Will voluntary agreements at EU level deliver on environmental objectives?

Lessons from the agreement with the automotive industry

WWF DISCUSSION PAPER

1. SUMMARY

WWF is one of the largest non-governmental organisation that works to preserve biodiversity globally, by protecting species and habitats, preventing destructive resource use and reducing pollution. At European level, we work to ensure that the European Union plays an environmental leadership role in world affairs and that European citizens play their full part in reducing damaging impacts on the earth's ecosystems.

Since the Rio Summit in 1992, WWF has been pressing the European Union (EU) to implement a strategy to combat climate change, by cutting down its greenhouse gas emissions (GHGs). The organisation has been heavily involved in the continuing series of international climate negotiations. WWF is currently highlighting domestic policies within the EU and measures needed to achieve the first Kyoto Protocol-related cuts in carbon dioxide (CO2) emissions. We also collaborate with leading companies which agree to implement cutting-edge climate solutions.

Voluntary Agreements (VAs) between government and industry have been increasingly used as a new policy tool to achieve energy efficiency measures. The European Commission argued for a greater use of agreements at Community-level to meet EU Kyoto Protocol emission reductions. This raises the question of whether voluntary agreements are suited to the institutional and political context of the EU. What are the implications for future EU climate policies? How will this affect the transparency and democracy of the European decision-making process?

We address these issues by learning the lessons of the agreement between the European Commission and the European Car Manufacture Association (ACEA), which aims at reducing CO2 emissions from passenger cars. This paper draws on the experience developed by WWF, as well as from analysis by other non-governmental organisations working on EU climate policies.

Many NGOs are sceptical about the bold claims made in favour of the use of VAs at EU-level.

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Our analysis shows that the ACEA agreement presents a number of fundamental shortcomings, which could undermine the EU strategy to reduce CO2 emissions from cars:

- The target of 140 g/km falls short of the emission reductions necessary in the transport sector and is not even likely to stabilise CO2 emissions from passenger cars at the 1999 level by 2010. As a benchmark, the ACEA VA contribution to the specific Dutch C02 reduction target will be just over the contribution of measures for raising tire pressure of Dutch cars;
- The establishment of the ACEA agreement bypassed the European Parliament and failed to ensure public participation;
- The Commission's lack of a credible alternative appeared to be no incentive for the industry to negotiate ambitious emission reduction targets;
- VA compliance is not backed-up by sanctions and measures to address the issue of free riders

From the above arguments, WWF believes that the scope for effective European voluntary agreements to address climate change is rather limited. In stead of pursuing a policy of climate-related voluntary agreements at EU-level, with modest results at best, the Commission should ensure that VAs at Member State level meet the Community guidelines and are effective in providing the required greenhouse gas emissions reductions. It is therefore recommended that a European-wide mechanism be developed, to monitor the implementation of Commission's guidelines on Voluntary Agreements.

2. TRANSPORT AND CLIMATE CHANGE

The transport sector presents one of the greatest challenges for climate protection. In the EU, it is the fastest growing source of CO2 emissions. CO2 emissions from transports rose by almost 10% between 1990 and 1995. In the absence of appropriate policies, CO2 emissions are predicted to rise almost 40% by the year 2010, based on 1990 levels, and it will represent about 30% of European CO2 emissions[i]. Passenger cars account for 50% of the EU's transport related emissions and 12% of the total EU CO2 emissions.

The current emissions path threats the ability of the EU to meet its Kyoto commitment that is to reduce greenhouse gases emissions by 8% below 1990 levels by 2008-2012. Table 1 compares EU Member States reduction commitments, under the EU Burden Sharing Agreement, with 1997 CO2 emissions. It shows that some Member States are struggling to meet their Kyoto commitments. For these countries, the effect of measures to reduce CO2 emissions from the transport sector is crucial.

Along with transport management measures, energy efficiency improvements are essential to cut CO2 emissions in the transport sector. However, in many EU countries average efficiency of new cars has remained stagnant in recent years due to the increasing size of cars, more powerful engines and more comfort features, such air conditioning[ii].

