays" principle, coal-fired power plants sector will be able to buy a greater percentage (35% of their allocations) of projects units compared to other sub-sectors, removing any incentive to move to lower-emitting technologies.

In order to meet its global emissions reduction target, Finland also plans to construct a nuclear power plant. Apart from the environmental hazards posed by the use of nuclear power, additionally, the new plant will not enter into production until 2011-12 but it is already being used to account for an annual reduction of 4.6 $MtCO_2$/yr during Phase II even before it is completed.

[6] Sub-category A (industrial processes) allowances = 13.5 $MtCO_2$/yr; amount that can be achieved, through external credits = 1.66 $MtCO_2$/yr
Sub-category B (industrial energy production) = 8.3 $MtCO_2$/yr; credits =1.08 $MtCO_2$/yr
Sub-category C (district heat and co-generation installations) = 1_2.7 $MtCO_2$/yr; credits =1.85 $MtCO_2$/yr
Sub-category D (condensing power production): 3.3 $MtCO_2$/yr; credits = 1.17 $MtCO_2$/yr
Total achievable through external credits = 5.8 $MtCO_2$/yr, which corresponds to ca. 65% of the overall reduction effort of 8.7 $MtCO_2$/yr.

France (WWF analysis)
Zero change in caps, zero ambition in NAP

Not only is the cap of Phase II 0.1% higher than that of Phase I, but massive overallocation, exaggerated emissions projections and the inclusion of nitrous oxides (N_2O) based on a weak emission factor, effectively remove all ambition from France's NAP II.

Weak cap and overallocation

France's cap of Phase I of the ETS was about 150.4[7] $MtCO_2$/yr. Verified emissions in 2005 covered 1,075 installations and were 13% below the cap. When only the installations that participated in Phase I are considered, France's cap for Phase II is set at 150.6 $MtCO_2$, which is 0.1% higher than that for Phase I. Additional installations and a unilateral opt-in of nitrous oxide (N_2O) installations will be included in Phase II, which make the final cap 155.6 $MtCO_2$.

Exaggerated emissions projections

The cap has been decided using emissions projections based on projected growth rates of industries and taking into account actual emissions during 2004-5. Growth rates used to define the cap were greatly exaggerated and were one to eighteen times greater than those published by the National Institute for Statistics and Economic Studies (INSEE). By taking into account the emissions of 2004-5 in the design of its cap, Phase II favours installations that emitted the most during Phase I and disincentivises emissions reductions.

Banking

France and Poland are the only countries that allow the banking of unused allowances from Phase I to Phase II. The massive overallocation in Phase I means that many excess allowances will be available for Phase II, completely removing any incentives for emissions reductions.

Unilateral opt-in of nitrous oxides

[7] Takes into account adjustments made after the publication of NAP I. At publication, cap of Phase I was at 156.5 $MtCO_2$/yr

During Phase II, France will be the first country to include N_2O emissions from the chemical industry into the EU ETS. During the period of 1990-2004, France's N_2O emissions have already been reduced by 24%. Therefore, it is essential that the ETS delivers N_2O

emissions reductions that will exceed those that are achieved through existing policies and measures. However, allowances will be allocated based on an emissions factor of 2.47 kg N_2O per tonne of nitrous acid produced, which is far more generous than the benchmark of 1 kg N_2O per tonne of nitrous acid produced, estimated by The European Fertilizer Manufacturing Association, based on best available technology. In addition, the margin of uncertainty in the monitoring of N_2O ranges between 8 and 12%, bringing into question the reliability and the environmental effectiveness of including N_2O into Phase II of the EU ETS.

Poor public consultation

The public consultation process did not improve greatly from that of the NAP in Phase I. Consultation was conducted uniquely via the internet. No effort was made to incite public participation. A complicated questionnaire was the only interface used for receiving comments, and no additional information was provided to explain what is at stake. Overall, 80% of the responses of the questionnaire were submitted by individuals, demonstrating the interest of the civil society in the subject. The public has demanded for a 10% reduction in the cap and the use of auctioning to allocate 10% of the allowances. However, neither of these requests has been included in the final NAP.

Germany (WWF analysis)
A paradise for climate killers - new coal power stations welcome

A weak cap, the lack of auctioning and borrowing from future periods will shift the burden of emissions reductions in Germany to non-ETS sectors, thus increasing the cost of reductions, and putting Germany's reduction targets in jeopardy.

