'Managing the Global Commons' An interview with Alain Lipietz by Barbara Lipietz

Interview by B. Lipietz on the fortunes and misfortunes of global negotiations against climate change, from Rio 1992 to Rio 2012. Document for pedagogic use at London School of Economics and Bartlett Development Planning Unit, UCL.

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BL Thanks again for agreeing to talk us through the trials and tribulations of climate change negotiations. We're particularly interested in getting your sense of the collective action problems inherent in managing this particular aspect of the global commons. The recent failures of Copenhagen, Cancun, Durban and the subsequent fudged processes leading to Rio +20 in 2012 certainly paint a pretty bleak picture.¹ Why is it so hard, then, to manage, to regulate, the global commons?

AL Well, the human species has been evolving on planet earth for a few hundred thousand years and started recording an account of its actions approximately 3000 years ago. It is now reaching a stage where it is destroying the possibility of its own survival, by overexploiting the particular global common 'atmosphere'. One shouldn't expect this matter to be resolved in a decade or even in one century! This negotiation, this regulation of the global common 'climate', will take time.

For one thing, we had to come to grips with the notion that this global common does indeed have the properties of a global common. A global common essentially means two things: a number of physical properties linked to a specific space, which people can enjoy in a non rival fashion; *and* a legal or cultural system to regulate its access (or exclusion).² "Non rival" means that many people may enjoy the same common at the same time,

¹ On the broader context of ecological crises of present time, see "Fears and Hopes: The Crisis of the Liberal-productivist Model and its Green Alternative.", invited lectures to : *Responding to the Crisis in International Development*, 20th Anniversary Conference, International Development dept, London School of Economics, 2011 sept 8th, and : *The Global Economic Crisis and State: Alternative Approaches for Monetary and Fiscal Policies*, 59th JSPE Annual Conference, Rikkyo Univ, Tokyo, 2011 sept 17th, http://lipietz.net/?article2669

 $^{^{2}}$ In this interview, 'regulation' should not be understood as a law or a contractual compromise, but in the broader meaning of the 'French Regulation Approach', which also includes habits, routines, beliefs, etc.

without reducing the satisfaction of its use for other users; in general, this is only true up to a point...

As far as the physical properties of the global common are concerned, we know, since the late 19th century and thanks to Svante Arrhenius, that certain gases capture infra red radiation and stops it from going back into space, thereby moderating temperatures on planet earth: this is the green house effect. And since the Russian Vladimir Verdansky, we have also deduced that, if the concentration of these green house gases (GHG: mainly carbon dioxide and methane) increases, the earth's temperature will rise. However it was not until the 1980s, with NASA acting as a 'whistle blower', that we were alerted to the actual reality of rising temperatures linked to increasing human ("anthropic") GHG emitted into the atmosphere.

This was a big 'discovery' that jolted many people back in the 80s. Up to then, the big environmental conferences, like Stockholm in 1972³, mainly addressed the issue of general resources depletion. We became receptive to these novel environmental concerns in the 1980s because around that time, the question of waste, and of environmental pollution, became an issue with the emergence of phenomena like acid rain and CFCs⁴. These triggered the beginning of a realization that humanity is not only threatened by the exhaustion of its resources, resources with which it produces things we can consume, but by an *excess* of production itself, an excess which produces so much waste we no longer know what to do with it.

So you see emerging at the time, the idea of the global common 'atmosphere' not as a pasture but as a 'pit' which, beyond a certain level, is becoming rival. That is, the non-rival and free access qualities of the atmosphere – which up to then were totally taken-for-granted - are being threatened by over-use and over-exploitation. This raises the vexed issue of how to exclude people or how to regulate access – that's the political and social element of the global commons.

BL And, at the time, the dominant view on the possibility of regulation is Garrett Hardin's rather pessimistic take developed in 'The Tragedy of the Commons'⁵...

AL Yes, and in fact Hardin's analysis will be taken up by the American negotiators at the 1992 Rio Conference with the idea that we must enclose the global commons ... through some form of private property principle, granted to the 'first occupier'! We'll come back to that shortly, but what is interesting to note is that you also see emerging, around that time, the work of Elinor Ostrom⁶ and colleagues who highlight the fact that, historically, there are *no* common goods which have *not* been regulated, whose excludability has *not* been regulated. And what they show is that the regulation of access to the use value of this common good emerges out of socio-political compromises: as soon as the possibility

³ The UN Conference on the Human Environment, the first international meeting on global environment and development needs, was held in Stockholm in 1972 and led to the setting up of the United Nations Environment Programme (UNEP).

⁴ Cholorofluorocarbons contain carbon, cholorine and fluorine – a volatile derivative of methane and ethane. They have destructive effects on the ozone layer.

⁵ G. Hardin. 1968. 'The Tragedy of the Commons' in Science, 162: 1243-1248.

⁶ E. Ostrom. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action.* Cambridge: CUP.

of abuse of the common good emerges, customs, institutions, norms develop little by little to – as much as possible - regulate that access.

Saying that, Hardin was pointing to something very real: if you do not regulate access to a non-excludable but exhaustible good, you are heading towards crisis of some sort. So you have to *institute* regulation.

