



CONTRIBUTION TO THE GREEN PAPER ON ENERGY EFFICIENCY

General ALTRAN statement

The ALTRAN group, European pioneer in Innovation and High Technology Consultancy, entirely supports the policy of the European Union towards increasing energy efficiency. Our group welcomes the European Commission's ambitious objective of harnessing cost-effective energy savings for Europe equivalent to 20% of the Union's current energy use - in the light of the Lisbon strategy, the EU's Kyoto protocol obligations and the security of energy supply. The present paper puts forward our contribution to the public consultation launched by the European Commission and includes our response to 18 of the 25 questions of the Green paper on Energy efficiency. As a general remark, ALTRAN suggests that all energy efficiency measures or products that have a pay-back time within the economic lifetime for the first owner, should be favoured over the conventional alternative. In order to minimise higher initial investments that may jeopardise the introduction and use of such a product, a European revolving fund could be established, or comparable national fiscal tools. Key issue is transparent and fair benchmarking of the technologies and measures and to pro-actively stimulate innovation.

1. How could the Community and the Commission in particular, better stimulate European investment in energy efficiency technologies? How could funds spent supporting research in this area be better targeted? (Section 1.1)

ALTRAN's answer

First of all, ALTRAN believes that the European Commission should set up long-term objectives (15-20 years). Then a package with incentive and compulsory measures has to be implemented to demonstrate consistency towards this objective. Investors need stability with regard to policies. If a government intervention creates a space for a new energy efficient technology, investors require stability of governmental policies in order to be confident of investing.

In general the European Union and the Commission in particular should use a combination of mandatory and voluntary measures to increase energy efficiency. This means that the Commission enforces mandatory, minimum requirements for energy efficiency, or maximum allowed emissions, with penalties for those who do not comply. Concerning the voluntary part, there should be a system in place that quantifies the level of out performance of the industry average. The Commission could enforce standards for regulated pollutants, for instance on power stations, making existing low efficiency technology costly and unattractive to investors.

To make sure that consistency occurs, research in the field of Decision Science has to be encouraged. Decision Support Systems (DSS) and the Decision Science are a key factors in the decision making process. The choice amongst different technologies is not a simple matter; it involves different contributes both on financial and technical and social side. Difficulties arise when different expertise has to merge and decision makers have to select the best opportunity. This research should be addressed with a goal "as practical as possible", i.e. a road map and a technical framework that could lead to realise tools (specific for the sector) to simulate decisions and to share knowledge in an easy way. This framework should be both designed and developed assuring the involvement, since the early phase, of members and representatives of financial institutions and not only of technicians.

ALTRAN's recommendations

- Set long-term objectives in order to increase the stability of investments via public policies
- Combine mandatory and voluntary measures both at EU and at national level
- The framework should be supported by both industry and financial sector

2. The emission trading mechanism is a key tool in developing a market-based response to meeting the goals of Kyoto and climate change. Could this policy be better harnessed to promote energy efficiency? If so, how? (Section 1.1)

ALTRAN's answer

ALTRAN welcomes the achievements of the European Union in order to reduce the greenhouse gas emissions via the Emission Trading Scheme (ETS) started in the 25 EU Member States on 1 January 2005.

In a sense the policy does support energy efficiency because higher efficiency allows energy users to consume more energy without requiring the purchase of further carbon credits. Creating an exchange rate that values credits created by higher efficiency or penalises the transfer of allowances from high to low efficiency uses would be possible to create, but this could also lead to complexity and create market uncertainty. Extra measures, in these cases, are not necessary.

The ETS could however be enlarged to some of the sectors currently not included, i.e. air transportation, chemical industry and public ground transport. The inclusion in the ETS should encourage these sectors, having a very high emissive impact, to implement new technologies, both less emissive and more efficient. However, this market mechanism does not necessary lead to the technological innovation: the operators could choose to keep the existing technologies and change the fuel mix or reduce their production. In order to promote energy efficiency, this policy should be supported by the introduction of financial, fiscal or economical incentives for the companies that decide to reduce their emissions adopting the BAT (Best Available Technologies) or low carbon technology.