Weak cap and overallocation

Germany's cap for Phase I of the ETS was set at 499 $MtCO_2$. Verified emissions in 2005 covered 1,842 installations, and amounted to only 95% of the cap designated for Phase I, indicating an overallocation of 5%, or 25 $MtCO_2$. Germany's cap for Phase II is at 471 $MtCO_2$ when only the installations that participated in Phase I are considered. Additional sectors will be included in Phase II, which adds 11 $MtCO_2$ to the final cap, making it 482 $MtCO_2$. Taking into account the real emission in 2005 of 485 $MtCO_2$, the cap for Phase II is merely 3 $MtCO_2$, or 0.6% lower than that of Phase I.

Germany still needs to reduce their emissions by around 30 $MtCO_2$, in order to meet their Kyoto target by 2012. The weak cap set for Phase II means that 90% of the emissions reductions will have to be achieved by installations and sectors not covered by the EU ETS. Non-ETS sectors, including households, transportation and services, will have to reduce their emissions massively - by 27-38 $MtCO_2$ over the next six years, which is highly improbable in view of current trends, policies and measures that are in place.

Due to pressure from the European Commission, the German Minister of Environment tabled a proposal on 24 November, 2006 to cap the emissions of the ETS sector at 465 $MtCO_2$/yr. If this would be accepted by the German government, the ETS sector would at least contribute its fair share of the reduction requirements by the Kyoto Protocol.

No auctioning

Germany's NAP contains no provision for auctioning. Free allocations allow large emitters to continue to pollute more without paying for it. Under Phase I of the EU ETS, electricity prices rose sharply across the country in 2005, partly because the cost of the allowances was included in the price of electricity. However, since the allowances were allocated for free, the increase in electricity prices immediately translated into windfall profits for power companies. Together, the five largest power producers in the country – E.ON, RWE, Vattenfall Europe, EnBW and STEAG – attain windfall profits of an estimated 31 to 64 billion Euro over the first two phases of the EU ETS (eight years).

14 year free ride for new entrants

As in Phase I, power plants built during Phase II are guaranteed a compliance factor "one" for the following 14 years. This level of compliance means that these installations will have no obligation to reduce emissions or improve their efficiency during this timeframe.

Borrowing against the Emissions Trading Directive

At the same time, Germany has a banking provision which allows a state-owned bank to replenish the New Entrants Reserve (NER) from the open market. The bank will then be compensated for its expenses with allowances from the following phase, i.e., allowances will be borrowed from Phase III to replenish the NER in Phase II – a provision that is expressly prohibited under the Emissions Trading Directive. Apart from constituting a breach in the directive, borrowing also means that Germany will have to reduce 20-30 $MtCO_2$ as a mortgage from Phase II, before one single tonne of CO_2 can be reduced in Phase III, making it even less probable that the country will be able to meet its long-term reduction targets.

No incentives for low-emitting fuels and technologies

New entrants in the power sector will be allocated allowances based on fuel-specific benchmarks. Benchmarks range from 365 to 750 g CO_2/kWh, with high-emitting coal installations being given twice as many allowances as low-emitting gas installations for equivalent production amounts. As a result, there are no incentives to switch from high-emitting to low-emitting fuels and technologies.

Hungary (CAN/Agree.net analysis)
ETS sectors rewarded 30 million EUR annual subsidies in the first phase

In Hungary a stricter cap is needed for 2008-2012 to achieve the aim of the ETS, and to establish a new emission reduction pathway for Hungary, avoiding the conflict between real emissions and expected strict UNFCCC post-2012 targets in the near future.

Overallocation decreases hot-air reserve

The proposed amount of total allowances has been set to 30.84 $MtCO_2$/year for the second period of the EU ETS. This amount is a little below the cap set in NAP I, which is 31.27 Mt CO_2/year. The decrease takes 0.42 MtCO2/year (-1.35%). The certified emission of the ETS sector was 27.46 $MtCO_2$ in 2005, which is only 87.82% of the yearly amount of total allowances in NAP I.

NGO estimation is that the proposed amount of allowances is too high. The affected Hungarian companies generally will have a huge surplus which can be sold in the second period. Estimation is that the ETS sector received approximately 30.3 million euros in subsidy yearly in the first period of EU ETS, and this is the opposite of the original aim of the scheme. The ETS sector covers 35% of total CO_2eq-emission, consequently the amount of overallocation decreases hot-air reserve, and through it the Hungarian government loses income from Assigned Amount Units (AAUs).