Typically, no one imagined we would have to regulate access to the atmosphere – even if in the course of history, humankind has had to learn to regulate access to land, to fresh water, etc. But with the impact of local pollutions, then long-distance pollutions (acid rains and CFCs), things started shifting. The regulation of acid rains was first dealt through bilateral negotiations, inspired by the regulation of international rivers; then, increasingly, through multilateral negotiations. Multilateralism is the only possibility when pollution, effectively, is "global", that is: originates from anywhere and affects everywhere.

The case of CFCs and the regulation of their impact on the depletion of the ozone layer, was a key moment - and it paved the way for negotiations to Rio. In effect, it provided a model of the institutionalization of global environmental regulation, which goes along these lines:

- Step one: whistle blowers (typically, scientists) intervene in the public domain and highlight a development which most people cannot even anticipate. In the case of CFCs, there was nothing obvious linking propellant gases in shaving creams or the gases used in refrigeration in Europe to the destruction of the ozone layer above Australia. So you needed a scientific explanation to make that connection. Note that at the beginning, people are likely to remain skeptical!
- Step two: a substantial wave of public pressure must support these scientific revelations. Luckily (!) in the case of CFCs, the victims were white, rich and from the OECD (Australians who were seeing a leap in the numbers of skin cancers due to ozone depletion). So they had the means to make noise and be heard.
- Step three: you reach a compromise; in this case, the elimination of CFCs and their replacing by HCFC with a lesser effect on the ozone layer.
- Step four: developing countries complain that, because of new environmental regulation, they are being deprived of the refrigeration industry which had contributed to boosting the North's development for quite a while.
- Step five: a compromise is reached with emerging countries (China...).

BL And this is the process for overcoming collective action problems that was followed at the Rio conference?

AL Yes. The negotiation process and the compromise reached in Rio cannot be fully understood without reference to this previous success. You see, most people in the Rio PrepComs⁷ were pretty skeptical that an agreement could be reached on global warming and, as at the scientific PrepCom in Rome in 1991, were quite open in laying out their disparate positions.

On the one hand you had one of the US' main advisor, the economist William Nordhaus, arguing that the US had no interest in regulation. While he believed in the

⁷ The Preparatory Committees.

whistleblowers' diagnostic, his stance was that the cost of regulating (effectively diminishing carbon dioxide production) was higher for the US economy than the consequences linked to climate change. Rising temperatures would mean a northward shift of the main US agricultural belts and, if at worst these migrated to Canada, the North-American free-trade agreement meant that the US would not be too badly affected.

Another group which argued for 'climate *in*action', but from a radically different perspective, were those productivist emerging countries seeking to emulate the East Asian NICs, that is opting for an export-led growth model, but on the basis of very low labour and environmental regulation. Regrouped under the leadership of the Malaysian delegation, their main argument was: "You, the North, have been burning your forests and your coal for the past 150 years; so we, the developing world, are now entitled to do the same."⁸ They were supported by powerful NGOs (which they financed) calling for the right of the Third World to develop without conditionalities.

Then you had a US think tank, the World Resources Institute, financed by the US government, that argued: "We will have to reduce our CO2 emissions, just like everybody will; here's a table of countries' emissions, let's all reduce proportionally!" That's the principle of enclosure⁹: you distribute rights on the atmosphere at a given time and you fix this allocation for eternity. So, the US would have acquired a historical right to pollute the atmosphere at their 1990 (high) share, whereas China, whose population is five times greater would remain for eternity in a per capita emission level 20 times less than the US – crazy!

The turning point in the negotiations came with the intervention of an Indian NGO, the Centre for Science and Environment, lead by Anil Agarwal and Sunita Narain. They had just brought out a report entitled 'Global warming in an unequal world: A case of eco*imperialism*' that basically argued for the right of the Third World to develop *but* within a framework of global warming regulation. The main issue here was to force the North to recognize that it does not have any more rights on the atmosphere than others; the right to the atmosphere has to be settled on the basis of the equality of all human beings, in the present and in the future. Based on a technique employed by the Indian federal state to 'force' Indian states to regulate births, they proposed the idea of quotas. Effectively, we know up to what level the atmosphere is non rival (the level to which GHGs in the atmosphere are spontaneously recycled by the marine and terrestrial ecosystem), so the idea was to divide the right to the atmosphere amongst approximately 10 billion people that's based on the assumption that the world population would stabilize around that level. You would have a country-level endowment according to its present population (its sustainable quota), and if a country went above that, it would have to pay a fine, or trade the quotas of those using less than they are entitled to, according to this universal endowment. So this was a sort of enclosure, but of a very democratic kind - a leveler access to the global common.

⁸ Famously, the Malaysian Prime minister Mahathur Muhammad declared, at the *Asian Society Forum* in 1991 that: "democracy, human rights, ecology, union rights, are but obstacles that advanced countries try to put on the road of their future competitors".

^b The movement of enclosure of the commons' took place in 18th century England as an alleged answer to the 'tragedy of the Commons' (Community-owned fields and forests). The analogy is exposed in A. Lipietz. 1995. 'Enclosing the Global Commons: Global Environmental negotiations in a North South Conflictual Approach' in Bhaskar & Glyn (edss), *The North, the South, and the Environment*, Earthscan: London.