ALTRAN's recommendation

- Enlargement of the Emission Trading Scheme (ETS) to other sectors as air and ground transportation and chemical industry

3. In the context of the Lisbon strategy aiming to revitalise the European economy, what link should be made between economic competitiveness and a greater emphasis on energy efficiency? In this context, would it be useful to require each Member State to set annual energy efficiency plans, and subsequently to benchmark the plans at community level to ensure a continued spread of best practice? Could such an approach be used internationally? If so, how? (Section 1.1.3)

ALTRAN's answer

If primary energy prices to European manufacturers increase, ALTRAN believes that competitiveness will require greater efficiency in converting energy to products. Similarly, on a global scale, the expected rises in primary energy prices will mean the more efficient conversion will be more competitive. That is why the key thing is to ensure that European manufacturers are not sheltered against rising prices of primary energy and are encouraged to think in the long term about improving efficiency.

The link that should be made between competitiveness and energy efficiency could be to impose to company HQ the compliance with the Energy Performance Certificate. This will create other

requirements for company to be eligible for certain specific call for tenders, and reshape again the economic competitiveness of companies in the EU area.

Therefore, at national level, benchmarking could then be organized by the authorized entity in order to build best practices sharing systems with minimum standard. The approach could then be used at international level under the direction of one of the UN agencies, or the IEA.

However in order to be able to make that link EU should encourage a program to define a framework to compare different practices through EU nations. At the moment, in the utilities sector, there are a lot of difficulties to collect and compare data, both because they are collected in a non homogeneous way and because regulatory and physical systems are very different.

ALTRAN's recommendations

- Reinforce compliance with the Energy Performance Certificate (EPC)
- Long term efficiency improvement by not sheltering European manufacturers for increasing energy prices
- Increasing primary energy prices automatically push improvements in efficiency

4. Fiscal policy is an important way to encourage changes in behaviour and the use of new products that use less energy. Should such measures play a greater role in European energy efficiency policy? If so, which sort of measures would be best suited to achieve this goal? How could they be implemented in a manner that does not result in an overall increase in the tax burden? How to really make the polluter pay? (Section 1.1.4)

ALTRAN's answer

ALTRAN strongly agrees with this approach. Fiscal measures should support the long-term goals that are articulated (see above) but they should not favour a particular route to this goal. The measures should encourage diversified approaches and technologies rather than backing particular solutions. Taxes should reflect externalities that are not currently priced. There should be a reward for innovations that reduce these external costs.

Fiscal measures have been widely used in Europe to provide environmental signals to industry. There is no reason why fiscal measures should not be revenue neutral for governments, thereby ensuring no increase in the overall tax burden. One way to do this is to tax the "bad" to provide a more favourable tax rate to the "good". This was done for example for unleaded petrol. This approach would require governments to be clear about the aim of energy efficiency. If it is to reduce climate impacts, then the tax has to fall more heavily on users whose emission of CO₂ per unit of production is higher to provide tax reductions for those using less energy per unit of production. Otherwise, and simpler, a carbon tax could be offset against, f. e. corporation tax.

General pollution taxes, for instance on SO₂ or NO_x would also have the effect of driving carbon efficiency into process of energy conversion as more up-to-date technology will have generally higher fuel efficiency. It must be noted that to avoid increases in the overall tax burden, fiscal policies could be in the form of tax rebates for good practice, rather than taxes to discourage bad practice. E.g. Centrica's Council Tax Rebate scheme in Braintree.

Fiscal policy is one of the main drivers to be used. It seems reasonable and convenient to apply new form of taxation. Up to date they are mostly "flat", i.e. proportional to the amount of energy used. Some incentive exist (for instance cheaper electric power in night hours) but much more can be done especially if we refer to car fuels. It seems viable to modify fiscal policies to encourage efficiency. In this perspective one could introduce a measure of overall efficiency as a weighted average of car specific consumption, net mass capacity, pollutants emission, average number of passengers, and stability of performances (etc). Tax values could be defined inversely proportional to that efficiency measure.