No Kyoto force on emission reduction

Hungarian base year net emissions are 120.4 $MtCO_{2eq}$/year (base year: 1985-1987). The Kyoto target is 113.1 $MtCO_{2eq}$/year. The total net emission was 78.4 $MtCO_{2eq}$ in 2004, which was 30.7% below the target that means no Kyoto force on emission reduction. The share of ETS sector is approximately 35% of total GHG emission.

Hungary uses Business As Usual (BAU) emission prediction studies and certified emissions data of the year 2005 for determining total amount of allowances. In the case of NAPI the predictive study suggested higher certified emissions than actually occurred in 2005. The BAU emission pathway that was predicted for the 2nd phase seems to contradict the NAP I prediction (from 2004), especially because it includes stagnating period for the years 2005-2008, and after that a sudden increase. The total amount of allowances is 1% above the BAU prediction, thus clearly showing the Hungarian government's policy of subsidising ETS-sectors instead of making real emission reductions.

Low external credit plans

The total external credit share rate is 2.63% which comes from only JIs. The amount of JI-reserve is equal to the sum of baseline Emissions Reduction Unit (ERU) amount of each approved JI project which meant the reserve value is determined on installation level. If ERU will be issued for projects, then the same amount of EU Allowances (EUA) is cancelled. There is no purchasing program on external credit use, the policy being that the project should be beneficial enough for the investors.

The Hungarian NAP II showcase: auctioning

The Hungarian NAP II proposal plans a 5% auctioning rate, which takes yearly 1,54 MtCO2. The revenues from the auctioning will support:
- renewable energy sources (RES) heat production, including switching into high efficient RES Combined Heat and Power (CHP) from traditional condensation electricity producing;
- the wind energy electricity grid integration solutions;
- investments of solar and geothermal energy use for producing electricity;
- insulation of buildings, and energy efficient investments;
- heat producing from communal waste;
- modernisation of district heating systems;
- more precise heat measuring system development;
- research and development on emission reduction.

Allocation based on grandfathering and benchmarking

The allocation process has two steps. Firstly the total sectoral amount is determined; secondly the amount is shared between the affected installations of each sector. The share rate based on “base date” means that determining the base date is the key for sectoral allocation. The base date calculation method was agreed by the sectoral representatives during the preparation phase earlier this year. The calculation method has the following principles: installations with old technology should not get benefits compared to near to Best Available Technology (BAT) installations.

Prediction studies accessible to public

The cap was determined using emission prediction studies as it is mentioned above. This study is an appendix of the NAP II proposal public debate document. The public participation took 30 days, the deadline is 20th November, 2006. Some events are expected on NAP II, managed mainly by external companies. The comments will be

collected by the Ministry of Environment, and after the closure they will be available on the website of the Ministry.

Italy (WWF analysis)
The rise and fall of ambitions: How a strong NAP turned weak

At the draft presentation the Italian NAP looked like one of the most ambitious among the countries with the highest emissions. However, during the process of the NAP's finalisation it has changed direction and the cap has turned out to be weak. In addition, some 20 $MtCO_2$ per year not allocated to the energy sector will be bought on the market by operators but, in the end, paid by consumers.

No overallocation but still far from the target

During Phase I of EU ETS the Italian average cap was set at 223[8] $MtCO_2$/yr covering 950 installations[9]. There was no overallocation since verified emissions amounted to 104% of the average annual number of allowances allocated in Phase I (215.8 $MtCO_2$[10]). Italy, however, is not on track to meet its Kyoto target (a reduction of 6.5% in greenhouse gas emissions under the "burden-sharing" agreement). In fact, Italy's global greenhouse gas emissions increased by 12.1% from 1990 to 2004, thus setting the reduction commitment to meet the 2008-2012 Kyoto target to a challenging -19% from actual emissions.

A weaker cap and flex mechanisms

According to the latest news, the cap for Phase II has been reviewed upwards from the initially foreseen 194 $MtCO_2$/yr to 209 $MtCO_2$/yr, including the reserve for new entrants. Being this cap approved, it will be 6% lower than the one for Phase I, but many the installations of the energy sector are still not included, thanks to the CIP6 convention. The principle behind the NAP2 draft was to allocate to the ETS sectors a share of reduction, in line with Kyoto commitments, proportional to their responsibility (38% of total emission in 2005). In 2005 the distance to the Kyoto target amounted to 94 $MtCO_2$. This reviewing of the cap would set the contribution of the traded sectors to the Kyoto target to 14%, instead of the 38% that should be. In addition to this there is a severe lack of well-drafted policies for reductions in the sectors not included in EU ETS. Lastly, a huge share of reduction corresponding to a maximum of 37%, will be done through the use of flexible mechanisms and absorption sinks.