Note that at the time (around 1991-92), the US were about 9 to 10 times above their sustainable quota per capita, Bangladesh approx at 0.1 of its quota... but Laos was already over its quota limit, i.e. much more than its development path would lead you to expect, because of 'poor production technology' (its slash and burn agricultural production). You see, there is a curve of CO2 (/methane) production by development level which is more or less generalizable: the curve goes up to a point and then tends to come down in terms of CO2 produced per unit of production. Schematically, that's because the machines that have gradually substituted human labour have tended to be increasingly energy-hungry before technical advances has lowered their reliance on fossil-fuel. It's a general curve but with significant variations according to countries' varied modes of regulation. Typically, the more a country is 'free-enterprise' in terms of its capital-labour relations, the more it will produce CO2 per capita. In Scandinavian social-democracies, in countries that are heavily norm-oriented, that produce consensus, you find that they also produce consensus around CO2 regulation, and their production systems are generally 'cleaner'. Other elements also have an impact on countries' position on this curve: landlocked countries versus open borders countries such as the US, Russia, China where big open spaces function as large thermostats. Being an oil or coal producer will also play a part.

Anyhow, in the PrepComs to Rio, countries positioned themselves in the manner outlined above. At the time, I sketched these out along a double axis: one North-South axis and another axis that differentiates between those countries that want to act upon the climate change threat and those that want to stick to 'business as usual'¹⁰. So the collective action problem is not just a question of North v. South: in the 'do nothing camp', you have the US in the North and, in the South, Malaysia and other emerging countries; but in the 'do something camp', you have in the South those poor countries that are directly threatened by climate change (Bangladesh, the small island developing states -SIDS) and in the North, you have Europe.

BL: Why is Europe keen to 'do something'?

AL: Because on the one hand, and contrary to the US, Europe cannot simply bar access to its territory by closing its border with Mexico; Europe is threatened in all directions by the population movements that are likely to arise from environmental crises. On the other hand, it is "only" producing four times its "sustainable quota" (in contrast with 10 times for the US) and it is in an advantageous position in terms of developing 'clean' technologies (those that don't depend on fossil fuels).

BL: Right, so how was the deadlock between the 'do nothing' and 'do something' positions you have mapped out for us, get unlocked before Rio?

AL: Well, it's interesting actually. On the one hand, you have ongoing negotiations within the PrepComs between the US and the EU around the modalities of what should 'be done'. Agarwal and Narain, as other environment economists, had proposed two ideas: quotas and an eco-tax. In the latter case, the idea is that the more you pollute, the

¹⁰ See article quoted in footnote 8.

more you pay; and the revenue from this tax could be used to help finance the 'green' conversion of poorer economies which, typically, emit three times more CO2 than developed economies per unit of production. Europe was initially in favour of this latter option, but the US were opposed to it (George Bush Senior was then President and he did not like the idea of taxation!).

So, negotiations focused on retaining the US in the deal by offering them a form of bait, a *market*-based mechanism: the QELRO system. QELRO stands for Quantified Emission Limitation and Reduction Objectives and represent a form of quotas. Now, was the quota market really more economically liberal than taxation? It's not that obvious. The initial endowment of quotas or QELROs depends on a public authority sharing out the quotas (here, the Conference of Parties of the Treaty against Climate Change, or COP), with a binding authority. So it's really about planning; whereas, with the eco tax, the idea is you can do what you like but it will be more expensive – it's in fact, a much more market-friendly mechanism!

Of course, the US negotiators were aware that QELROs were effectively an international administrative constraint, an infringement on their sovereignty and on free trade – and they were not too happy. And immediately, as in step 4 of the Ozone layer negotiations, the emerging countries of the South (China, India and Malaysia) started to protest that QELROs would represent an unacceptable obstacle to their development, that they were an unfair constraint given that existing stocks of anthropic GHG in the atmosphere had been emitted exclusively by old industrial countries. So, this idea of the market of QELROs points to another sticking point that gets somewhat ironed out in the preparatory rounds and at the Rio conference itself, which has to do with the South's claim for the right to development – cf the ambiguous argument that "poverty is the first pollution", as if there was no 'clean' way out of poverty and as if the poorest were not the first victims of pollution(s)!

To address this claim, and in order for the negotiations to move forward ahead of the Rio conference, you see the symbolic change of the conference's name from the "UN Conference on the Environment" (UNCE) to the "UN Conference on Environment and Development" (UNCED). And, crucially, you see the introduction of the notion of "burden sharing": i.e. a universal commitment to addressing climate change *but differentiated* according to development level. This is a recognition of developed countries' 'environmental debt' – the fact that they have started polluting the planet about one century before others.

In practice this means that a) developing countries are exempted from any constraints. QELROs would only concern 'Annex 1' countries – i.e. developed countries of the West and of post-communist Europe. B) Annex 1 countries agree to finance the green conversion of developing countries through specific development funds. Note that a loophole would later be introduced to that agreement, whereby Northern countries would be able to buy quotas from countries not subjected to the quota system (non-'Annex I' countries) – on the basis that they would help finance 'clean' production technologies in the South. This loophole, misleadingly called CDM (Clean Development Mechanism) would mean, in practice, that Northern countries could 'buy' QELROs by financing cleaner development in the South. This makes no sense in terms of the broader objective of reducing global CO2 emissions! It may help introduce cleaner production processes in

the South, but it relieves the North of reducing its own emissions as long as it can buy up QELROs in the South... without imposing a net reduction in the South – absurd!

