Personal Reflections on the Development Phase of the Montreal Protocol



Presentation
to the
Canadian Association of the Club of Rome
G. Victor Buxton
21 April 2021

Canadian Engagement In Creating the MP

- There were really two very different phases to the creation of the Montreal Protocol (MP);
- The first phase was the run up to the Vienna Convention (VC) which culminated in 1985;
- The second phase were actions from 1985 until September 1987 that gave rise to the regulatory provisions and the signing of the MP;
- The Canadian team up until the final meetings to conclude the Treaty consisted of Jon Allen who was our legal adviser (from External Affairs), Dr. Alex Chisholm, an EC meteorologist, and head of delegation up until the conclusion of the VC and myself as the EC regulation specialist;
- As soon as the VC concluded Alex asked me to take over as head of our delegation as the second phase was centered on regulation development;

My Engagement In Creating the MP

- I drafted regulations prohibiting the use of CFCs in antiperspirants, deodorants and hair sprays in 1979 reducing Canada, consumption by 50% 8 years before the MP;
- Asked to lead on Canada's regulatory engagement issues with UNEP on creating an Ozone Convention in 1983;
- There was great early opposition to a Convention by the UK (ICI) Dupont and many LDCs which Dr. Alex Chisholm and I took a lead in countering;
- Dr. Alex Chisholm and I formed "Friends of the Protocol" (to create global control measures and challenge the UK et al);
- Prepared and discussed a draft regulatory framework in 1984.
- Prepared and presented 5 papers in Rome and then a draft
 Protocol in Leesburg all in 1986;
- Canada AM, Market Place and then a law suit against me:

Our Engagement In Creating the MP

- I was Head of Delegation and chief negotiator for Canada from the Vienna Convention until the MP;
- I was a "special adviser" to Dr. Mostafa Toba UNEP head;
- I and Dr. Alex Chisholm developed and proposed a priority setting concept for ODS (tonnage times ozone depleting potential)
- Introduced the idea of controls based on production + imports − exports (opposition wanted a treaty of producers only);
- Based on my experience with the London Dumping Convention I offered the notion of a series of Annexes (CFCs, Halons, etc. the basket approach);
- I proposed EIF via a double trigger (11 ratifications and 2/3rds of global consumption of controlled substances) based om my experience with the Marpols Convention where I lead a team to develop controls of waste and sewage from ships;

About this Presentation

- There are many books on the official history of the MP mostly based only on meeting final reports;
- There is also the undocumented history from the unpublished record which is the story I will tell today;
- I have selected a number of items that I hope will stimulate interest and discussion;
- Many observations in my slides are my own personal recollections that can only be corroborated or refuted by others who were there at the time of these occurrences;
- I will also allude to the bureaucrat's dilemma --- CFCs and the fear of CTCs (career terminating comments) (My experience on the TV show Market Place);

Setting the Vision

- By 1983, the science had demonstrated the need to exercise the precautionary principal, and it was now time to establish the vision for charting the pathway forward;
- Vision setting for environmental protection is the responsibility of governments who alone are accountable for making these tough decisions in the overall best interest of all;
- Industry sets its own vision ... but in the context of the Corporation, not necessarily for the long term public good;
- Industry, nonetheless, had (and continues to have) a very important contributory role to play in creating and/or destroying political will, at least in the short term for the MP;
- For the MP, vision setting did not come easily. Governments could not agree on the magnitude or imminence of the threat and this hindered striking a public policy balance with general acceptance;
- Industry produced researchers with credentials who denied the threat;

The Players and the "Atmospherics"