[8] CITL data, including new entrants reserve and auctioning, http://ec.europa.eu/environment/climat/emission/pdf/citl_pr.pdf
[9] Source: EEA report No 9/2006: "Greenhouse gas emission trends and projections in Europe 2006"
[10] Source: presentation from APAT, Agenzia per la Protezione dell'Ambiente e per i servizi Tecnici (Italian Environmental Protection Agency), excluding the reserve for new entrants.

Reserved auctioning

The Italian NAP2 sets apart 12 $MtCO_2$ for auctioning. Nevertheless this not all good news because the auction is reserved for coal fired plants, presumably at prices lower than the market ones. It is desirable that auctioning is increased to the maximum extent possible, namely 10%, and that every operator is guaranteed with the same chances in order to make the whole process as cost-effective as possible as well as to incentivise reductions by the more polluting sectors.

The "untouchables" of the CIP6

Many installations in the electricity sector benefit from the protection of an Italian legislative shield provided under the CIP6 convention. The CIP6 is a sort of long-term power purchasing agreement between independent producers and the government, signed before the liberalisation of the electricity market. This price agreement with the government allows power companies to pass on extra costs to the public if any changes influence the agreed amount of income for their installations, through a dedicated voice in the electricity bill.
For Phase II it is likely that these operators will be almost excluded from the free initial allocation, forcing them to buy the allowances from the market, thus provoking two main effects. First, the consumers would directly pay the emission cost (through a specific component in the electricity bill called A3), on behalf of the polluter which reduce incentive for emission reductions. Second, not allocating allowances to these operators a considerable amount of allowances, some 25 $MtCO_2$, would then be made available to other installations thus reducing their incentive for emission reductions.
It is strongly desirable that this allocation will be examined by the Commission under the State Aid regulations.

Poland (WWF analysis)
Dream a little dream of growth: Europe's most ridiculous cap

Poland's NAP II continues to reward large polluters by setting a weak cap, and making use of fuel-specific benchmarking and over-generous emissions projections.

Weak cap and overallocation

Poland's cap for Phase I of the ETS was set at 239.1 $MtCO_2$. Verification of 2005 emissions is still underway, but published data, which covers at least 90% of installations, indicates that emissions amounted to only 88% of the cap designated for Phase I, which is equivalent to an overallocation of 12%.

Poland's cap for Phase II of the ETS is set at 279.6 $MtCO_2$, a 17% increase from Phase I, but still puts the country on track to meet its Kyoto target.

In 2003, the Polish government adopted a climate policy, which provided for a strategic objective of emissions reductions of 40% by 2020 when compared to the base year of 1988. The average annual national CO_2 emissions cap that is proposed in the NAP for Phase II is 36% above the planned objective. If the climate policy objective is to be achieved, the cap of Phase II needs to be reduced by 40%.

SO_2 emission limits and fuel-specific benchmarking favour high-emitting installations

Poland's power sector will be given sufficient free allowances to cover all of its emissions during Phase II. Allocation will be based on sulphur dioxide (SO_2) emissions. Installations with SO_2 removal facilities receive noticeably more allowances than installations with no flue gas desulphurization facilities. Allocations are distributed based on fuel-specific benchmarks, with high-emitting fuels such as coal and lignite receiving more allowances than low-emitting fuels such as gas. This removes any incentive to encourage the change from high-emitting fuels to fuels that emit less CO_2.

Over generous emissions projections

The cap level for Phase II has been decided based on emissions projections. However, projections were only available for the energy sector and not for other sectors or trades. This leads to unequal treatment of the different sectors and makes it impossible to verify the credibility of the projections. Where there are projections, they tend to be over generous

and optimistic with regards to production. The NAP for Phase II projects a 50% increase in electricity production for the period 2005-2015. However, over the last ten years, the consumption of primary energy carriers has actually decreased by almost 8%, while maintaining a steady level of consumption during the period 2000-2004. In fact, an increase in electricity production on such a large scale is not probable, as Poland lacks the ability to support the construction of the necessary facilities.

