



Green Investment Schemes: *Maximizing their benefits for climate and society*

Andreas Tuerk

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- Report carried out within the Climate Strategies Network
 - Lead: CEU: Diana-Urge Vorsatz
- Partners: Joanneum Research, Point Carbon
- <http://www.climatestrategies.org/>



Aim of the study



- **Mapping of GIS activities in CEE countries**
- **Investigation of the shortcomings of existing carbon finance mechanisms (mainly JI and CDM)**
- **Drawing lessons on how GIS could overcome them, and applying these lessons and other criteria to an investigation of how such schemes can be designed to ensure environmental integrity and to maximize socioeconomic co-benefits**



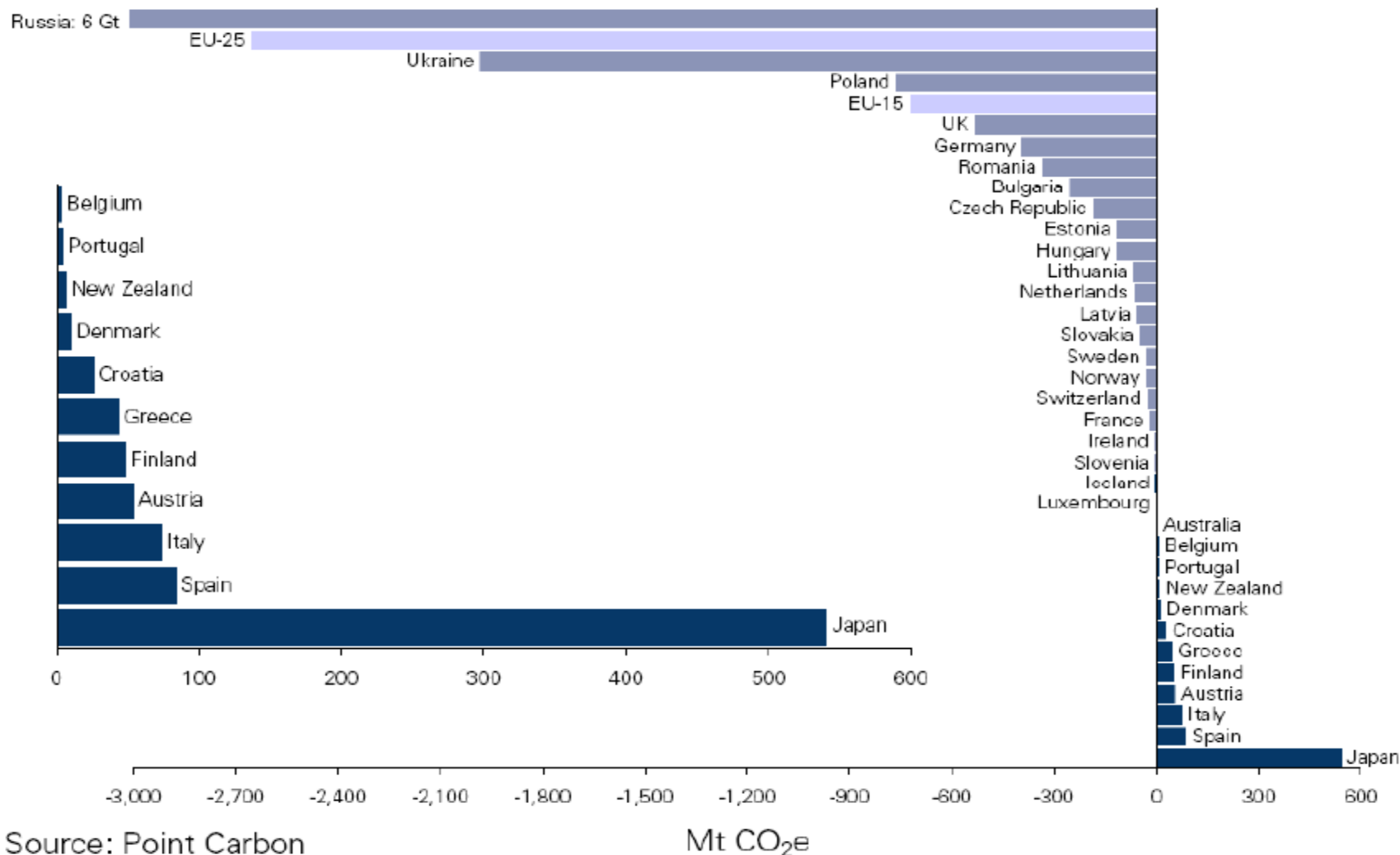
State of GIS development



- Rapid development during past 2-3 years
- Pioneer national legislation passed in Hungary in second half of 2007
- Legal framework and institutional system established in Latvia in 2008
- General legislation adopted to date in Czech Republic, Ukraine and Romania
- Strong interest in GIS demonstrated by Bulgaria and Poland
- First announced transactions: autumn 2008, Hungary sells 8 million AAUs in total to Belgium and Spain



Net demand and supply, after taking into account sink provisions under planned purchases of CERs and ERUs, and domestic reduction measures such as direct control regulations and the EU ETS.





GIS may overcome shortcomings of JI/CDM

- JI largely failed to deliver in those mitigation areas with the highest sustainability benefits which are also especially important priority areas in CEE, such as **building energy efficiency, small- and medium-scale bioenergy utilisation.**
- Greening ratio can be lower than 1:1
- Under GIS AAUs can be sold for emission reduction activities that are not quantifiable (soft greening)



GIS vs JI



- GIS can accommodate longer-term horizons
- Allows governments to place emphasis on areas where early investment is crucial for the transition to a de-carbonized economy in the long-term and which are not targeted by the private sector under JI
- In contrary to JI there is no strict additionally criterion under GIS.
- In EU JI is strongly limited due to linking directive



GIS vs JI



- GIS more flexible in high priority areas
- Can have lower transaction costs