Table 1. EU Member States CO2 emissions in 1997 and Kyoto-related reductions by 2010

Countries	***Burden sharing CO2 reduction (%)***	***Change 90-97 (%)***
Austria	- 13	+7.9
Belgium	- 7.5	+12.3
Denmark	-21	+17.9
Finland	0	17.9
France	0	-4.1
Germany	-21	-9.9
Greece	+25	+11.5
Ireland	+13	+13.0
Italy	-6.5	+4.0
Luxembourg	-28	-20.6
Netherlands	-6	+14.3
Portugal	+27	+25.3
Spain	+15	+18.0
Sweden	+4	+0.5
UK	-12.5	-5.2
Total EU	***-8%***	***-***

Source: IEA 1999

3. THE ROLE OF VOLUNTARY AGREEMENTS TO ADDRESS CLIMATE CHANGE

Since the development of the EU's Fifth Environmental Action Programme, which argued for the need to broaden the range of policy instruments, Voluntary Agreements (VAs) are increasingly used as a new policy tool in the environmental field. The total number of VAs in the EU has been calculated to exceed more than 300[iii]. An increasing number of these agreements have been used to achieve energy efficiency objectives. In the last two years, most of the EU Member States have considered launching voluntary agreements as part of the national climate change strategies. Key examples include:

- *The Netherlands*. Energy Efficiency Benchmarking Agreements aimed to achieve Best-Practice targets between 2000 and 2010;
- *Denmark*. Agreements on Energy Saving Measures signed by the government by a number of individual energy-intensive companies to reduce the energy tax burden;
- *Germany*. Climate Change Agreement agreed by the federal government and industry associations as an alternative to carbon-energy tax and heat ordinance;
- *Italy*. Climate Change Pact, which should lead to VAs in the field of energy-efficiency in the electrical sector, energy consumption in transport and urban areas, and renewable energy;
- *UK*. Recently, energy efficiency agreements have been negotiated with UK's ten most energy-intensive industrial in return for substantial rebates on a forthcoming energy tax.

In its 1996 communication, the Commission pointed out non-binding VAs at Community level, "*as the available instrument to encourage a pro-active approach from industry and as an*

incentive for effective environmental action". Recently the Commission reaffirmed its plans to use VAs as a new policy instrument at EU-level to implement climate policies[iv].

The European Commission provided a set of guidelines for guaranteeing the transparency, credibility and reliability of VAs developed both at Member State and Community-level. The key elements in that respect are: prior consultation with interested parties, a binding form, quantified and staged objectives, the monitoring of the results as well as the publication of the agreement and the results obtained. However, as argued later in this paper, a brief assessment of the first attempt to implement an EU-level VA indicates a tremendous gap between theory and practice.

WWF believes that VAs could be valid instruments to implement stringent Climate Change policies, provided that the following basic objectives are met:

- **Promote effective environmental improvements:** VAs should guarantee the achievement of Kyoto's emissions reduction targets. Furthermore, VAs need to be able to embrace initiatives that go beyond win-win opportunities (by changing the "goal-posts") if climate change is to be successfully addressed -which requires emissions reductions that go significantly beyond the targets agreed at Kyoto.

- **Support cutting edge technological development**: given the significant potential for new and innovative climate friendly technologies, VAs should address existing barriers and underline the hidden win-win benefits. They should "force" these technologies to reach their appropriate level of industry penetration and should establish new markets.

- **Be transparent and democratic**: Transparency is a crucial issue for VAs to be a credible policy tool. It is vital that all key stakeholders, including civil society represented by Parliament and NGOs, are actively involved in the preparation, negotiation and implementation of the VAs process.

- **Ensure corporate responsibility.** The challenge of climate change requires industry to implement pro-active environmental actions. VAs should be used to encourage corporate environmental responsibility and reward truly innovative climate solutions.

BOX 1: WWF Climate Savers

WWF believes there are enormous opportunities for businesses to improve their standing and their bottom line through actions that cut CO2 emissions. Therefore, WWF has set up "Climate Savers" to strike deals with leading corporations prepared to make innovative new commitments to reduce their carbon dioxide emissions. The target agreed with WWF must be demonstrably more ambitious than previously planned or communicated by the company. It should place the company in the role of leader in emissions reductions in its particular sector. The Climate Savers agreement is tailored to the circumstances and operating sector of the company but places the company ahead of its competitors in terms of reducing global warming gases. Outside experts monitor and verify compliance with the agreement.