Tax benefits could be adopted to domestic and business customers if they can demonstrate the use of "green" energy and/or Energy Service Company (ESCO) certified.

ALTRAN's recommendation

- Fiscal policy should play a greater role, but the balance between fining and rewarding is important

6. Public authorities are often looked to for an example. Should legislation place specific obligations on public authorities, for example to apply in public buildings the measures that have been recommended at Community or national level? Could or should public authorities take account of energy efficiency in public procurement? Would this help build viable markets for certain products and new technologies?

How could this be implemented in practice in a way that would promote the development of new technologies and provide incentives to industry to research new energy efficient products and processes? How could this be done in a manner that would save money for Public authorities?

ALTRAN's answer

ALTRAN is certain that public authorities play a key role as far as education and social responsibility is concerned. It is therefore recommended to act as demonstrators and to benchmark the feasibility of new technologies. It is necessary to be neutral, asking for sound business plans, stating deadlines and measurable deliverables. The aim is to help a new technology to demonstrate its potential to be disruptive and/or to be applied to the mass market.

Legislation should place specific obligations on public authorities. A good way to shape this would be to oblige public authorities to, for instance, have 10% of their energy consumption produced by a renewable source. These projects should demonstrate and identify both technical as well as regulation issues.

ALTRAN sees no reason why public authorities should not take account of energy efficiency in public procurements. The market offers enough possibilities and all new procurement is another opportunity to be able to invest in state of the art technology. This then helps to build a viable market, because companies can count on the public authorities to invest in energy efficiency. If public authorities work together on this, it could help save them money because they can buy in bulk.

ALTRAN's recommendations

- Specific obligations on public authorities, in particular concerning public procurements
- Public authority as launching and demonstrating customer

8. Energy efficiency in buildings is an area where important savings can be made. Which practical measures could be taken at EU, national, regional or local level to ensure that the existing Community Buildings Directive is a success in practice? Should the Community go further than the existing Directive, for example extending it to smaller premises? If so, how could the appropriate balance be achieved between the need to generate energy efficiency gains and the objective of limiting new administrative burdens to the minimum possible? (Section 1.2.1)

ALTRAN's answer

ALTRAN agrees with the approach laid down in the Energy Performance of Buildings Directive (2002/91/EC). In the case of new buildings, one could require to the constructor a long term economic evaluation of different efficiency measures, to let the citizen understand the benefits and accept to pay for them during construction. In the case of existing structures, a distinction could be made between "disruptive" interventions and "soft management". Disruptive seems to be attractive when fiscally convenient and benefits understandable (see above), whereas more investment and divulgation could be done to spread "smart solutions": optimal heating/cooling/lighting control, remote (dis)activation of heating devices, small scale solar panels, etc.

ALTRAN considers that the primary challenge is reducing energy use and carbon emissions from the existing building stock, because the rate of replacement of existing buildings is generally only 1-2% per annum. We believe effective solutions must address three dimensions: user behaviour and awareness, management information and procedures, and building fabric and systems.

One option would be to link future extensions of requirements under the EPB directive to building value, rather than to floor area, as this would increase the relative affordability of energy efficiency enhancements, and also address the largest buildings first.

An obligation on utilities to make available real-time energy consumption information, perhaps initially only for larger consumers, could spur the development and commercialisation of new metering technologies, automated demand management systems, and internet applications.

ALTRAN's recommendation

- Standard requirements and incentives relative to size: link the future extensions under the EPB directive to building value

9. Giving incentives to improve the energy efficiency of rented accommodation is a difficult task because the owner of the building does not normally pay the energy bill and thus has no economic interest in investing in energy efficiency improvements such as insulation or double glazing. How could this challenge be best addressed? (Section 1.2.1)

In domestic properties, a minimum standard for energy efficiency could be introduced by making it a requirement under the landlord's legal responsibilities in a similar way as the UK requirement for landlords to carry out safety inspection and certification for gas heating and cooking appliances. Energy efficiency inspections could be required at periodic intervals, say 3 or 5 years, with mandatory requirements for improvements to meet a minimum standard being required before the property can be re-let.