- GIS can extend beyond 2012, overcoming short window of opportunity
- GIS: can better accommodate smaller projects
- More suitable for projects needing large upfront payments
- Most CEE countries opt to copy Track-2 in Track-1, thus its flexibility cannot be taken advantage of



Risks of GIS

- Flexibility of GIS also poses significant risks: environmental integrity is harder to assure without robust international legal and institutional frameworks.
- Weak governance structures of host countries can lead to intransparency



GIS target area choice

- Buyer's market
 - Main preference: environmental integrity
 - Thus: ADDITIONALITY
 - Transparency and accountability
- Maximising gains towards national, social, political and regional development priorities
- Channeling revenues to areas difficult-to-reach by other policies (vis-à-vis harvesting the low-hanging fruit)
- Practical feasibility, dispensability and transaction costs



Possible target areas

- Low-energy retrofit of old building stock
 - ⇒ Pivotal to invest in *very low energy construction and retrofit, due to long lifetime*
 - ⇒ Numerous co-benefits (health and comfort improvements, employment creation, higher energy security, etc.)
- Land-use projects in suitable target countries (e.g. RO, BG, PL, RU, UKR)
 - ⇒ Co-benefits like income creation for rural population and increased biodiversity
- Biomass-based heating



Lessons to be learned for GIS from the shortcomings of CDM/Track-2 JI

Modality of CDM/JI compromising effectiveness in energy efficiency and land-use	Implications for GIS architectures
Strict additionality criterion	Additionality to be ensured through simplified methods
High project transaction costs	Simpler or more streamlined project cycle Simplified M&V
Difficulty in having methodologies approved	Allowing simplified, sector-based methodologies; Allowing multiple methodologies and facility-level bundling
Complex monitoring and verification requirements	Simple M&V, such as using sampling, ISO Precise M&V is less crucial than in JI/CDM because do not affect quantified compliance!!
High transaction cost of activity	Softening greening ratio or allowing longer crediting periods to improve the bankability of projects even with transaction costs; Institutional assistance in reducing transaction costs



