

An ESD-based innovative financing mechanism

- a draft Hungarian proposal -

Aims of the proposal

Energy efficiency of buildings is a key area of delivering 20/20/20 targets, as it was also pointed out by the 2050 Low Carbon Roadmap. However, it is an area, which is very difficult to finance with traditional financial instruments, especially in new Member States. Hungary believes that, in order to make negotiations on the 2050 Low Carbon Roadmap and the Energy Efficiency Directive successful, the EU should put more emphasis on developing new innovative financial instruments.

Hungary is developing an innovative financing mechanism, which would add revenues from allocation units under the Effort Sharing Decision (ESD) to climate related funds of the 2014-2020 Multi-annual Financial Framework (MFF), and use them together to leverage investment in the non-ETS sector, in partnership with the private and banking sectors. Such a mechanism would make co-financing significantly easier for new Member States, while, at the same time, provide Cohesion Policy with decarbonisation projects, which are in line with EU structural development and climate change goals. New Member States could use funds multiplied by the mechanism to finance energy efficiency in buildings measures.

In order to make this new innovative financing mechanism successful, Hungary intends to make full use of opportunities provided by the transfer provisions in the Effort Sharing Decision. These provisions in the 2008 Climate Energy Package were developed with the aim of providing lower income member states with the incentive to implement carbon-efficient policies, and further over-achieve on their targets in the Effort Sharing Decision. However, anticipated carbon prices indicate that the system is out of balance. Creating an efficiently working carbon market under the ESD would contribute greatly to reinstating the balance and ensuring cost-efficient delivery of targets across Europe.

Hungary proposes the followings:

1. In order to create an efficiently working carbon market under the Effort Sharing Decision, **transfer rules and registry arrangements yet to be developed** should respond to two important preconditions. The ESD implementing measures (e.g. within registry regulation) should contain provisions,

- which allow the *involvement of financial institutions as market intermediaries*. Member States, as primary account holders, could authorise financial institutions to transfer ESD allocations autonomously and identifiably (the different options of involvement will be explained in the background in detail), subject to harmonized conditions and limitations set out therein. Such market intermediaries could add great value to the ESD carbon market by offering credible guarantees to prospective buyers (ultimately to Member States) that revenues from greened transfers would be spent on decarbonisation projects in an EU-conform way.
- which encourage the participation in *greening mechanisms* as part of adopting measures to facilitate transfers and increase their transparency. Upon transaction, information on greening should be transmitted to possible buyers and to the public in

an effective and transparent manner. Greening mechanisms could be implemented by Member States on a voluntary basis.

In addition, to create a link with relevant EU proposals, Hungary proposes the followings:

2. The **draft Council Conclusions on the 2050 Low Carbon Roadmap** put too much emphasis on the EU ETS as a key instrument in the transition to a low-carbon economy, and the ESD should receive equal attention. An efficiently working carbon market under the ESD would contribute greatly to reinstating the balance within EU carbon markets, and innovative financing mechanisms would generate significant low carbon investment in new Member States. Therefore, Hungary proposes the following amendment to paragraph 14:

“STRESSES the significant investment needs and the need to explore all options to mobilise public, private and innovative finance as part of a kick-start of the European economy, while taking into account Member State differences in investment capacities and ENCOURAGES developing innovative financing mechanisms, such as the usage of AEA units under the Effort Sharing Decision for co-financing purposes, with implementing greening mechanisms and the involvement of financial institutions.”

3. The **draft Energy Efficiency Directive** requires major efforts from low income Member States, but without providing any flexibility mechanisms similar to ESD, and thus further reducing possible demand for allocation units (and thus, ESD carbon price). Consequently, without proper ESD implementing rules, the system will fail to generate funds for less developed Member States helping to meet their provisions. Therefore, Hungary proposes the following amendment to the Energy Efficiency Directive, as Article 4(5):

“In meeting the above obligation, innovative financing mechanisms should be encouraged, where transfers of allocation units under the Effort Sharing Decision could be used for co-financing purposes, by involving financial institutions as market intermediaries, and implementing greening mechanisms as part of adopting measures to facilitate transfers and increase their transparency pursuant to Article 3(6) of Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020.”