In commercial premises with long term, full repairing and insuring leases, technical measures are of limited effect, due to the complexity of the legal and commercial responsibilities. However other measures such as enabling provision of near real time information about the energy performance of the premises may enable tenants to manage their energy consumption more effectively and to identify cost effective measures to reduce consumption which could be implemented. This information could then be used in rent review negotiations, especially if reinforced by a legal obligation on landlords to implement cost effective measures.

A fiscal measure such as a 'property energy levy' with appropriate rebates could be used as an incentive for landlords to address energy use in their portfolio. The levy could be based on the difference between national benchmarks for annual energy consumption per square metre in different building types or uses and the total energy use across a property portfolio. This would encourage landlords to address the lowest performing buildings first, and to engage constructively with tenants to achieve targets and share cost savings.

ALTRAN's recommendations

- Introduce standards for energy efficiency in the landlord's legal responsibilities
- Create a 'property energy levy'

10. How can the impact of legislation on the performance of energy-consuming products for household use be reinforced? What are the best ways to encourage the production and consumption of these products? Could, for instance, present rules on labelling be improved? How could the EU kick-start research into and the subsequent production of the next generation of energy efficient products? What other measures could be taken at :

– International level

- EU level
- National level
- Regional and local level?
(Section 1.2.2)

ALTRAN's answer

Existing standards and labels for energy efficient products are no longer drivers for innovation as current technology is capable of meeting the highest standards currently available. Improvements to present EU labelling schemes could include tightening schemes to reduce scope for manufacturer interpretation of standards, as well as monitoring of performance and compliance.

In rapidly-evolving industries, labelling or standards schemes must include continual reviews to adapt the scheme to keep pace with changes in the market. This should include how the standard is assessed, rather than change to the design of the label the consumers see, else this would lead to confusion. Consumer electronics and lighting were two key areas identified as needing new labelling schemes in the Energy Efficiency Innovation Review.

General recommendations can be made on how to increase the effectiveness of eco-labelling schemes:

- The eco-label must be recognisable and easy to use. A simple label, e.g. a gold/silver/bronze award or marks out of 10, is easier for consumers to understand than a complex one with several different types of information. However, linking the simple label to a source of greater information on which the label was based, e.g. an accessible website resource may increase the balance between usability and information provision. The simple label, based on a whole life-cycle view of the product, should also include a clear message of the energy costs of running the product. High publicity will also increase recognition
- Recognised government support increases the credibility of schemes in the eyes of stakeholders, particularly if the scheme is mandatory.
- Overlap between labelling schemes should be avoided, e.g. each type of product should be covered by only one scheme. Products covered by eco-labels should include those with considerable room for improvement in their energy efficiency.
- Incentives to buy green should be offered alongside eco-labelling programmes, e.g. rebates.

ALTRAN's recommendations

- Improvement of existing EU labelling schemes to create awareness
- The eco-labelling system should be recognisable and easy to use without overlap between labelling schemes

11. A major challenge is to ensure that the vehicle industry produces ever more energy efficient vehicles. How can this best be done? What measures should be taken to continue to improve energy efficiency in vehicles and at which level? To what extent should such measures be voluntary in nature and to what extent mandatory? (Section 1.2.3)

ALTRAN's answer

One of the significant opportunities in the automotive sector is the use of alternative fuels (using a well-to-wheel analysis). Alternative fuels such as hydrogen applied in fuel cells and BTL (Biomass to Liquid) fuels offer great potential for CO₂ reduction. However, the cost of alternative fuels remains much higher than that for gasoline/diesel (hydrogen: factor 2 to 6, BTL: factor 3). Further research and demonstration projects are needed to optimize the cost of their production and distribution.

The Commission should ensure that types of vehicle that have high fuel consumption are not sheltered by anomalies in the rules governing vehicle emissions of regulated pollutants (this has happened in the case of Sports Utility Vehicles, which were originally regulated as vans rather than as passenger cars). Emission standards for regulated pollutants should be improved generally.