BL: and with these various compromises, an agreement is reached in Rio?

AL: Yes, but note that these compromises were developed and agreed upon by negotiators. Actually, the Rio conference opens with the US' participation - but under the cloud of G.W. Bush's clear statement: "Our way of life is not negotiable". So the Rio agreement is not signed by the US – despite all the attempts described above to bring them into the fold. Most other countries ratify the treaty¹¹ – on a rather minimalist objective of reining in emissions of carbon dioxide (and other green house gases) to their 1990 level, by the deadline of 2000. The details of 'burden sharing' (the QELRO endowments) were left to be negotiated at the next COPs.

Now, nothing much happens after that. Governments and firms don't take the agreements particularly seriously, especially since no implementation protocols have been agreed. It's not until the Conference of the Parties (CoP) in Berlin in 1995 that things start moving again – but by then it's already too late to meet the Rio objectives ...

BL: And what is the catalyst in 1995?

AL: Well, it's about the time when countries of the North are starting to be confronted with very powerful storms. In a sense the future of climate change is starting to become more present – and we start to realise that climate change will first entail a general increase in the variability of weather patterns at the extremes, before affecting global temperatures per se. Insurers start becoming restless, realising the economic consequences of climate change: the Great storm of 1995 in the UK cost the insurance industry more than the Kyoto earthquake of that same year! They do not want to have to shoulder the burden of climate change and they prove a powerful advocate, putting pressure on business and on governments to act. In Berlin, a decision is taken to postpone the Rio objectives by 10 years, to 2010 (with a 4 years mobile mean), but to introduce as well, and for the first time, quantifiable and constraining reduction objectives for countries of Annex 1.

In 1997, at the CoP in Kyoto, developed countries sign an agreement on burden sharing (with reduction objectives for 2012) that commits the EU to 8% reduction in their greenhouse gases and the US to 7%. But, one more time, the US delegation is disavowed on its return back home and the US government refuses to ratify the agreement. A terribly strained attempt at conciliation collapses in Bonn, in 2001. The head of the European delegation at the time, the French minister of Environment and leader of the Green Party, Dominique Voynet, refuses to accept the relaxation demanded by the U.S. which, she argues, entirely negates the principles of a global regulation – and the U.S. remain outside of the Kyoto protocol.

BL: Before looking at the post-Kyoto period (which, to some degree, is a story of unraveling), can you talk us through the negotiation process at Kyoto? How were the

¹¹ The United Nations Framework Convention on Climate Change (UNFCC).

constraining targets achieved? What were the incentives for the various parties to the agreement?

AL: At Kyoto, it's not all plain sailing. You have, at first, a group of Annex 1 countries that opposes the proposed agreement, the so-called JUSCAN group: Japan, the US, Canada, Australia and New Zealand. Apart from Japan, whose position seems a bit strange, the JUSCANians are mainly open border countries or countries with important reserves of petrol or coal which, structurally, have less incentive to compromise.

Their gradual rally to the agreement – except for the U.S. - stems from a number of things. First of all, the period is marked by the increasingly regular public output of scientific evidence that man-made climate change has already started to take place – and these scientific reports are filtering through to governments through the IPCC (the Intergovernmental Panel on Climate Change). Secondly, 'abnormal' climatic events are becoming ever more regular. So, 'steps 1 and 2', described earlier, are fulfilled: public opinion and the insurance sector now believe that something has to be done. Some sectors of 'clean' industry (such as windmills) are waiting for decisions.

Thirdly, Kyoto benefits from the ongoing and increased leadership position of Europe in the negotiations. Not only are the European Commission and Parliament proactive, but you must remember that at the time, the Greens have a voice in a number of European countries: France, Germany, Belgium, Italy, Finland. Moreover, and interestingly, the majority of Eastern European countries have shifted their position since Rio: they support the proposed agreement because most of them have gone through some form of economic collapse and produce some 20% less than in 1990. They are in favour of Kyoto, basically, because they have a lot of quotas to sell! These various forces combine to make Europe an active lobby in favour of a Kyoto agreement, and European Union negotiators work hard for a positive outcome. Concretely, this translates into a number of flexible mechanisms included in the Protocol to act as sugar pills for the reluctant JUSCAN group: emissions trading, CDMs and "joint implementation" (a form of CDM specific to post-communist countries).

So, little by little, most JUSCAN countries rally the Kyoto protocol, some after the Kyoto conference itself. Russia will take a long time to ratify Kyoto: its ecological tradition is really that of Verdnasky, at the beginning of 20th century, for whom global warming was a good thing for Russia since it would entail the raising of temperatures in a largely cold and inhospitable country. The Russian position will start shifting when the Siberian permafrost starts melting.

BL: Meanwhile, Europe seeks to meet the Kyoto agreement targets by setting up its own internal system of environmental regulation - and is relatively successful in doing so. Can you talk us through those regulation mechanisms, and their politics?

AL: The European Emissions Trading Scheme (EU ETS) is an interesting story. At Kyoto, Europe accepts a QELRO target of 8%, that's a reduction objective of 8% for all of Europe. So the first implementation step is a process of internal burden-sharing of this QELRO, i.e. allocating the weight of reduction objectives across EU countries.