Alongside the actual reductions in emissions, WWF is relying on the quality and innovative nature of the agreements to catalyse wider change within the business community. Climate Savers agreements could involve targets in one or more of the following categories: energy efficiency of products; energy efficiency in processes or facilities, energy-saving products; transport efficiency; fuel switching to natural gas or increased use of co-generation; conversion to renewable energy (supply, use, marketing); financing schemes for i) to vi) above.

The first two corporations joining Climate Savers are IBM and Johnson & Johnson. Johnson & Johnson pledged to reduce its global warming emissions world-wide 7 per cent below 1990 levels by the year 2010 while IBM has pledged to increase energy efficiency and use clean energy in reducing its CO2 emissions by an average of 4 per cent per year by 2004. Other companies are also getting the message:

- in Germany, AEG - the country's leading maker of household appliances, like refrigerators and vacuum cleaners - promised WWF it will sell only the most energy-saving models;
- in Japan, WWF has been engaging power companies, government ministries, local authorities and the public in developing wind power;
- in the Netherlands, WWF brought together energy companies, financiers, a TV station, a rock music band and government ministries to deliver the biggest-ever leap in numbers of new subscribers for "green electricity".

4. KEY ISSUE IN DESIGNING VAs

The current policy trend towards public deregulation and industry self-regulation tends to portray VAs impacts in glowing terms, especially in terms of faster achievement of objectives, better cost-effectiveness, and enhanced environmental corporate responsibility.

Even in the Netherlands, the country where VAs were first launched and implemented, questions are now being asked as to the environmental effectiveness and transparency of the new round of Energy Efficiency Benchmarking Agreements.

WWF considers the following criteria to be uppermost in assessing the effectiveness of VAs:

- ***Targets.*** Targets play a key role in ensuring that the VA delivers effective and measurable environmental improvements. Quantitative targets must be ambitious enough to have an impact on the sectors' behaviour. They should go beyond business-as-usual so they can affect future investment decisions and spur technological development. The starting point for negotiations should be how great GHGs emissions reduction needs to be delivered by the agreement, and not how much industry thinks it can or wants to deliver. Therefore, targets should be set in the context of the Government's existing Kyoto-related emission reduction commitments and in anticipation of future targets beyond 2010.

- ***Firm-level responsibility.*** VAs should preferably be signed with individual companies - not industry associations- and should relate to specific sites or installations rather than company-wide activities. While industry associations may be a first port to call for discussions on the size of reductions in the sector, signing an agreement with the sector as a whole gives weaker incentives for compliance. This is confirmed by the case of the

German Declaration on Global Warming. The poor environmental effectiveness of this VAs is, among others, due to the element of collective liability of the German industry, as compared to the individual liability of participating firms of the Dutch LTAs[v]. The lack of reports on progress from individual companies resulted in little incentives to follow the agreement, and provided no clear "sticks" in case of non-compliance.

- ***VAs and complementary instruments.*** VAs can not be an independent instrument to address environmental protection and climate change, but are to be used within a portfolio of other instruments, including regulations, taxes and technological development programmes. VAs can not be considered as a substitute to regulation, as they would then lack the complementary threat of penalties or sanctions which ensure industry's incentive to comply. The experience in the Netherlands and in Denmark shows that VAs can be successful only if they are part of a policy mix of instruments, including market instruments and regulations. In Denmark, VAs were launched as a flexible way to allow from exemption to the national energy tax. VA signatories still pay a certain level of tax, and if failing to achieve the targets, will be retrospectively liable for the tax exemption awarded[vi].

- ***Transparency and public participation***. VAs are often promoted as a new policy tool based on multi-stakeholder dialogue and shared responsibility. Although there is certainly a potential, current experience in the EU shows clearly that recently agreed VAs lacked transparency as well as multi-stakeholder collaboration. Even in the case of the Netherlands, analysis of VAs negotiations points out the very limited involvement of third parties, such as environmental NGOs[vii]. Civil society should be formally involved in the VA process from the beginning. Resources should be available to allow an informed participation.