Background to the proposal

One of the headline targets of the **Europe 2020** strategy is delivering 20/20/20 energy efficiency objectives. According to the **2050 Low Carbon Roadmap**, energy efficiency of buildings has a key role, as it is an area, where emissions can be reduced in the most cost efficient way, and where measures have the highest, short term additional value, such as boosting the economy, creating employment, and reducing energy import dependence. However, delivering 20/20/20 energy efficiency objectives in a cost efficient way is a great challenge for Europe, due to the shortage of available funds. The biggest challenge faces the non-ETS sector, as traditional financial instruments are not able to generate sufficient private investment for decarbonisation projects. Recent funding practice in the non-ETS sector relied heavily on state subsidies and bank loans, but in the present economic climate these funds have become scarce and expensive, especially in new Member States. As a result, the EU places great emphasis on innovative solutions to mobilise capital investment in low carbon strategies. The Commission’s communication on *a Roadmap for moving to a competitive low*

carbon economy in 2050 states that additional public private financing mechanisms are key in order to overcome initial financing risks and cash flow barriers. Public finance through innovative financing instruments, such as revolving funds, preferential interest rates, guarantee schemes, risk-sharing facilities and blending mechanisms can mobilise and steer the required private finance, including for SMEs and consumers.

Consequently, the EU uses an innovative approach in the **2014-2020 Multi-annual Financial Framework** (MFF). The Commission's communication on the *EU Budget Review* and a *Budget for Europe 2020* states that, in order to deliver results, the budget should be used to leverage investment, and innovative financial instruments could provide an important new financing stream for strategic investments. EU funds could be used in partnership with the private and banking sectors, particularly via the European Investment Bank (EIB), but also with other partners including development banks in Member States and the European Bank for Reconstruction and Development (EBRD). Projects should be supported on the basis of competitive application by the project promoters, with a focus on EU added value. According to the basic principles, the new financial instruments must be smart, integrated and flexible. Spending programmes need to be both sensitive to the needs of private finance and precise as to what they want to achieve. Financial instruments should be focused on addressing identifiable market failures taking into account the state of national financial markets, the legal and regulatory environment and the needs of final beneficiaries.

The EU has made the first steps in making new financial instruments available to Member States by modifying arrangements within Cohesion and Structural funds, pursuing to *Regulation (EU) No 539/2010 of the European Parliament and of the Council of 16 June 2010 amending Council Regulation (EC) No 1083/2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund as regards simplification of certain requirements and as regards certain provisions relating to financial management*. In addition, the above objectives were strengthened on different levels of EU decision making. The 16 March 2010 ECOFIN Council "took note of the proposal to mobilise EU policies and instruments, including legal and financial instruments (including cohesion policy), to pursue the EU2020 objectives, and in particular supported the proposal to improve instruments to help finance Europe-2020 by designing innovative finance instruments." The 24-25 March 2011 European Council stated that "fiscal consolidation efforts must be complemented by growth-enhancing structural reforms. To that end, Member States emphasise their commitment to the Europe 2020 Strategy. In particular, they will implement measures in order to attract private capital to finance growth."

Based on the above mentioned objectives, Hungary is developing an innovative financing mechanism, which is in line with EU structural development and climate change goals, while, at the same time, suits the specific needs of new Member States. The mechanism would add revenues from transfers of allocation units under the Effort Sharing Decision (ESD) to climate related funds of the 2014-2020 Multi-annual Financial Framework (MFF), and use them together to leverage investments in the building sector, in partnership with the private and banking sectors. In line with EU goals, the mechanism would multiply available climate related EU funds and use them to leverage investment in the private sector. In line with new Member States interest, ESD revenues could be used for co-financing purposes, and for generating low carbon investment at Member State level. The inclusion of public funds is a key element, as new Member States with less developed infrastructure and scarce public and expensive private funds find it extremely hard to kick-start decarbonisation projects. Firstly, the retrofit (especially deep retrofit) of the existing building stock is very cost intensive, and needs a large-scale programme. Secondly, without state subsidized bank loans, the highly

indebted population, small and medium enterprises and local authorities would be unable to make use of funding opportunities. A further added value of the mechanism is that it would provide Cohesion Policy with adequate decarbonisation projects.

In order to make this new innovative financing mechanism successful, Hungary intends to make full use of opportunities provided by the transfer provisions in the **Effort Sharing Decision**. These provisions in the 2008 Climate Energy Package were developed with the aim of providing lower income member states with the incentive to implement carbon-efficient policies, and further over-achieve on their targets in the Effort Sharing Decision. However, anticipated carbon prices indicate that the system is out of balance. Creating an efficiently working carbon market under the ESD would contribute greatly to reinstating the balance and ensuring cost-efficient delivery of targets across Europe.