Public – or industry – consultation

Poland's NAP was subject to a public consultation period of three weeks, mostly involving sectoral associations, chambers of commerce and scientific organisations but also NGOs. Approximately 200 letters were received, mainly from installations that were concerned about not receiving sufficient allowances for 2008-2012. Some of these comments were taken into account. Other comments have led to the increase of the New Entrants Reserve, and an increase of 10 $MtCO_2$ to the cap. The NGOs' demand of reducing the cap by 30 $MtCO_2$ was not taken into account.

Romania (CAN/Agree.net analysis)
Special reserve for Joint Implementation

As a future member state of European Union, Romania has to submit two National Allocation Plans, first one for 2007 (NAP I) and the second one (NAP II) for 2008 - 2012. Both of these have been submitted in the same document.

Marginal reduction from phase 1 to phase 2

According to the NAPs, the number of allowances allocated for 2007 is 80.34 $MtCO_2$ and for 2008-2012 is 399.43 $MtCO_2$ (equivalent to 79.88$MtCO_2$/yr). These numbers do not include the new entrant reserves. The estimated difference between the 1st phase and the 2nd is 0.46 $MtCO_2$, which means about a 0.57% reduction.

Far below Kyoto, far from emission reduction stimulant

Under the Kyoto Protocol, Romania has committed to reduce GHG emissions by 8% in the 2008-2012 as compared to 1989 emissions. This accounts 171.103 MtCO2e. Romania will definitely meet its obligations under the Kyoto Protocol, with a reduction mainly achieved due to the industry production decline during the 1990's and also to an economic reorganisation in the transition period to a market economy. Even Business As Usual (BAU) and intensive growth scenarios do not bring the country close to failure to reach its Kyoto target.

Reserve for indirect JI projects and new entrants reserve above the cap

Romania has created a reserve of indirect JI projects in order to avoid double counting. These are JI projects implemented by installations outside the ETS, but which have an indirect effect on energy sector emissions. It was decided to establish a certain limit to which the installations could use the emission reductions resulting from JI projects. This limit applies in cases where operators would wish to invest in these types of projects in other countries. The limit is estimated to be about 10% of the total allocated volume to installations for 2007, respectively for 2008-2012. New entrant reserves for 2007 represent 1.2% of the national cap, and for the 2008-2012 period represent 11.5%.

Auction only for unused new entrant reserves

Romania has no intention of auctioning allowances for 2007, except for the new entrant reserves allowances, which remain unused at the end of the year. In the same way, at the end of 2008-2012 period, these allowances (not used from the new entrant reserves) will be auctioned, together with those allowances from the reserve in order to avoid a double accounting in case of indirect JI projects.

Limited incentives for efficient and clean technology

Romania granted free allowances for GHG emissions on a grandfathering basis, according to which the volume of the allowances corresponding to each installation is based on the share of the installation emissions in the relevant year, out of the total sector emissions. National cap for GHG emission allowances was based on a "top-down" approach combining the historic method with the forecast method. The considered scenario was BAU with implementation of the existing measures for emissions reduction.

Benchmarking is not used both for 2007 and for 2008-2012 period, but since grandfathering is used without benchmarking, correction factors are introduced, in order to differentiate between various kinds of technologies, compensating the reduced emissions. The allocation of allowances was made on an installation-based methodology, after these emission allowances have been distributed on a sector level.

If the installation is eligible, it can receive a bonus represented by a number of allowances for combined heat and power production or by allowances for early actions. The bonus from combined heat and power production allowances is granted because Romania aims to stimulate energy efficiency and to use clean technologies by implementing the ETS scheme. This bonus is granted to the installations with 65% of its global efficiency, according to the 2004/8/CE Directive. Romania supports the operators which invested voluntarily in emissions reduction measures in 1998-2002, through additional granting of allowances as bonuses.

Transparency is not the keyword

There was no consultation with stakeholders during the elaboration of the NAP, and only at the end of the process was two seminars organised by the Ministry of Environment and Water Management (MEWM) with the subject "Emissions monitoring and reporting". After elaboration of the NAP, the first draft was opened for public hearings for 30 days on the MEWA web page. The comments are supposed to be registered and analysed by a joint MEWM and NEPA team and the summaries of the comments will be posted on the same page. For the time being the MEWM is redrafting the second version after public consultation period.

Existing climate policy in spite of the Kyoto overreaching

Presently in Romania, there is a strategy and an action plan for climate change mitigation. Many of the climate and energy strategies supported the improvement of energy efficiency starting from the production to the final user; and promotion of renewable energy sources by using the Kyoto flexible mechanisms for effective reduction of GHG emissions.