- Government (plenipotentiaries) delegations often headed by Foreign Affairs or Finance Ministries. Environment Ministry representatives were often junior members of delegations with only limited influence;
- Most heads of del (spokespersons) were not technical experts and were compelled to adhere to strict delegation instructions that left little room for compromise or negotiation (hence the need for informal discussions which we initiated);
- Industry was both part of delegations and via their registered associations played a very influential role on delegations (both positive and negative) in the early years often speaking on behalf of the developed and some of their client developing countries;
- NGOs were not part of national delegations in the early years;
- The key fear expressed was not the inability to adequately protect ozone layer but potential for the adverse economic ramifications;
- This was the prevailing atmosphere in the meeting rooms leading up to the negotiations of both the Vienna Convention and the MP;
- The unspoken dynamic was the pursuit of parochial self interest;

The Barriers in the Run-up to the Vienna Convention

- No agreement on the need to exercise the precautionary principal (no consensus on even a production capacity cap);
- Preoccupation with possible "winners and losers";
- Red Herring "environment, an artificial barrier to trade";
- Conspiracy theories and the strategic application of doubt was used as a stalling tactic;
- Only limited public awareness of the science and the dimensions of the threat which meant little political will;
- Early efforts by a few especially the UK, REIO (the precursor to the EU) and Mexico (who lead the group of 77) to prevent control measures;
- The "Toronto Group" was initiated to sustain the vision and create some momentum to move forward;
- Canada engaged FOE Canada to inform and energize FOE in the UK which worked:

Key Concerns

- Mexico -- expressed concern that signing a Treaty could restrict their and developing country access to commercially critical ODS thereby seriously impacting development;
- India (and others) -- as alternatives to ODS became available (most likely in developed countries), their availability to developing countries must be guaranteed;
- Developed Countries responded by observing that this could not be done. Governments could encourage and to some degree "facilitate" by removing barriers but ultimately access to such chemicals was an intellectual property rights issue that must be managed in accordance with domestic laws and WTO rules;
- India -- said Governments set domestic laws and they could change them;
- Developed countries insisted that in a free market, democratic countries / economies, this (confiscation of property rights) will not happen;

Closing the First Chapter

- VC (Vienna convention) Compromise text "the Conference of the Parties shall ... d) adopt, in accordance with Article 3 and 4, programs for research, systematic observations, scientific and technical cooperation, the exchange of information and the transfer of technology and knowledge"
- VC a bicycle with no pedals; nonetheless a commitment to carry on- a "framework" to lead to future control measures
- At the close of VC negotiations, thanks to a Resolution by Sweden (which I help to draft) was a proposal creating a timetable leading to the meeting to adopt control measures (the MP);

Still No Consensus

- The science; human health effects; terrestrial effects all remained under debate;
- Growth rates were still debatable (dimensions of the rising threat);
- Technological feasibility of phasing out / restricting (substitutes and alternative technologies);
- Practicality / economic impacts of mitigation measures;
- Affordability (especially for developing countries);
- Nature and possible scope of controls.

The Barriers Continued

- Uninformed debate -- many participants still had less than a full understanding of the issues;
- Spread of misinformation by industry (DuPont said that CFC substitutes were not possible);
- Conspiracy theory by ICI (Dupont has a substitute and wants to steal our export market);
- Over emphasis of interest groups or regional economic concerns;
- Lack of political will (especially in Europe lead by the UK);
- No thought as yet as to how to finance the way forward;
- Confusing technical and scientific information (often conflicting);
- Conflict of objectives production cap, limited product bans,
 CFC phase down or phase-out etc.;
- Lack of public awareness;

The MP Challenges

- Framing the debate, overcoming the barriers and forging consensus;
- Credibility of expert opinion who do you believe?
- Striking the required north / south balance (group of 77);
- Charting the way forward (defining technical and economic feasibility);
- Monitoring progress against threats remaining;
- Facilitating technology transfer;
- Increasing awareness and acquiring data;
- Creating political will;
- Technology transfer / intellectual property issues / joint ventures and economic sovereignty encroachment;
- Funding assistance for LDCs;