- ***Monitoring and verification.*** It is essential to put in place an effective monitoring mechanism to monitor VA progress and independent verification of it, otherwise the VA is neither credible nor accountable. A progress report on VA implementation should be made mandatory and available to the public, so that the latter can play the key role of "watchdog". However, the level of public availability of results thus far has been very low. In Denmark, results on VAs progress are not published, in the Netherlands monitoring reports are confidential, and in Germany while reports are in principle available they have been difficult to get hold of[viii].

- ***Sanctions in case of non-compliance***. To ensure an additional “stick” in case of non-compliance, it is vital that VAs contain a set of sanctions in case targets are not met. Without sanctions for failing to meet the targets, it is unlikely to be possible to demonstrate that any change has occurred which would not follow Business-As-Usual trends. Sanctions are also necessary to avoid the free-riders problems, while backing-up pro-active corporate responsibility. Experience in countries like Netherlands, Denmark, and Portugal shows how sanctions are crucial for ensuring compliance.

The above points show that there are many important criteria when assessing whether VAs have the potential or not to deliver on climate mitigation objectives. VAs should be developed only

where they offer to be a useful instrument, complementary to other instruments such as regulation, taxation and technology development programmes.

Current VAs at Member State level fall short in meeting the above-mentioned criteria, particularly on ambitious targets and third party participation. These shortcomings raise a number of questions about the capability of VAs to allow for GHGs reductions beyond business-as-usual to meet Kyoto commitments.

5. THE ACEA VOLUNTARY AGREEMENT

5.1 Background

In 1995, the European Council approved a Community Strategy to reduce CO2 emissions from passenger cars to an average of 120 g/km for newly registered cars by year 2005, at the latest 2010[ix]. The strategy is based on three policies: a) a voluntary fuel economy agreement; b) a fiscal framework for Member States and, c) a fuel economy labelling scheme.

In 1998 a voluntary agreement was reached between the European Commission and ACEA under the terms of which the industry is committed to reduce average CO2 emission figures from all new cars to 140 g/km by 2008. This compares to a current level of emissions of about 186 g/km. An intermediate target was set for 2003 up to 170 g/km. The industry has also undertaken to make available to the market cars that emit 120 g/km by 2000 and to undertake further improvements beyond 2008.

5.2 Review of the ACEA agreement

The ACEA agreement represents the first Community-level agreement aimed at climate change protection. A quick assessment of this agreement against WWF criteria for VAs (as well as Community guidelines) shows a number of fundamental shortcomings- weak targets, lack of compliance systems, democratic deficit- which are likely to undermine the EU strategy to reduce CO2 emissions from cars.

A) VA targets

The content of the agreement is technically outdated. The target of 140 g/km was designed to bring about cars that would drive 100 km on 5 litres of petrol. However, recent OECD research[x] shows that a 50-80% improvement in fuel economy would be technically possible using existing commercial technologies at little extra cost over 10-15 years. More importantly, the agreement falls short of the emission reductions necessary in the transport sector. In contrast, its impact is not even likely to stabilise CO2 emissions from passenger cars at 1999 levels by 2010[xi]. Analysis carried out by the Dutch government (1999) demonstrates that most of the agreement's impacts had already been assumed in the official business-as-usual projections. Table 2 shows that the agreement contribution to the Dutch reduction target is negligible, between 0 and 0.4 Million tonnes of CO2. In other words, the ACEA commitment will have approximately the same emission reduction effect as raising tire pressure (equal to -0.3 Mtonnes CO2)[xii].

Furthermore, the agreement's objective is not sufficiently ambitious to support a technological shift from the current internal combustion engine to new technologies, such as methanol or hydrogen-based fuel cells. Although these technologies are now in commercial production, barriers of higher costs and lack of supportive infrastructure still delay their large scale development. The terms of the ACEA agreement are clearly not designed to support the introduction of alternative technologies but to assist the maintenance of the conventional car model.