Measures to be taken to ensure the continuous improvement of energy efficiency in vehicles should include voluntary as well as mandatory measures. The mandatory measures should both apply for cars produced in the EU and cars that are imported to the EU because of international competition. On top there should be a voluntary system for extra efficient cars. This "bonus" system should relate to a reduction in taxes for the purchase of a new car. (Reduction on BPM in the Netherlands)

A mandatory measure could change the competitive landscape between European OEMs due to the existing differences in production volumes, exposure to export markets, different segments and share of diesel etc. This needs to be considered in any measure.

Any measure needs to consider the connection with other significant opportunities for CO2 reduction in cars (e.g. behavioural change in car usage, improvements in transport infrastructure and alternative) The measures should not just focus on technology solutions for reducing emissions; they also need to look at other drivers that are increasing weight of cars. For instance, safety measures has increased the weight by about 40kg (for an average vehicle of 1,200 kg) due to more airbags, side impact and roof protection etc. Likewise, measures to address air quality such as NOx emission, noise reduction and recycling have increased the weight of cars.

ALTRAN's recommendations

- Cost optimization of alternative fuels (hydrogen, BTL)
- Combination of voluntary and mandatory measures in order to improve energy efficiency of vehicles

13. What can be done to improve the efficiency of electricity transmission and distribution? How to implement such initiatives in practice? What can be done to improve the efficiency of fuel use in electricity production? How to further promote distributed generation and co-generation? (Sections 2.1-2.3)

ALTRAN's answer

Improvement of the efficiency of electricity transmission can be realized through the adequate management of the powerbalance of the electrical grid. This should be managed by the individual Transmission System Operators.

ALTRAN believes that the Commission should explore the potential of distributed generation. This helps to improve the efficiency of the electricity transmission and distribution because it will mean less dependency of large systems and less loss on transmission lines. The moves to liberalise the electricity market will help if they are carried forward in a way that ensures the internalisation of environmental costs into price equations.

Distributed generation needs investments in tools and methodologies to support the management of an Information Infrastructure. So it is important to encourage distribution and transmission companies to adopt systems able to manage intelligent units and in parallel investigate issues like Electrical Quality to manage in an effective way the new Power Infrastructure.

A whole different approach could be the 'Virtual Power Plant'. Small, dispersed, renewable energy production units (such as urban turbines and solar panels) at people's houses are combined with other electricity production units, thus forming a virtual power plant. This plant is governed by an electricity company.

ALTRAN's recommendations

- Encourage distribution and transmission companies to adopt distributed generation systems and
- Support and regulate distributed generation
- Virtual Power Plant approach

14. Encouraging electricity and gas providers to offer an energy service (i.e. agreeing to heat a house to an agreed temperature and to provide lighting services) rather than simply providing energy is a good way to promote energy efficiency. Under such arrangements the energy provider has an economic interest that the property is energy efficient and that necessary investments are made. Otherwise, electricity and gas companies have an economic interest that such investments are not made, because they sell more energy. How could such practices be promoted? Is a voluntary code or agreement necessary or adequate?

ALTRAN's answer

This contradiction could be removed if public authorities could promote competitiveness among providers and progressively require a sound social responsibility as a reputation must. In the medium term energy companies should be moving from the target of selling more, to the target of ensuring the availability of energy. Moreover, the price premium will be balancing the volume specific reduction: total demand will be anyway increasing while output will be shrinking.

A change-over from quantity to quality of the delivered energy opens a complete new market approach and market opportunities.

ALTRAN's recommendations

- Promote competitiveness among providers
- Quality instead of quantity will be a new market driver for utilities

15. In a number of Member States, white (energy efficiency) certificates have been or are being introduced. Should these be introduced at Community level? Is this necessary given the carbon trading mechanism? If they should be introduced, how could this be done with the least possible bureaucracy? How could they be linked with carbon trading mechanism? (Section 2.4)

ALTRAN's answer

ALTRAN highly recommends the enlargement of the white certificate market at Community because it would certainly contribute to increase the liquidity and liveliness of this market. Furthermore, the white certificates mechanism (WCM) is complementary to the Emission Trading Scheme, because it is applicable to those sectors, such as the domestic sector, which cannot be included in the ETS Directive. As complementary measures, it makes sense that European Unit Allowance (EUA) and energy efficiency certificates are both applied to all the EU members.