The Turning Point

- Workshop mechanisms were used to create agreement on: current production levels; anticipated growth rates (Rome, May 1986); anticipated impacts (Washington June, 1986); possible control measures and mechanism (Leesburg, Sept. 1986);
- The Leesburg workshop was the turning point;
- Many decided that parochial self interest was not the key driver behind Canada, Nordics, USA, New Zealand, Australia (the Friends of the Protocol group);
- Control mechanisms, country problems and possible MP control formulas were discussed;
- Meaningful dialogue / negotiations finally commenced based on a new sense of trust;

Meeting the Challenges

- Less formal interactions A small group was convened periodically to assist Dr. Tolba in developing strategies to meet challenges (me, Bob Watson; Eileen Clausen and a few others);
- I was sent by UNEP to Russia and several other countries to provide background to the protocol and thus to encourage their participation (Sergei Stepanov and Mikhail Gorbachev);
- Four panel concept (Science, Technology, Economics and Effects) were proposed to address: consensus building and misinformation / technical feasibility issues and to enhance knowledge base of many developing countries;
- Tolba asked me to create the Technology Panel and I spent 6 weeks in Nairobi, Kenya along with Per Bakken then we held a workshop in the Netherlands;
- NGOs began to be engaged to create awareness and help create political will (they made it an issue in the UK);
- Technology transfer remained a key sticking point and potential deal breaker;

Creating the Bargain

- MP negotiations (Sept 6-16, 1987) were difficult, acrimonious going well into the night and culminating in the creation of a "fragile package";
- All plenipotentiaries were asked by Dr. Tolba to not upset the "fragile balance";
- What was this "fragile balance"? (Our backroom agreement via a select small group of players);
- Fragile balance = Informal agreements were reached on:
- technology transfer;
- control mechanism;
- trade provisions (and level playing field) and REIO clause;
- flexibility provisions;
- industrial rationalization;
- catch up time and guarantees on supply for LDCs;
- credit for ODA;
- penalties for late joiners;
- future financial assistance (incremental costs) for LDCs;
- consideration of certain countries 5 year plans.

The Nature of the "Fixes"

- Technology transfer covered by Resolution to address via future workshops (hold in abeyance approach);
- Emissions control measures fix was to define emissions as "consumption" (a pound not consumed is a pound not emitted); (Consumption = Production + imports Exports)
- Flexibility a basket approach where countries could decide on which chemicals to address;
- Weighting factor approach (ODP times tonnage) would level the playing field;
- Industrial rationalization via text (I wrote) designed to meet industries needs;

The Nature of the "Fixes" continued

- Current ODA (Official Development Assistance)
 expenditure ..the fix 20% contribution via bilaterals;
- Russian fix legally binding nature of 5 year plans (Para 6);
- REIO clause- EU bubble under specified conditions (Para 8);
- Trade to be a driver to join;
- Late joiners penalized by "accordion approach";
- Double trigger EIF avoided easy vetoes EIF 1 January 1989, at least eleven ratifications, acceptance, deposited by States or REIO and 2/3 of 1986 global consumption;
- 10 year lag for LDCs given to allow catch-up;
- Commitment to panel approach to facilitate updating;
- Non-compliance concept of creative ambiguity;
- Agreement to discuss financial assistance at first MOP

Creating the MP Covenant with the Future (MLF)

- Deal struck by a very small working group (EU, USA, Canada, Nordics) that went off to a back room (the four wise men of which I was one);
- Back room approach was essential to holding "informal discussions" and putting collective heads together to design the "fixes";
- Once agreement could be reached on each point, the text was handed to the lawyers (Jon Allen, Canada and Patrick Szell UK) to turn our backroom agreements into appropriate international legal language without altering the substance;
- In the end the package known as the MP was created and presented to the plenary session as a "fragile balance" try to change anything and the deal collapses;
- Very few items were left to Ministers to negotiate out;
- None of the major constituencies (Governments, Scientists, NGOs and Industry) totally pleased with the first MP product which means we probably struck the right balance;

Montreal Protocol Achievement

The MP created a process for controlling <u>all</u> ozone layer depleting substances by:

- Providing short and long term plan to address all ODP substances;
- Providing mandated phase down which stimulated product development for environmentally acceptable substitutes or alternatives (phase down affected market behaviour through placing constraints on supply and demand);
- Signalled producers and users that society's tolerance of these chemicals is short lived future investment decisions should be made accordingly;
- It established a dynamic, science and technology driven process whereby the stringency and scope of the controls could be adjusted in response to the current understanding of the science, the environmental affects, the technological capabilities, and the economic considerations;
- It provided, incentives for developing countries to join the Protocol early without fear of additional economic hardship for having done so;
- It provided for trade sanctions as a way of denying those that chose to remain non-parties access to the worlds most lucrative markets;
- It created the world's first MEA most successful treaty ever to protect the global atmospheric heritage of mankind and thus the future well being of future generations.

Technology Transfer Remained a Critical Issue

- Agreed text of Article 5(2) in the original Protocol document became; "The Parties undertake to facilitate access to environmentally safe alternative substances and technologies for Parties that are developing countries and assist them to make expeditious use of such alternatives".
- MP was subsequently amended by decisions taken at the MOP (London 1990); Copenhagen, (1992); and Vienna 5-7 December, 1995. Article 10A "Transfer of Technology" of the Protocol now reads; ... "Each Party shall take every practical step, consistent with the programs supported by the financial mechanism, to ensure: that the best available, environmentally safe substitutes and related technologies are expeditiously transferred to Parties operating under para 1 of Article 5; and that the transfers referred to in subpara a) occur under fair and the most favorable conditions." (mention Margret Thatcher and Patrick Szell);
- The text in sub para b), needless to say, remains at the heart of the continuing technology transfer debate as to what constitutes... "fair and most favorable conditions". This is a key element of the technology transfer conundrum ... fair, like beauty, is in the eyes of the beholder.

Genesis of Assessment Panels

- Since MP initially was only a 50% reduction, much work was needed to build the evidence base for charting the path for moving forward;
- Panels needed to be small, workable, transparent, inclusive, accountable; strong but fair, providing impartial and unbiased leadership and communication;
- Primary membership consideration was specialized expertise;
- Geo-political balance needed but important to first get the process up and running;
- The technology and economics panels needed to define what was doable at what cost as this would determine political acceptability of control measures and further tightening;
- Network and constituencies were also a key consideration

Genesis of the Multilateral Fund (MLF)

- Fund's genesis started during Vienna Convention negotiations (1983-1985);
- At the first MOP, a decision was taken to establish a WG to establish the modalities of a financial assistance mechanism to help Article 5 Countries comply with the Protocol.
- MLF was a key outcome (along with increase in stringency and scope) of 2nd MOP London, 1990.
- MP was signed in Canada and the MLF located in Montreal, due to the Canadian contribution:

The Fight for the Fund

- As Dec 31, 1993 approached, concern arose in developed country capitals that assistance for this fund could not, or should not, be viewed as open-ended, either in terms of fund size or fund longevity;
- This fund was not to be perpetuity funding and perhaps it was best to consolidate all major environmental Treaty contributions under one roof-top. (fear was that controls spending by environment departments could go wild);
- The Finance Departments especially in developing countries discussed ways to "cap" environmental spending;
- I believe this "need to cap" or "fixing a roof-top" issue arising from the creation of the MLF, was the key driver for the creation of the GEF with its "designed in" roof-top provisions;
- Strident efforts were made by some countries at the time of its implementation, to move the MLF into the newly created GEF. A great debate followed and eventually the collective political will especially from A5s, was sufficient to retain the MLF as an independent entity.



As my colleague, Iwona Rummel-Bulska (UNEP legal adviser) has said "Those of us who have been fighting for the ozone layer since the early 1980s look back in amazement at what was accomplished and most of us consider our work on ozone layer protection as the most important work of our lives". I just want to conclude by thanking my friend Jon Allen, who is with us here today, and Dr. Alex Chisholm (who I could not locate) for the role they

Every nation state on the UN list has ratified the MP.

played in creating the most successful treaty ever.