Involving financial institutions as market intermediaries in some form has a double objective. Firstly, based on previous experience from AAU market of the Kyoto Protocol, characterised by huge supply and moderate demand, allocation units can only be sold at a decent price and volume, if sellers can guarantee towards buyers that revenues will be spent on adequate decarbonisation projects. Greening is essential, if ESD allocation units are to compete with CER units from third-world emission reduction projects, which are already established on the market. Secondly, without sufficient incentives from the carbon market Member States with significant ESD surpluses cannot be expected to invest in large-scale emission reduction projects with high capital cost.

Calculations supporting the proposal

The Excel sheets attached in a separate document illustrate the possible demand and supply in ESD carbon market at different assumptions. Calculations were based on the document „Consultation on quantities of verified emissions – results” circulated by the Commission in WG2 of CCC on 12 September 2011. For 2010, proxy estimates were used for total emissions (source: EEA’s trends & projections 2011).

A new sheet is attached for calculating AEAs and possible surpluses & shortages for Member States:

- WEM & WAM emission projections from EEA’s trends & projections are used.
- Limits for the use CER: 3% of 2005 total emissions. This is a lower limit, impact of Art5(5) of ESD is ignored here.

Results:

- Cells in row64 show the total shortages within EU15 for each year and in total for 8 years for both WEM and WAM scenarios.
- For comparison
 - Cells in row65 show the limits for use of CERs (identical per MS for all years). Figures suggest that MSs in EU15 with AEA shortages together would be able to cover their needs with CERs alone.
 - Cells in row66 show projected total surpluses of NM12 for each year. In the WAM scenario NM12 surplus are higher than shortages in EU15 for most of the years and clearly higher for the 8 year long period.

Conclusions:

- If CERs are more preferable to EU15 there would be no demand for AEAs even under WEM scenario. Thus it is crucial that AEAs should be made attractive.
- Even if one ignores CERs, only in the WEM scenario there is significant demand for AEAs of NM12 and only if no MS from EU15 (e.g. UK or DE) would sell its surplus.
- In WAM scenario supply is much higher than demand. Adoption and implementation of draft energy efficiency directive would intensify this situation further.

Technical options for involving non-state agents in ESD trading

Based on initial communication with Commission experts, the proposal needs to respond to the following requirements:

- State ownership: It should be clear that only Member States can be account holders.
- Freedom of action for agents: Agents must be able to realise transfers on their own, without getting government approval for every single transfer.
- Transparency: It should be made clear to the public whether an allocation is under the control of an agent or not.

In line with the above requirements, Hungary proposes the following technical options for involving non-state agents in ESD trading:

Option A: Separate person holding accounts for agents

This solution is identical to the one used under the Kyoto Protocol, and the EU ETS, whereby agents have their own „person holding account”, which they use freely to buy and sell allocations. Under the Kyoto Protocol it is entirely up to the state to decide which persons or class of persons may hold units. In the case of ESD, statutory limitations could be established, e.g. stating that only financial institutions may be allowed to have person holding accounts under the ESD.

Pros:

- It is very similar to the current set-up of registries, so it does not require additional software development.
- It is entirely transparent, as ownership is clear.

Cons:

- It is difficult to put any additional limitations on the agents once they receive the allowances, should that be deemed necessary.

Option B: National accounts with agents as account representatives

If the ESD will not have person holding accounts, a Member State can always hand over effective control over an account by making the agent's representative the account representative. This way, the account would nominally be held by the state, but transactions would be initiated by the agent, making the account into a de-facto person holding account.

Pros:

- It requires no additional legislation, and a Member State would always be able to implement such a solution.
- It also does not require any additional legislation and software development.

Cons:

- It has the appearance of a makeshift solution, and would not help to attract private sector players.
- It is not very transparent, as the public would not necessarily know that a particular government account is essentially controlled by an agent (although that could be avoided by naming the account after the agent).
- There is no limitation over the group of persons who could act as agents.
- There is no possibility to limit the activities of the agent once it controls the account.

Option C: A special account type that gives a structure to shared ownership

A middle solution would be to set up a special account type in the registries, e.g. an „agent account”, where the agent would have the right to initiate transactions without the government's case-by-case approval, while the account would nominally remain a government account. This would make it clear and transparent that the units are held by the government, but they are traded by agents. Again, just as under option A, the class of entities allowed to become agents could be limited by law.

Pros:

- It is the most transparent of all options.
- The system can be fine-tuned to put in all limitations and controls that may be necessary for this specific type of market participant (e.g. a limitation on the total number of allocations, which may be held on the account at any one time, or a time limit after which the account reverts to the state, etc.).
- It would also be possible to create specific reporting requirements.
- It makes it clear for private entities that their participation is welcome.

Cons:

- It requires additional software development.