Table 2. Environmental effectiveness of the ACEA agreement - the Dutch example

Measure	**Impact** (CO2 Mtonnes)
Dutch Kyoto reduction target	**- 50**
ACEA agreement impact in the Netherlands	**- 0.4**
Measures to rise tire pressure in the Netherlands	**- 0.3**

B) Democratic deficit and lack of transparency

The establishment of the ACEA VA process was marked by an important democratic deficit: the process bypassed the European Parliament (EP), the only directly elected EU institution and failed to ensure civil society participation. While the EP was informed and could offer its opinion, which may or may not be considered, it had no decision-making power. In the future, exclusion of the Parliament will lead to an unacceptable trend toward a less democratic EU legislative process. Civil society participation has been quasi non-existent with NGOs consulted only once. Because negotiations have been carried out "behind close doors", the danger of regulatory capture materialised and led to the agreement of very weak targets.

The lack of transparency is even more evident in regard to public availability of the agreement progress. ACEA has insisted that the performance statistics for individual manufactures should not be published. This is due to the fact that individual car manufacture contributions will not be directly quantifiable (the so-called collective responsibility or liability). It is unclear whether the Commission will meet ACEA demands. However, disclosure of information for individual manufacturers is vital to allow the public, including NGOs, to compare different performances and thus encourage pro-active behaviour and compliance.

Other important limitations of the fuel-efficiency agreement include:

C) Lack of negotiation threat or incentive

During the negotiation of the ACEA agreements, there was no threat of regulation if negotiation failed, there also appeared to be no incentive for the industry to negotiate ambitious emission reduction targets. A potential threat was represented by the development of fuel economy legislation. Legislative options have been seriously discussed only twice, both in a Council

conclusions in 1991, and at a high-level workshop in 1998[xiii]. Interesting enough, only after the latter "threat" of CO2 emission standards, ACEA did accept a more ambitious VA target.

D) Lack of enforcement mechanism

A further problem with the ACEA agreement is the lack of any enforcement mechanism. The agreement does not contain sanctions for non-compliance and measures to address the issue of free riders. In other words, the industry will effectively be its own watchdog. Given the highly competitive characteristics of the car industry and the collective responsibility of the VA, free riding is a likely outcome. In this case, the even modest target of 140 g/km will not be achieved. Nevertheless, a concrete legislative proposal does not exist and it has been argued that consensus within the Council would be difficult to achieve[xiv].

E) Weak Monitoring

The agreement includes statistical and holistic monitoring schemes in order to monitor both the ACEA progress and the agreement's assumptions. This would appear to meet Commission guidelines on VAs, requiring data to be independently verified. However, at least until the EU database is established in 2001, monitoring data will be coming from the same source. Moreover, not only are these mechanisms weak but they could also lead to renegotiations of targets, as the monitoring procedure will take into account, amongst other things, legislated policies which might neutralise fuel economy improvements and the availability of fuel of a sufficient quality.

F) Lengthy agreement

A common myth about VAs is that their conclusion can be considerably quicker than the adoption of legislation having the same targets. As regards VAs at EU-level, the Commission argued that the average time between the proposal for an environmental Directive and its adoption is well over two years with usually another two-year period for transposition by the Member States[xv]. However, the time span required for the conclusion of the ACEA agreement does not confirm this claim. While the VA has taken some four years to complete (1995- 1999), the legislative process is unlikely to take any longer than the average of two to three years. It has been noted that if legislation is to be adopted before 2008, the process may considerably quicker than normal as the institutions have already discussed the issues in considerable depth[xvi].

Table 3 below gives an overview of some shortcomings of the ACEA agreement, compared to a VA potentially more effective.

Table 3: Business-As-Usual vs Effective fuel economy agreement

Criteria	ACEA VA – BAU scenario	Effective VA
Target	140 g CO2/km by 2008	120 g CO2/Km by 2005
Transparency	No company targets	Company targets
Public participation	Targets subject to negotiation	Targets set by the EP

Incentive to negotiate	Little	Fuel economy legislation
Enforcement system	None	Sanction for non compliance
Monitoring	Weakened by assumptions	Independent authority- no assumptions

6. LEARNING FROM THE ACEA CASE: LESSONS FOR THE FUTURE USE OF VOLUNTARY AGREEMENTS

The ACEA agreement represents the first attempt by the Commission to implement a climate change measure through a voluntary agreement. Theoretically, the ACEA case represented an ideal context for the use of this new policy instrument. Basic conditions were in place: a strong European car industry association representing a large share of the market, a level of trust between government and industry, and concern for the economic effects and competitiveness implications of regulations.