Slovenia (CAN/Agree.net analysis)
Industry is overacting, while energy is resting

Slovenia's second NAP shows slight improvements over the first, however, the divergence between energy and industry sector remains. While the former is receiving generous amounts of allowances, the latter is more and more being constrained.

After slight overallocation, a slight reduction in cap

In the first NAP, Slovenia allocated less allowances each year. The average annual cap of NAPI is 8.76 $MtCO_2$, but the cap for 2005 is 9.14 $MtCO_2$. After certifying 8.72 $MtCO_2$ in 2005, it was clear that in 2005 there was a slight overallocation (0.42 $MtCO_2$). If we compare the 2005 emissions to the 2005 cap of NAPI, we see that emitted CO2 represents 95.43 % of allocated CO2. The annual cap of NAP II is 8.29 MtCO2. In spite of the marginality of the difference in absolute terms (0.47 $MtCO_2$), the relative difference is not negligible: 5.4% less than in the first phase.

ETS sector working for transport sector

Slovenia's Kyoto target is 18.587 MtCO2e annually. The share of the NAPII in reaching the target is 41.6%. Trading sectors are easier to supervise as opposed to transport emissions; hence the trading sectors are capped, while there are no serious measures to limit growth in the transport sector. There are serious doubts that Slovenia will reach its Kyoto target, even when the sinks are fully used. Due to the fact that the transport sector is not doing enough, the ETS sector's contribution to reaching the Kyoto target should be increased.

Amount of total external credits unknown

An external credit of 17.8% of installation allocation can be used, plus the total difference between realised process emissions and allocated allowances for process emissions. In such a way the final amount of external credits cannot be determined beforehand.

No auctioning, a bit of benchmarking and a lot of grandfathering

Slovenia decided, to the regret of NGOs, not to auction any allowances. When forming the total cap for NAPII a combination of top-down and bottom-up approaches were used. Also for the allocation of allowances a mixed approach was used: a mixture of grandfathering

and benchmarking. For the energy sector, in the first three years of the second period only grandfathering is used, while in 2011 and 2012 benchmarking is used (30% and 50% respectively). A combination of both methods is used also for the industry sector. Average annual emissions from 2002-2005 are adapted by benchmark factors (there are two variations to this method). Factors vary from 0.639 to 1, depending on the CO2 intensity of the fuel and use of Best Available Technology (BAT).

Private meetings constituted public consultation

After delaying the announcement of the first draft of NAPII until September, the document was finally released online for public consultation which lasted 5 weeks. Prior to the release of the first draft there were two public meetings, and a lot of private meetings mainly for and with installation managers. Public consultation resulted in 15 comments received, one being from NGOs. The NGO comments were not incorporated into the second draft, while some of the industry comments resulted in some corrections.

Transport and energy use endanger reaching the Kyoto target

Slovenia's first main problem in the field of climate protection is transit transport. As Slovenia cannot control or limit it, other sectors receive the burden of transport emissions. Therefore trading sectors are relatively 'overburdened', while transport emissions endanger the possibility of reaching the Kyoto target.

The second crucial problem is swift growth in energy use, resulting in very serious debates on the construction of a new block of NPP and other energy production facilities, varying from lignite-based to gas-based. Energy efficiency is not part of the debate, meaning that in the future energy emissions will grow rather than reduce, probably causing even more pressure on the trading sectors and industry in general.

Spain (WWF analysis)
Cutting Spanish emissions without cutting emissions in Spain

Apart from a tight cap, Spain's NAP II leaves much to be desired. Excessive use of project credits, lack of auctioning, use of emissions projections and benchmarks that are overly generous nearly obliterate any incentives for emissions reductions.

Tight cap and no overallocation

Spain's cap for the Phase II of the EU ETS is set at 152.7 $MtCO_2$, 16% lower than its cap in Phase I, but still putting the country in line with its Kyoto target. Verified emissions in 2005 exceeded the actual allowances allocated by 13%. Spain is one of the few countries which did not overallocate during Phase I.

Excessive use of project credits

Up to 50% of the country's allowances can be covered by credit imports from flexible mechanisms. In the case of project credits purchased by the government, priority will be given to energy efficiency and renewable energy projects, but how much the government's total purchases will be made up of these projects has not been specified. In the case of project credits purchased by private companies, there are no requirements on the quality of projects.

Such a large and indiscriminate use of project credits risks putting domestic action on the backburner, against the Commission's guidelines issued in 2005. It is likely to disincentivise the development of energy efficiency and clean technologies in industries and could provide a perverse incentive, in which companies sell their free allowances at the higher market price and purchase project credits at the lower price to meet their emissions needs.