As far as the integration of these two markets, the ET market and the white certificate market are not homogeneous, and should work separately. To reduce at least bureaucracy, they could be managed by the same authority, but not being integrated. When both markets are fully working, it might be possible to calculate a conversion factor between white certificates and EUA, in order to let the operators choose the best portfolio strategy.

ALTRAN's recommendations

- Enlarge the White Certificates Mechanism (WCM)
- Do not integrate WCM into ETS

16. Encouraging industry to take advantage of new technologies and equipment that generate cost-effective energy efficiencies represents one of the major challenges in this area. In addition to the carbon trading mechanism, what more could and should be done? How effective have been the steps taken so far through voluntary commitments, non-binding measures adopted by industry, or information campaigns? (Section 3)

ALTRAN's answer

ALTRAN thinks a benchmark should be made to set achievable goals in energy efficiency. The technologies be that can be used to achieve the benchmark are cost-effective. This way companies have no reason for not applying the technologies. They may need help in their investment through a very low interest loan.

Companies should be imposed to meet the benchmark. Outperforming companies should be rewarded. The money for rewarding comes from the underachieving companies paying a fine.

ALTRAN's recommendations

- Benchmark setting
- Reward for outperforming, fine for underachieving companies

19. Among the measures that could be adopted in the transport sector, which have the greatest potential? Should priority be given to technological innovations (tyres, engines...), particularly through standards defined jointly with the industry, or to regulatory measures such as a limit on fuel consumption of cars? (Sections 4.3-4.5)

ALTRAN's answer

ALTRAN believes technology and regulations should move together. To this aim, requiring progressive innovation for different components is necessary. Yet, it seems that new perspective of regulations should be found. Addressing, for instance, the stability of performances in time and under different working conditions.

We also think priority should be given to measures that should be adopted in the transport sector. However, if standards are defined this should be done in close cooperation with the industry. Again, a combination of mandatory and voluntary standards with beneficial tax reductions will increase the amount of effort that industry will dedicate to technological improvement of efficiency, such as fuel consumption. With a system in place that promotes the energy efficiency it will not be necessary to priorities specific subjects, automatically the most obvious but efficient energy saving solutions will be implemented.

ALTRAN's recommendations for the future (summary of the key points)

- Combination of technology and regulations
- Definition of both voluntary and mandatory standards in cooperation with the industry

20. Should public authorities (state, administrations, regional and local authorities) be obliged in their public procurement to buy a percentage of energy efficient vehicles for their fleets? If so, how could this be organised in a manner that is technology neutral (i.e. it does not result in distorting the market towards one particular technology)? (Section 4.3)

ALTRAN's answer

ALTRAN thinks that public authorities should be obliged to buy energy efficient vehicles for their fleet. Instead of favoring a technology, they should indicate what the total amount of energy use and emissions per kilometre at maximum can be. "Well to wheel analysis" are of great importance regarding this issue. Also local benefits versus global benefits should be discussed.

Public authorities can play a demonstrating role in this regard.

ALTRAN's recommendations

- Oblige public authorities to buy energy efficient vehicles
- "Well to Wheel analysis" and life cycle implications to consider
- Public Authorities should play a demonstrating role

21. Infrastructure charging, notably paying to use roads, has started to be introduced in Europe. A first proposal was made in 2003 to strengthen the charging of professional road transport. Local congestion charges have now been introduced in some cities. What should be the next steps in infrastructure charging? How far should "external costs" such as pollution, congestion and accidents be directly charged to those causing them in this manner? (Section 4.4)

ALTRAN's answer

The next step in infrastructure charging should be an intelligent one. In ALTRAN's view, optimal flows study (deploying at local scale existing studies at European level) and even more innovative action "slot selling" are possibilities. Slot selling means selling the right to move in specific time intervals and geographic areas at different prices. This could be limited to large urban areas, working days, etc. A new balance between individual freedom and collective freedom could be found.