This is really a diplomatic exercise, internal to the EU, and coordinated by the European Commission (Europe's executive) whose role, as a guardian of treaties, is to propose and

implement EU policies. It takes place within the European Council (assembly of governments) and has to be approved by the European Parliament (directly elected by citizens) as well. Both of these institutions operate through majority vote rule but, in practice, an array of negotiation processes are going on at the same time on a number of different topics and this opens the way for "cross-retaliation", i.e. the process whereby a country may retaliate by blocking a decision on another issue when a majority decision is imposed on a reluctant country. The aim for negotiators is therefore to strive for consensus, avoiding a painful majority decision.

So, at work here, are a number of different positions. On the one hand, you have the positive contribution of those countries that are ready to take a greater part of the burden, largely because they have already gone quite far in the 'green' conversion of their industries, have decided to abandon coal and have made the bet that being a front runner in terms of strict regulation will improve their overall competitiveness. That's mainly the Nordic case of Germany, which even though it is hampered by the political weight of its mining industry, reacts to the societal pressure of a sizeable Green movement. Remember that at the time, the Greens are present in a number of EU national parliaments and governments. They play an important part in influencing the position of individual governments within the European Council, as well as the European Parliament which, in passing, tends to be more open to environmental concerns than other European institutions.

BL: Why is that?

AL: Because the European Parliament is directly exposed to the pressure of public opinion, and less exposed to the lobbying of national industries.

Other players within Europe are less forthcoming on this issue of internal burden-sharing. Poorer countries argue that in order to develop or to 'catch up', they need more lenient reduction obligations.¹² Their demands are granted, for the sake of reaching an agreement. France, meanwhile, obtains a QELRO of zero (i.e. no reduction obligations), on the basis that its nuclear industry has facilitated the greatest progress in terms of pollution reduction. In practice, this means that France leaves the development of 'clean technologies' to Germany and even Spain.

So, once this internal burden-sharing is agreed, the next step is: how do we induce European countries to adopt the policies they have committed to in principle, how do we get countries to stick to their part of the bargain? And this, *without* calling upon the CDM scheme since European countries have agreed that they will meet their QELRO without buying up the excess quota of developing countries. So, there again, you have heated negotiations about the best means of inducing change.

Roughly speaking, you have a number of options to reduce greenhouse effect gases. First of all, and importantly, you have "civic attitude": public opinion is aware of climate change and is aware that things need to change. So people accept some of the

¹² Note that central and oriental European countries are already 'benefiting' from the benchmark date, i.e. 1990, which was the peak of "dirty" industrialization under communist regimes.

consequences of this change – that's the notion of incorporated norms à la Max Weber or Pierre Bourdieu. And without that, you can't really go anywhere.

Beyond that, you have – and I'll list them here in order of decreasing governmental/political pressure to implement:

- a) restrictions, bans, standards for example manufacturing standards for cars or imposing speed limits on motorways. Note that reducing speed limit on motorway is a very powerful way of reducing your emission of CO2!¹³ But standards can have a perverse effect: we've noticed that savings achieved through greener standards on car manufacturing (i.e. cars that consume less petrol) is often offset by increased car usage.
- b) an internal QELRO: 'cap and trade' whereby you allocate yearly quotas ('cap') for the emission of CO2, and you develop a market for quotas to supplement yearly requirements along with penalties for going beyond one's 'cap'. This will become the European Trading System (ETS).
- c) an increase in the price of CO2 emission an ecotax.

The agreement that gets reached is that of an EU-wide ETS for large CO2 emitters and big industry, and national-level measures to control the rest of national-level emissions of greenhouse gases. The cap and trade approach is limited to big industry emitters because of the difficulty of monitoring Co2 emissions generally. But the focus on big industry (i.e. energy, steel, cement, glass, etc.) means that almost 40% of EU's green-house gas emissions is affected.¹⁴

In passing, note that the idea of an EU-wide eco-tax does not get much of an airing, in part because a crazy loophole, dating back to the Treaty of Rome in 1957, stipulated (when our Founding Fathers didn't perceive the importance such a rule could entail) that the European Parliament has the power to legislate on markets but not on taxes! So the European Parliament, which if you remember, is generally the most 'green' of the European institutions, is not effectively engaged in any battle on ecotaxes – which is a great shame! Anyhow, the battle it embarks upon, lies in the realm of quotas, where it is tasked with ETS legislation.

The ETS is a 'cap and trade' system that seeks to influence the CO2 emissions of big industry. The Parliament's first 'battle' centers on the initial trading credits (or permits) endowment for each plant operator subject to EU ETS. The Parliament proposes an experimental first phase, to iron out any implementation hic-cups (this will be the First EU ETS Trading Period, from 2005 to 2007). And it argues in favour of auctioning a share of the initial permits endowment rather than allocating these endowments freely. This is in order to gauge the amount and price industrialists are ready to pay for those permits, and to get a double 'eco' dividend¹⁵ that can be channeled into other social or green spending/reconversion.

¹³ In France, enforcing existing speed limit on motorways (130km/h) through radar controls contributed to half of the 4% decrease we experienced between 2005 and 2006. The other half stems from a hike in petrol prices.

¹⁴ More than 10 000 installations are covered by the ETS, collectively responsible for close to half of the EU's emissions of Co2 and 40% of its total greenhouse gas emissions.