Key issues to maximize benefits of GIS



- Simpler and innovative approaches to ensure additionality
 - ⇒ Worrying lenience towards additionality by several host countries
- Realistic post-2012 crediting period important to accommodate long-term investments
- Optimal spending of GIS revenues seriously challenged if disbursement limited to first commitment period



Recommendations for GIS architecture– Part 1

Modality category	Issues in modality choice and recommended modality, if applicable
Greening option	Dominance of hard greening is required to ensure climate effectiveness. A small share of soft greening can be important to facilitate the effectiveness of the hard greening part, but this should be a minor share to avoid potential risk of misuse, since ensuring the integrity and effectiveness of spendings through soft greening are difficult.
Programmatic / project approach	A purely project-based approach may compromise GIS in areas where small and dispersed investments are needed such as end-use efficiency or small-scale renewables, because of transaction costs. A programme-based approach has lower transaction costs and can have larger scale roll-out.
Budgetary option of the fund	Due to relatively low financial discipline and major budgetary problems of CEE host countries, it is important that revenues enter special accounts from which the money cannot be legally paid out on other spendings.



Recommendations for GIS architecture– Part 2

Modality category	Issues in modality choice and recommended modality, if applicable
Additionality requirements	Additionality is essential for ensuring the environmental integrity of GIS. 3 types: financial, legal and environmental. Some financial additionality is mandated for EU member states, but not enough to ensure environmental integrity. Additionality should ideally be stipulated in GIS legislative framework, but at least be ensured by the scheme setup. Rigorous quantitative additionality enforcement, on the other hand, may be counterproductive for many areas of high priority for GIS in CEE.
Baseline	Sectoral baselines rather than individual baselines substantially reduce transaction costs and can overcome methodology problems.
Monitoring and verification	M&V are essential for ensuring the environmental integrity. They are a crucial supervision tool and the proof of the projects taking place as agreed between the buyer and seller. However, rigorous M&V as in CDM could kill GIS in important priority target areas. Simplified, innovative M&V methods are suggested, such as calculations confirmed by random checks, using ISO standards, etc.



Recommendations for GIS architecture-Part 3

Modality category	Issues in modality choice and recommended modality, if applicable
Crediting period	Allowing post-2012 crediting is important in order to avoid that GIS only picks the low-hanging fruit. If, however, flexibility is applied to the greening ratio, or AAU prices are high, or substantial co-funding is applied, long-term investments may still be bankable.
Timeframe	Normally transactions will be allowed only in the 1 st commitment period. However, extending the timeframe for funds disbursement would be important for optimizing climate effectiveness. The remaining time is too short for a careful scale-up of funding schemes, and disbursement capacity will either be a serious bottleneck limiting the total volume of GIS, or the climate effectiveness will be jeopardised if funds are spent compromising the optimal framework in order to expedite disbursement.



Recommendations for GIS architecture– Part 4

Modality category	Issues in modality choice and recommended modality, if applicable
Greening ratio	1:1 ratio would be ideal, but may not be feasible (too narrow circle of enabled investments) if the crediting period does not extend beyond 2012 or there is no co-financing.
Priority areas targeted	Due to the one-time window of opportunity, high-priority climate abatement areas not easily targeted by business-as-usual activities and policies are ideal target areas. These often include low-energy infrastructure determining long-term emissions, but typically associated with long payback times (buildings, transport). Societal co-benefits for host countries can also be maximized. In particular, in CEE attractive areas that fall into these categories include: energy efficiency in residential and public sectors; renewable energy for heating; biogas production for transportation purposes; other small-scale bioenergy investments; land-use if applicable in host country.



GIS as a model for a new Carbon finance mechanism in developing countries?

- State induced emissions reductions can maximize national social, political and regional development priorities
- In some target areas this mechanism can exhaust important reduction potential that can not sufficiently be captured by JI/CDM
- Environmental efficiency of the mechanisms however strongly depends on the modalities and the host country's governance structures