However, the ACEA agreement can not be considered a good example of an effective climate protection measure. In other words, what would be the use of a VA negotiated only with influential corporate representatives, whose mandate does not respond to the interests of all key stakeholders, which does not deliver on the environment, and that contains no enforcement dispositions?

The ACEA agreement provides, amongst other things, two important lessons regarding the achievement of effective voluntary agreements::

- **Need for highly credible threat**. VA negotiations based on weak threats for alternative fiscal or regulatory measures are unlikely to produce ambitious agreements. For instance, the lack of a fuel-economy legislation proposal proved to be particularly detrimental to the Commission's bargaining power. Due to the complexity of the EU legislative process, the Commission's threat of legislation is less direct as compared to that of national governments.
- **Need for high level of technical capacity**. Independent information about the sector addressed, together with technical capacity, plays a crucial role in the negotiation of VAs. In the ACEA case, the lack of technical support for the Commission during the negotiation process led to a modest target. Unsupported by specific technical or commercial studies, the target was obtained solely through political bargaining, using data already available. As the Commission could not check ACEA's findings, its bargaining power was weakened considerably.

These findings point to the question of whether voluntary agreements are suitable for the institutional and political context of the EU. The analysis above gives the indication that negotiation of VAs at Community level will be at best complex and time-consuming. In addition, if one considers the environmental effectiveness and the transparency of the ACEA agreement

case study, it is clear that agreements at EU-level have an even smaller performance than alternative instruments, such as regulations and economic instruments.

From the above arguments, WWF believes that the scope for effective European voluntary agreements to address climate change is rather limited. It would therefore be more appropriate not to launch new European VAs, in order to maintain the credibility of these new policy instruments, as well as to not undermine EU climate policies.

7. CONCLUSIONS

VAs should be developed only where they offer a useful instrument, complementary to other instruments such as regulation, taxation and technology development programmes.

Instead of trying to develop a policy of climate-related voluntary agreements at EU-level, with no results at best, the Commission should ensure that VAs at Member State-level meets the Community guidelines and provide effectively the required greenhouse gas emissions reductions.

WWF believes therefore that the European Commission should take urgent steps to implement the following recommendations:

- *A European-wide mechanism should be developed to monitor the implementation of Commission's guidelines on Voluntary Agreements;*
- *It is necessary that the ACEA agreement's targets are reviewed and improved as a part of the ongoing process of technological development;*
- *The Commission should start immediately to draft a proposal for a Council Directive on stringent car-related CO2 emission standards;*
- *Before renegotiating the agreement, the Community should have already established the quantitative target and timeframe first, following later with clarification of the agreement details;*
- *When entering any negotiations, the Commission should support its position via clear and analytical research on the true potential for technological progress in the fuel-economy.*

Giulio Volpi and Stephan Singer, Brussels 24 January 2000.

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Notes

[i] EC (1998).

[ii] After several years of relative stability, European sales of high riding sport utilities surged 26 % in 1998, four times the rate of the overall passenger vehicle market, to 464,400. For 1999, SUVs are expected to grow another 21 %, to roughly 564,200, again four times the pace of the overall market. In the next decade, sales are expected to growth even faster given that all large car companies are introducing new models to gain this profitable new market.

In this respect, the US offers a interesting lesson as the overall fuel economy of new vehicles declined since 1980 because sales of Sport Utility Vehicles and other light trucks (NYTimes Dec 1999).

[iii] EEA (1997).

[iv] EC (1999).

[v] ECOTEC (1998).

[vi] Ten Brink et al. (1998)

[vii] WWF Netherlands, personal communication (Jan 2000).

[viii] ECOTEC (1998).

[ix] Council Conclusions 25/06/95.

[x] According to official OECD data and other experts, "*it is quite possible today to build a monotirised personal passenger vehicle with the fuel economy in the region of 0.5 litre/100 km or less…*" (Michaelis 1997).

[xi] The VA outcome is dependent on the time path, towards 2008, but CO2 emission reductions will likely be in the order of 60-70 Mtonnes (Utrecht University 1998).

[xii] Dutch Ministry of Environment (1999).

[xiii] Goodwin (1999).

[xiv] Lyneham, personal communication (Dec 1999).

[xv] EC (1996).

[xvi] Keay-Bright (1999).