¹⁵ Imposing an eco-tax or selling quotas has a 'double dividend': first it induces firms to avoid pollution; second, it creates a revenue for the administration.

The Green Parties' argument in the EU Parliament is that you're unlikely to alter industrialists' emissions of CO2 (and reach reduction objectives) if you freely allocate annual endowments. Firms are more likely to react and change their practices if they have to buy their initial endowment through an auction system. To some degree, the argument of selling initial endowments through an auction system is a disguised form of eco tax – but through a market system!

In practice, the ETS system has evolved over time to take on board most of the Green's recommendations, through a process of trial and error, through experimenting with alternative incentive strategies, and through skillful negotiation on the part of those who wanted to see a real success in implementing Europe's QELRO.

BL: That's interesting... can you tell us a bit more about this process – both the evolution in the incentive mechanisms you mention, and the politics of it all?

AL: Well, at first, EU national governments are reluctant to buy into the Parliament's proposition and sell initial permit endowments to plant operators (the auctioning idea mentioned above). Under the pressure from industrialists – and remember that national governments are the most affected by this kind of pressure - they only agree to test the auctioning process on 3% of the agreed cap. Big firms' argument is that quotas already represent an impediment to their competitiveness and they don't want the added burden of having to pay for those quotas. They lobby for a free endowment, according to their needs, and evaluated on the basis of past emissions (the 'grand-fathering' method).

So, when ETS is first trialed, the initial endowment process works with national governments allocating permits to various industrialists, in line with their own National Allocation Plan. However, it soon became obvious that governments were allocating too many initial endowments to their national industrialists, in an attempt to protect their competitiveness. The competitiveness concerns stems from the fact that industrialists would have to buy additional quotas, if and when they burnt all their annual endowment – and this would add to their overall costs. To prevent any potential loss of competitiveness, more quotas were distributed than in a business-as-usual scenario! There was no real incentive to lower plant operators' CO2 emissions – and, incidentally, it lead to a collapse of the permit market in the first year (that's 2006). These developments, however, gave ammunition to arguments in favour of an auctioning of initial endowments) – i.e. the arguments put forward by the Greens within the EU Parliament and which, gradually, came to be adopted as the ETS evolved through its various iterations.

If you come back to this notion of incentives, note that the Greens have been very good at playing the game, using the language of market mechanisms to push for more stringent regulation of CO2 emissions. So, for instance, you could hear the Greens argue that the initial mechanisms of 'grand-fathering' was a "totally unfair system" since it distorts market competition rules ('level playing field'), through preferential (national) free initial endowments, etc. And I remember praising the benefits of the auctioning system to French industrialists who had come to lobby me against auctioning and in favour of some improved variant of grand-fathering. In response to their quest, I asked how they intended to distribute quotas amongst themselves. When a muffled answer came back, I had great

pleasure in throwing back the well-rehearsed mantra that 'the market knows best' and is most efficient in allocating permits according to need: "So, really, I advocate you opt for a market solution!" (i.e. auctioning). Totally hypocritical use of the language of the market, but very efficient in this instance when my main concern was regulation!

BL And what has been the incentive for national governments to abide by these changes in the ETS?

AL: Well, it's all in individual national governments' benefit really. Don't forget, they are bound to an international agreement to reduce greenhouse gas emissions¹⁶ and there are penalties attached if a country does not meet these targets. That was the great victory of Kyoto, and the sanctions mechanisms have been perfected in the successive rounds of post-Kvoto CoPs. But that agreement is unpopular with many industrialists. So blaming Brussels in order to enforce that regulation is a fantastic cover for national governments! They can then play 'pals' with their (i.e. national) industrialists by arguing: "It's not our fault. We tried to defend you, but Brussels is putting the pressure!" And in negotiating the actual permit/quota endowments, they can 'blame' Brussels again when industrialists ask for excessive quotas: "Come on, we can't give your that much, Brussels will not accept it, you have to give in a bit!".... It's a great alibi for governments! Moreover, the adoption of market-driven incentives is fantastic ammunition for governments in their negotiations with business, because by talking the language of the markets, they enter business' space of representation. So little by little, and through a carefully and iteratively constructed system of incentives, you have the development of a trading system within Europe that is getting better and better at addressing collective action problems inherent in managing the global commons. It is far from perfect, but at least it exists!

BL: So, effectively, Europe imposes increasingly exacting emission reduction constraints for itself, and its heavy industry especially. Meanwhile, neither China nor the US appear to be 'doing something'. Is this not provoking concerns, within Europe, regarding the fate of its industry?

AL: Of course, the European pro-active camp is constantly subjected to the pressure of those who say: "What is the point? others are *not* following in our footsteps..." The Shumpeterian response - the response according to which "we'll all have to be subjected to such constraints at some stage or another, so we might as well take the lead to bolster our competitiveness" – this response, then, fails to convince all sectors. So there is an increasing demand for matching the EU's climate change policies with protective measures for European industries. This is what has been labeled 'ecologist clauses on free trade'. A good example of this comes from the aviation sector.