Over-generous benchmarks and emissions projections

A large part of the emissions reductions will come from the power sector. Allowances will be allocated based on technology-specific benchmarks which favour coal over lower emitting technologies. In addition, compared to other countries, Spain's coal benchmark (0.92 tCO_2/MWh) is unusually generous (e.g., Germany's coal benchmark is set at 0.75-0.80 tCO_2/MWh).

Other industrial sectors will receive allocations based on product-specific benchmarks. However, they will be receiving allocations that will exceed their emissions projections. In particular, the refining industry will receive allocations that amount to an increase of 25.6% over their 1990 emissions, cement will receive an increase of 37%, and paper will receive an increase of 38.8%.

Incentives for co-generation removed

All the incentives that were in place in Phase I to encourage the deployment of co-generation as an energy-efficient technology have been completely removed from the NAP of Phase II. Allocations for co-generation installations have been reduced from 23.1 $MtCO_2$ in Phase I to 17.2 $MtCO_2$, and new installations no longer receive preferential treatment.

United Kingdom (WWF analysis)
Going once, going twice, sold: buying the idea of auctioning

The UK as a self-styled leader in climate change has a responsibility to step up to the mark and make bold commitments for Phase II of the ETS. The current NAP – though it has some positive aspects, for example, it has committed to auction 7% of the allowances – still leaves room for improvement.

No overallocation in Phase I, passable cap in Phase II

The UK's cap for Phase I of the ETS was set at 245.3 $MtCO_2$ per year. Verified emissions in 2005 covered 768 installations and amounted to 116% of the average annual number of allowances allocated in Phase I. The UK is therefore one of the few countries which did not overallocate during Phase I. However, this is primarily due to the fact that, in 2005, the power sector went back to burning more coal, which is a fuel that emits a large amount of CO_2 for each unit of power that it produces. Other energy intensive industries received more allocations than they actually emitted during the course of the year.

When only the installations that participated in Phase I are considered, the UK's proposed annual cap for Phase II is set at 236.7 $MtCO_2$, a mere 3.5% reduction. In Phase II, additional emissions from glass, mineral wool, gypsum, flaring from offshore oil and gas production, petrochemicals, carbon black and steelworks sectors will be included – bringing the total annual cap to 246.2 $MtCO_2$.

The UK is on track to meet its Kyoto target (a reduction of 12.5% below 1990 levels in greenhouse gas emissions between 2008 and 2012). However, it currently looks set to miss its more ambitious domestic CO_2 target of a 20% cut by 2010. The cap for Phase II puts the UK on track to reducing its CO_2 emissions by only 16.2% by 2010.

Pushing up emissions projections

Emissions projections have been used as a basis for setting the cap for Phase II. These projections were revised upwards in June 2006. The revised emissions projections included an increase of 11$MtCO_2$ nationwide, of which 4$MtCO_2$ comes from the traded sector. Using this method, together with free allocation, clearly incentivises industry sectors and companies to inflate their emissions projections in order to maximize the number of allowances that they will receive.

7% auctioning

The UK is the only country which has proposed a significant amount of auctioning, although it still falls below the maximum allowed amount of 10%. Up to 7% of allowances can be auctioned and will be deducted from the allocations to the power sector. In addition the UK intends to auction surplus allowances from the new entrants reserve, as well as allowances that have not been allocated as a result of closure. Therefore, in reality, more than 7% may be auctioned.

Treatment of new entrants disincentivises combined heat and power

Although some effort has been made to promote the uptake of Good Quality Combined Heat and Power (GQ CHP) plant - GQ CHP is still disincentivised under the proposed allocation rules to new entrants. CHP plant will not receive enough allowances to cover their emissions and conventional boilers will still get proportionally more allowances.

Only fuel-specific for old, but best available technology benchmarks for new installations

Allowances given to the power sector will be allocated based on five fuel-specific benchmarks. By establishing several fuel benchmarks, rather than a single product specific benchmark for incumbents, the government is sending a clear signal to old, inefficient coal fired power stations that they will receive generous allocations in Phase II of the scheme. In contrast new entrants to this sector will receive an allocation based on a best available technology benchmark (combined cycle gas turbine).