This should however not lead to the impression that people are followed everywhere (the 'Big brother is watching you' feeling). It therefore requires an ingenious technical solution. ALTRAN thinks that clean transport should be rewarded.

ALTRAN's recommendations

- Introduce intelligent systems as "slot selling"
- Reward should be given for clean transport

23. Should energy efficiency issues be more integrated in the Union's relationships with third countries, especially its neighbours? If so, how? How can energy efficiency become a key part of the integration of regional markets? Is it necessary to encourage the international financial institutions to pay more attention to demand management issues in their technical and financial assistance to third countries? If so, what could be the most effective mechanisms or investments? (Section 6)

ALTRAN's answer

One important task is to create incentives for less developed countries to consider energy efficiency. Energy demand management needs important conditions to be accepted or to succeed in less developed countries. Governments should have effective incentive schemes for encouraging demand management. Experimented organizations or firms are needed in the field of demand management.

ALTRAN's recommendations

- Create incentives to consider energy efficiency
- Help to develop demand management

24. How could advances in energy efficiency technology and processes in Europe be put to effective use in developing countries?

ALTRAN's answer

If the technology is too expensive in terms of capital investment or operational cost, it may be hard to be adopted in developing countries. ALTRAN suggests EU to help developing countries to encourage favourable policy/regulation/market conditions in order to be willing to buy EE technology, before any significant investment in EE technologies.

The European Energy Initiative supports the Millennium Development Goals by creating a focus on energy and poverty. A large part of the poor in developing countries is rural and efforts are often consequently directed to these populations. But in this decade more people will start to live in a city than in a rural environment where often most of the population still relies on biomass (charcoal) for cooking and heating. Due to the rapid degradation of the surrounding regions, charcoal and other vital goods have to be transported over increasingly longer distances. The large size of those cities and the poor quality of urbanization plans often result in maladapted transportation solutions. The 'taxi-brose', once a picturesque sight in those cities, is now a major cause of pollution.

Extending the EEI by explicitly including city authorities could address this problem in a more effective way. Cities already possess some of the basic infrastructure required for electricity distribution. Generating power using sustainable energy resources is a logical first step. Integrating energy policies with other policies such as waste collection and public transportation (regional trains, trams, etc.) would leverage the total effect. One could also promote the use of electricity for household applications (including cooking). All those aspects would benefit cities and their populations in more than one way including for example health improvement. Within the EEI, one could extend the efforts at country level to the level of cities. Partnerships between cities, North-South or South-South, would provide for benchmarks and best practices and could be integrated in other projects at European level.

The issue of the quality of vehicles coming from second-hand markets of developed countries should also be addressed because they increase pollution problems. Banning those vehicles from export is not a solution. However, more energy efficient and less polluting alternatives must be developed.

In other areas, the EU can play a key role in driving improved environmental performance through the supply chains of companies based in Europe with many manufacturing and other functions in emerging economies.

ALTRAN's recommendations

- Help developing countries to build up favourable policy/regulation/market conditions in order to adopt EE technologies
- Encourage sustainable energy resources, help to integrate energy policies with waste management and transportation
- Aide to tackle pollution problems due to transportation (solution for old, second-hand vehicles)

Contributors: Elske van de Fliert (NL), Luca Bolognini (IT), Yves Gigase (B), Michiel Jak (NL), Justin Keeble (UK), Bram Ledebor (NL), Guanghai Li (China), David Lyon (UK), Gilbert N'jouda (B), Brian Quinn (UK), Giulio Troncarelli (IT), Davide Vassallo (IT)s

For more information please contact:

Pascale LARDIN, European Public Affairs Manager, Av. de Tervueren 142/144 - 1150 Bruxelles Tel: +32 (0)2 737 68 11 Fax: +32 (0)2 737 68 36 Mob: +33 6 72 14 33 27 email: plardin@altran.net