Just like the navy, aviation has always been dispensed of taxation on the fuel consumed *during* travel. This dispensation, set out by the International Association of civil aviation, extends to internal flights. In practice, this has translated in flying gradually becoming competitive with, or even cheaper than, rail travel. Of course, from an ecological perspective, this is inacceptable! The European Commission therefore proposed to

¹⁶ The objective has been eventually extended (at the Buenos Aires CoP) to a common convergence objective of annual per capita quotas for greenhouse gaz emissions by 2050.

include aviation in its quota systems. However, since planes from third countries can land in Europe and then fly to another European county, the risk of unfair competition was enormous. Accordingly, the Commission proposed that the buying of quotas by planes coming from third countries and landing in Europe should become compulsory. Straightaway, EU governments received heated letters co-signed by the US and Chinese ambassadors to the EU, requesting that such a measure be axed. At the time, I was rapporteur on this project and I took the decision not to engage with these letters. I soon realised that all other political parties at the EU Parliament shared my irritation and we voted en masse in favour of the Commission's proposition - indeed we toughened the proposal. Naturally, neither China nor the US declared war against us... The flip side of their lack of cooperation on GHG emissions is that both countries were forced to acknowledge our sovereignty, and thus our right to protect our industry against unfair competition – unfair competition from their failure to join the fight against greenhouse effects.

At the time, I hoped that this precedent would spread, that forcing an importer to buy the quotas of a product coming from a third country would extend to other products such as cement. But I did not manage to convince the EU Commission, nor the Council. I think this was because, contrary to planes who come from third countries, those cement factories that are relocating to Turkey or Morocco in order to escape the EU quota system ... are European firms! They thus have the means to put pressure on their respective governments and the Commission to avoid any such form of 'green' taxation.

Now, in 2012, third countries planes are submitted to EU ETS... and forms of retaliation already appears, such as rebuttal of Airbus contracts from Chinese firms.

BL Going back to the global picture, the Kyoto Protocol is coming to an end in 2012 and international negotiations resume with vigour in order to lay out the contours of the post-Kyoto era. Why are Copenhagen, Cancun, Durban and the various PrepComs leading to Rio + 20 such abject failures so far? Why, for instance, is the success of the EU ETS not built upon?

AL Well, in a nutshell, I would argue that the current paralysis in climate change negotiations is the outcome of the collapse of the European Union as an environmental driving force and key negotiator.

Let's take a step back. After Kyoto, you had the gradual rally of JUSCAN countries to the Kyoto protocol. The US, who refused to ratify the agreement, did nonetheless wake up to the pressure of climate change. Inside the US, a number of cities and states gradually rally to Kyoto – both because of fears for the competitiveness of their industries if they miss the boat of 'green' technological conversion, and because of the increasingly obvious physical threat of global warming (cf storms' increasing violence, Katrina, etc.). And eventually, Obama replaces Bush as the head of State and you have, generally, an *apparently* more propitious environment for climate change regulation – at least, as far as the US is concerned.

If you remember the overall picture of contrasting positions vis à vis climate change which I touched on earlier, the main challenge in the post-Kyoto era is to rally to international regulation covenants the following actors: those countries of the South that have a 'don't move' attitude regarding global warming; those that are hesitant (especially those whose economic growth means they are about to, or should, join Annex 1 countries - typically China, India, Brazil); and, of course, the US.

So, in brief, you have two negotiating terrains ahead of Copenhaguen: reduction objectives in terms of greenhouse gas emissions, and the financing of developing countries' 'green' conversion. In other words: the speed of the North's green conversion and its financing in the South. That was the roadmap to Copenhagen, established at the Bali CoP in 2007.

What is interesting is that, compared to earlier key moments in climate change regulation, you now have the rise of China as an indisputable protagonist in international covenants. China was already a rising power at Rio, but by the time of the post-Kyoto negotiations, China has become THE key player. Up to now its position has been pretty close to that of Malaysia around 1992: "We won't budge, unless you finance our conversion". The US' response to this has been: "Look, you're polluting just as much as we are, if not more, so we won't commit to any reduction objectives unless you do"... to which the Chinese can (and do) invariably respond: "We pollute less per capita and per year than you the US do, *and* we are entitled to the North's 'environmental debt".¹⁷

So, basically international negotiations have been in this non-cooperative equilibrium for the past 17 years or so, blocked by this confrontation between the US and emerging developing nations. However, as the post-Kyoto era approaches, China, who is acting as a leader of sorts of those dynamic emerging economies, is also starting to shift its own attitude. China too has seen the number and gravity of environmental catastrophes grow over the short while and is starting to take the effects of global warming more seriously. So, in the pre-Copenhaguen CoPs and negotiation rounds, some of which bilateral between the US and China, China offers to step up its energetic conversion (+40% in efficiency¹⁸ by 2020) *without* this being financed by the North. Of course, the proposed gains would be annulled in a few years by its exponential economic growth... But anyway, this is a step in the right direction, and Brazil and India follow suit. And the US offers a rapid reduction of its emissions within the next two decades. On both sides, the proposals are well below what is required according to the latest scientific reports of the IPCC and even below objectives set by previous covenants, but but ... the stalemate seems to have been broken.

BL So why the failure of Copenhagen, despite an impressive popular mobilization?

AL Well, it's a scandalous failure of leadership really! The US and China's ongoing arm wrestle is certainly to blame in this failure but the greatest explanation lies in Europe's waning leadership in the fight against climate change.