HU comments to the Commission Concept Paper on the 2012 amendment of the Registry Regulation

Hungary agrees with the main principles and business logic set out in the concept paper. However, in order to facilitate Hungary's proposal on an ESD based innovative financing mechanism, we propose a few changes, along basic principles set out by the Commission:

- Member States make use of the mechanism on a voluntary basis.
- As Member States have obligations under ESD, they have to be the account holders of AEAs.
- The involvement of the private sector in ESD is restricted to financial institutions, in whose case regulatory oversight ensures transparency, reliability and efficiency of decarbonisation investments.
- Use of AEAs is restricted to ESD accounts, and should not be allowed to be used in the EU ETS.

In order to facilitate the transfers between Member States, as set out in Article 3(6) of the Effort Sharing Decision, a new feature should be added to the ESD section of the Registry Regulation concept: the so-called **“Secondary Compliance Account”** (SCA).

The SCA would allow MSs to enable in some form the participation of the private sector in the transfer of AEAs, thereby assisting their use in supporting decarbonisation projects. At the same time, it would ensure that MSs retain ownership and the necessary level of control over their AEAs.

A Secondary Compliance Account should be based on the following principles:

- Each MS should have *at least* one Compliance Account (CA), for each year. The first such account is obligatory and should be known as the Primary Compliance Account (PCA). In addition, MSs would be allowed to create SCAs.
- An SCA would initially be empty, but should be able to receive from the PCA any amount of AEAs that would otherwise be eligible for transfer to the PCA or SCA of another MS. Such are:
 - transfer of up to 5 % of the AEA for a given year; and
 - transfer of the part of the AEAs that exceeds its allowed GHG for that year taking into account flexibilities.
- While such SCAs would be held by MSs, they should have an Account Manager, who can on its own initiate transfers to other PCAs or SCAs. An Account Manager could be a state- or a non-state entity, i.e. a financial institution, authorized by the Account Holder by statute or by contract, to act as an Account Manager on behalf of the Account Holder.
- Legislation would define eligibility requirements for entities that may be authorized to act as Account Managers, e.g. only companies that are subject to the *Markets in Financial Instruments Directive 2004/39/EC* (MIFID) may be Account Managers, etc.
- The rights of the Account Manager may be open-ended, or may be limited in time. In practice, this would mean automatic transfers to next year's SCA (with the same Account Manager), or the return of the AEAs to next year's PCA.
- The identity of the Account Manager and the extent of its authorization should be made publicly available.

Operation of the innovative financing mechanism

The exact role of financial institutions and operational details of the mechanism will be developed at a later stage, after more information is released by the Commission regarding innovative financing mechanisms, as well as ESD transfer rules, and the Hungarian position is established based on a detailed analysis. In principle, the greening mechanism proposed by Hungary would be developed and managed jointly by the government and financial institutions. The government would allow the financial institutions to hold and transfer ESD allocation units in some form, with the condition that revenues will be used to generate low carbon investment, in building projects designated by the government. If financial institutions do not comply with the designated criteria, the government will be entitled to take the allocation units back. The financial institution, as market intermediary, would be responsible for selling allocation units on the market, as well as for the greening of units, after linking them with specific decarbonisation projects. As an intermediary, the financial institution would be responsible for inviting applications and managing the designated projects, and would report to buyers about compliance. The bank loan constructions, which would be subsidised in some form through the mechanism, would be available to public, communal housing, local municipality, or other owners of buildings, and enterprises.

Funding rates within the mechanism will also be determined at a later stage, when more information is available on the exact amount of EU funds and ESD revenues. The share of different financial sources depends on several factors.

As for EU funds, the rate of own resources is different in every funding type. At present, the European Regional development fund will provide support for energy efficiency of private and public housing, with a 50% own resources in the Central Hungarian Region (where the majority of the renovation potential is located), and 25% in the rest of the regions. At present, the Cohesion Fund is designed to support energy efficiency measures in public buildings only, with a 15% own resources. It is important to note that Hungary, together with several other Member States from the Central Eastern European Region, is asking for the extension to private buildings, as the present funding balance and criteria makes it extremely hard for less developed member states to deliver targets.

As for ESD revenues, their rate in the mechanism will mostly depend on the rate of EU funds and their funding objectives. In principle, their role is to complement EU funds in a balanced way, generating the highest possible proportion of private investment within each sector.