Project credits of dubious quality allowed

Up to 8% of the total allocation can be met by the use of credits imported from Clean Development Mechanisms (CDM) and Joint Implementation (JI) projects. However, there will be no further qualitative limits placed on the use of credits. Initial estimates show that up to one third of the project credits available during 2008-2012 will be from non-CO_2 gas abatement projects. One of the key aims of the CDM is to help developing countries achieve sustainable development. Industrial gas abatement projects often have little or no wider sustainable development benefits. They do not help to catalyse the transition to non-fossil fuel based energy systems in project host countries, nor do they encourage greater energy efficiency.

Broad public consultation

The public consultation exercise conducted by the UK government was relatively well done, involving a broad group of stakeholders. All information was published on a single website and stakeholders were emailed and invited to participate in the consultation.

A brief glossary to the EU Emission Trading Scheme

Allocation/Overallocation/Auctioning - During Phase I almost the total amount of the allowances has been given to installations for free (grandfathering approach). Some NAPs have been found to be too generous in fixing the cap thus creating an overallocation and taking away incentives to invest in cleaner fuels and more efficient technologies to reduce emissions. The alternative allocation method is by auctioning, the maximum possible for Phase II is 10% of the Cap. Under an auctioning approach the installations have to buy allowances on the carbon market, thus putting the "polluter pays" principle into effect.

Benchmarks/CO_2 intensity - The benchmarking approach is an alternative method to allocate allowances. This approach does not use historic emission data but fixes an average value of the emissions per unit of output (CO_2 intensity). This value would be the benchmark on which basis the allocations would be made to installations. In principle the more an installation pollutes the less allowances it should receive; in this view product-based benchmarks are the most effective as they reward a lower CO_2 intensity per unit of output.

Borrowing/banking - Borrowing allows installations to borrow allowances from the following year of the same period to cover an allowance shortage in the current year. Banking let operators save EU allowances for future years within the same ETS period.

Cap - The Cap is the maximum amount of CO_2 that one Member State plans to emit for the traded sectors during one year. Each Member State adopted a different methodology to calculate this amount using past sectorial trends, growth projections and the tightening of the emissions in order to comply with the target.

Cogeneration/Combined Heat and Power generation - Cogeneration/Combined Heat and Power (CHP) generation is a definition used to describe facilities that produce both heat and electricity from a single source. The heat produced and stored can then be used for various purposes such as space heating or water heating. The difference is that CHP produces electricity and then heat, while cogeneration produces electricity and heat simultaneously. These two systems can potentially improve the efficiency level of power plants of up to 70-90% from the 50% of a new traditional power plant.

Eligibility - The system covers about 11,400 installations in the power sector, oil refining, cement production, iron and steel manufacture, glass and ceramics, paper and pulp production. Together these installations are responsible for about half of Europe's CO_2 emissions. The ETS Directive applies for two periods, named Phases, from 2005 to 2007 and from 2008 to 2012. The Commission will review the Directive by 2007 which may

include additional sectors after 2012. The system currently covers only CO_2 emissions, which may also change in the future.

Flexible Mechanisms: JI/CDM credits - Beside the Emission Trading Scheme the Kyoto Protocol includes two more flexible mechanisms: the Joint Implementation (JI) and the Clean Development Mechanism (CDM). They are the two project-based mechanisms of the Kyoto Protocol. JI is a mechanism that permits one Annex I Party, with a commitment inscribed in the Annex B, to implement an emission reduction project in an another Annex I Party. This emission reduction generates Emission Reduction Units (ERUs) valid to meeting the implementing Party's Kyoto target. The CDM provides for Annex I Parties to implement project activities that reduce emissions in non-Annex I Parties, in return for certified emission reductions (CERs) valid to meeting the emission targets.

$MtCO_2$ - These initials stand for Millions of tonnes of Carbon Dioxide (CO_2), the common unit of measurement of the emissions in the atmosphere of the most important greenhouse gas. In the Emission Trading Scheme 1 $MtCO_2$ corresponds to 1 allowance of emission.

National allocation plans - The ETS Directive establishes that each Member State periodically has to develop a National Allocation Plan (NAP) in order to establish the emissions target for the covered sectors, as well as deciding how this target is divided among the various installations covered by the system. Each NAP is supposed to be put together in a way that is objective, transparent and open to public comment.

New entrants (reserve) - New entrants are brand new installations which enter a traded sector of the Emission Trading Scheme in one Member State after having obtained emission permits. Member States can choose whether they let new entrants buy their allowances on the market, make use of the possibility to set aside some allowances for periodic auctioning, or foresee a reserve in the National Allocation Plan to issue allowances to new entrants free of charge.