In the run-up to Copenhagen, the EU Commissions' officials banked on repeating the strategy deployed with success at Kyoto: table a high reduction of European emissions (-30%) at the international conference, and prepare to back a unilateral 20% reduction if no

¹⁷ China is indeed the first polluting country. While it emits 'only' 5 metric tons of Co2/person/year, which is much less than the U.S., it produces 2.5 times more than what is sustainable for the earth's ecosystem (which is 2t/person/year).

¹⁸ That is to say, with the same quantity of energy consumed (or GHS emitted), China wants to produce 40% more commodities.

agreement is reached. That became an internal EU commitment, established as early as 2007 - i.e. two years before Copenhagen.

But in late 2008, 'coup de théâtre'! The German Chancellor Angela Merkel and the French President Nicolas Sarkozy, under the pressure of Italian and Polish (but also French and German) industrialists, agree to lower Europe's reduction target to be presented ahead of the upcoming international negotiations to -20%! When you think that the IPCC had called for a reduction of between -25% and 40% for industrialised countries¹⁹ in order to mitigate a rise in temperatures of +2 degrees centigrade! Merkel's move was clearly framed by her industrialist response to the economic crisis. And the German Social democrats, coalition partners to Merkel's government at the time, failed to challenge her decision. Meanwhile, Sarkozy was evidently motivated by the desire to 'crown' his European presidency²⁰ with an agreement so that he was quite satisfied with an easy win. Minus 20% means a $+3^{\circ}$ c or $+3.6^{\circ}$ c increase – it's catastrophic! And remember that, at the time, EU public opinion was ready to take much more drastic steps: in November 2009, just weeks before the Copenhagen CoP, the European Parliament - a freshly elected Parliament, the most *right*-wing it's been for years - yoted a -40% reduction target by 2020 and a €30 billion yearly credit stream to finance the 'third world"'s green conversion!

Alas, EU public mobilization did not understand that the failure to federalize Europe (the 'no' vote in the 2005 Constitutional referendum) brought power back to national governments – and in particular to the German and French alliance. The European Parliament has now been eclipsed from negotiations, while the European Council has been captured by the Franco-German block. And that's bad news for global commons regulation, because national governments are the least abstracted from industrial pressures – and 'old industry''s pressure at that!

So, effectively, Europe as a negotiator disappeared in Copenhagen: it tabled a proposal which was way below that requested by the IPCC and, in the process, its voice got drowned as Copenhagen become the scene of a dramatic confrontation between China and the US. Obama and Wu reached an agreement at the last moment ... which is to postpone further negotiations. No new targets, no decisions! The same thing was reiterated the following year at Cancun. Basically, the strategy adopted by the two protagonists seems to be: let's wait until 2012 (Rio +20) and let's bank on a strategy of terror: the consequences of non-action will by then be so terrible that one of the two (the US or China) will have to give in and we can finally act upon the IPCC requests. But it's a hugely perilous strategy: how will they put together a new protocol, without initial pillars being set up in the rounds of the preceding CoPs?

Meanwhile, the great machine of climate skepticism is drumming its beat loud and clear and the media is receptive to its claims. Copenhagen's collapse provided the space for people to question the severity of scientists' claims: 'Were we taken for a ride? How could it be so serious since no serious action has been taken? etc.'

¹⁹ A reduction of -25% and 40% of emissions compared with 1990, by 2020. They also called for a stabilization of developing countries' emissions by 2015 and \$110 billions/year to convert its energetic system.

²⁰ The presidency of the European Council was at the time held by a different EU country, rotating every six months; and most unfortunately, the second half of 2008 turned out to be the French semester.

BL So, to conclude, what lessons would you draw from climate change negotiations as an attempt to protect a global common through collective action?

AL Simply, that to protect a global common, we need a form of global political organisation able to take decisions. If the 27 European countries have been able to impose for each other a set of collective rules, it's because of the existence of the European Union. This EU is not much more than a confederation. It's certainly not a federation à la USA, Switzerland, Federal Germany or even India; but it's much more than an ensemble of countries governed by diplomatic negotiations.

Does this mean that we won't protect the climate until there is a universal republic? Of course not! Since the Rôles d'Oléron written in 1160 by Alinéor d'Aquitaine on maritime rights, all countries have been able to agree on common rules – as long as they can see the benefit, or rather, as long as they recognize that the absence of rules is bound to have deleterious effects on them.

As I said at the start of this interview, protection of the global common 'atmosphere' is a new concern in the history of humanity, and there will come a day when the conscience of the danger linked to climate change will be so widely shared that all countries will accept the need for action. But it will be far too late. That's why it is crucial that propositional political forces act at once in different states in favour of a global regulation of access to the atmosphere. This political/ideological force is of course the global ecologist movement represented at times by associations, at others by political parties. Associations play an essential role: they are key in shaping mentalities' evolution. But at some stage, decisions have to be taken - which means that ecologists must enter the political realm, at the national level and in international bodies such as the EU Parliament and even the European Council. It is no coincidence that the most significant advance reached to date (the Kyoto accords) was reached when green ministers occupied strategic positions within several EU governments - in the ministry of environment with responsibility for negotiations or even, in the case of Joschka Fischer, as vice-Chancellor of Germany.

If we want the global commons to be preserved before their destruction convinces the most reluctant of the need for their defence, I cannot see any other solution than promoting ecologists to political responsibilities....