As for private funds, their rate in the mechanism will depend on the rate of EU funds and ESD revenues. In principle, their role is to generate short term return investment. In private buildings, they will appear in the form of subsidised bank loans, with subsidy rates varying between 30%-70%, depending on funding needs of different segments of the sector. In public buildings, they will appear in the form of Government contracted innovative financial instruments (e.g. ESCOs, Energy Performance Contracting, etc.), with subsidy rates up to 85%, or where no such instruments are available, 100%.

Previous experience

Similar financial constructions already operate on a small scale in most Member States. For example, the Hungarian **Green Investment Scheme** (GIS) uses revenues from Assigned

Amount Units (AAU) under the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) for leveraging low carbon investment in the building sector.

The Kyoto Protocol has introduced international emissions trading (IET), which is essentially the trading of greenhouse gas emission rights, among developed countries. Hungary has a significant surplus of AAUs, generating large revenues for the country. In 2008, it was the first nation in the world to sell AAUs, and has concluded several bilateral deals since then. In accordance with *Act LX of 2007, Government Decree no. 323/2007 (XII.11.) Korm.* on the implementation of the Act and the purchase agreements (PA), revenues from sales of AAUs are used for climate protection purposes under the Green Investment Scheme (GIS). Hungary has undertaken “hard greening”, which means that it uses its revenues from IET exclusively to finance greenhouse gas emission reduction projects. Based on the principle of additionality, GIS only support initiatives that result in the greatest reduction of greenhouse gas emissions. These initiatives could not be realised without GIS support, or not on such wide scale (i.e. resulting in a lower level of emission reduction). Another important criterion is that projects under the scheme should achieve measurable, verifiable emission reductions. Consequently, the direct emissions reductions achieved by each program must be controlled and verified. In accordance with the relevant legal regulation and the PAs, a maximum of 5% of the revenues from the sales of Kyoto units can be used for GIS management, operation, revenue collection, costs to verify the use of finances, as well as the realisation and monitoring of sub-programs, the quantification of the achieved emissions reduction and the financial and technical evaluation (a yearly audit is carried out by an internationally renowned firm) of the compliance of GIS revenues.

GIS sub-programs have been realised in the form of residential applications. So far, six sub-programs have been announced, primarily focusing on the building energy sector:

- GIS Climate Friendly Home Panel Sub-program (2009)
- GIS Climate Friendly Home Energy Efficiency Sub-program (2009)
- GIS Energy Efficient Household Appliances Replacement Sub-program (2010)
- GIS Energy Efficient Bulb Replacement Sub-program (2010)
- New Széchenyi Plan GIS ‘Our Home’ refurbishment and new home construction Sub-program (2011)
- New Széchenyi Plan GIS Sub-program for promotion of renewable energy usage, installation of multifunctional solar collector systems for the generation of residential hot water and heating purposes

Although GIS is currently the most radical system in Hungary supporting the reduction of GHG emissions, it is a continuous objective to optimally exploit the available potentials and opportunities. One area for expansion is developing an innovative financing solution, a GIS revolving credit guarantee fund, which could offer state guaranteed credit opportunities for private individuals participating in the GIS building energy efficiency programs to pay their own funds required in the application. This would greatly benefit Hungary, since most of the population lacks the necessary savings to commence building energy renovations. Furthermore, traditional mortgage and personal loan products are not adequate to finance such renovations, as many owners are reluctant to risk their property by drawing mortgage loans, the properties are often not mortgage-worthy, moreover, many people are not creditworthy for personal loans. Having recognized this problem, the World Bank Group and the International Finance Corporation operated a credit guarantee fund to support the renovation of residential buildings in Hungary, the Hungary Energy Efficiency Co-financing Program (HEECP)

between 1996 and 2008. The experience and good results thereof serve as a good basis for the planning of the GIS credit guarantee fund.

Conclusions

In conclusion, the proposed innovative financing mechanism would be beneficial for the whole of the EU. In line with EU objectives, it is smart, integrated and flexible, while, at the same time, it suits the needs of less developed member states. In addition, the creation of an efficiently working carbon market under the ESD would contribute greatly to reinstating the balance in the 2008 Climate-Energy Package. Hungary has engaged in a dialogue with experts of the Commission to finalise details of the proposal, and is gathering support from Member States on all levels of EU decision making, as well as the Danish Presidency of the EU.

Contact persons:

Anna Tamas, EU Climate Change Consultant, Ministry of National Development in Hungary,
Tel: (+36 1) 795 6674, E-mail: anna.tamas@nfm.gov.hu

Györgyi Gurbán, Climate Change Attaché, Permanent Representation of Hungary in Brussels,
Tel: (+32 0) 2 234 1397, E-mail: Gyorgyi.Gurban@mfa.gov.hu