# Joint Standing Committee on Treaties

# INQUIRY INTO THE KYOTO PROTOCOL

Submission by the Australian Aluminium Council



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Australia should only consider ratification of the Kyoto Protocol on the basis that

There is no adverse impact on the international competitiveness of industry

The flexibility mechanisms, such as emissions trading, are agreed on a basis acceptable to Australia

Developing countries make some commitment to long term greenhouse emissions abatement

Sinks are included on an acceptable basis to Australia

Other major developed countries agree to ratify, especially the USA

Australia must consider impacts on trade exposed industries such as aluminium in making its decisions on the Kyoto protocol and greenhouse policies and measures

### **Submission Joint Standing Committee on Treaties** INQUIRY INTO THE KYOTO PROTOCOL

#### **Background**

The Australian aluminium industry is

- Australia's second largest export industry in 1999, with a value of exports of over \$7billion, behind only coal.
- Competitive on the world's markets without protection of any kind
- Subject to prices set by free trading on the London Metal Exchange (LME)
- Highly energy intensive for production of primary metal, due to the nature of the production process
- At the leading edge of energy efficiency and technology
- Regionally based, with heavy capital investment in regional Australia
- A major employer, especially in regional areas
- Poised to proceed with major capital investment and expansion
- A leader in successful greenhouse reduction, having been a member of the Greenhouse Challenge Program since 1996 and having reduced direct greenhouse emissions per tonne of product by 55% for the smelting sector and by 6.5% for the refining sector, between 1990 and 1999

Greenhouse is a major issue for the aluminum industry because

- It is a very large energy user and much of this energy is based on fossil fuel, by necessity
  - The aluminium industry uses about 16% of all Australia's electricity and about 12% of all natural gas
- It is close to world's best practice in terms of energy used per tonne of alumina and aluminium
  - And thus further significant improvements in energy efficiency can only come from technology advances
  - Which are under development but take time and a lot of money to bring to commercial viability
- There are also direct emissions from the production process but these are close to the edge of world's best practice in terms of emissions
  - The main direct emission, PFCs from smelting, have been reduced by about 80% since 1990. This is one of Australia's major greenhouse success stories.
- Any cost increases cannot be passed on because of the LME based trading system
  - There are numerous alternative supply sources in normal times
- Competition for investment in the industry comes almost entirely from countries outside Annex B of the Kyoto protocol

- Possibly Iceland and Canada are the only exceptions for metal
- There are no exceptions for alumina
- The agreements under the Kyoto protocol, if ratified, could be of critical importance to the achievement of the potential new investment in the Australian aluminium industry
  - An increase in costs of around 20% for metal production could be the result of emissions trading if all permits were auctioned and achieved a price of \$30 per tonne of CO2 eq.

#### The Kyoto Protocol

#### General comment

The aluminium industry has consistently made clear that it supported the Government in the outcome achieved at the COP3 negotiations in Kyoto, even thought the final result has some flaws from the aluminium industry's perspective. Considerable pressure was brought to bear on Australia during those negotiations, much of it misinformed and some of it self serving. Some vital principles were incorporated in the Protocol, partly as a result of the Australian Government's stance. These include the flexibility mechanisms and the provisions covering sinks. Nonetheless the task set under the protocol for Australia is a major challenge that will be difficult, if not impossible, to achieve within the timeframe

There are also some specific aspects of the Protocol that are of serious concern to the aluminium industry, including the failure to include developing countries in any way, and the failure to recognize the environmental benefits of materials such as aluminium, such as:

- high energy consumption for primary metal but very low energy consumption for recycled metal
- benefits in usage for lightweighting transport.

Aluminium should be viewed as part of the long term solution to achieving greenhouse abatement globally and not as a problem as is all too often the case. The life cycle impacts of materials such as aluminium must be taken into account much more effectively than has usually been the case so far.

The issues to be addressed at COP6, including sinks, the nature of the flexibility mechanisms and a path to involve developing countries in a real way, will be most important if the Protocol is going to be acceptable to Australia and other developed countries as a mechanism under which real long term progress can be achieved on greenhouse emissions abatement.

The aluminium industry strongly feels that Australia's decision on ratification of the Protocol must be subject to certain criteria, including

- Any economic impact on the Australian aluminium industry must be kept to a minimum and must be in line with the requirements faced by competing countries, including those outside Annex B.
- The flexibility mechanisms must be cost effective and not burdened with constraints such as levies

- Any international emissions trading scheme must be market based and not constrained by limitations on the market mechanisms
- There must be agreement by developing countries to a commitment to participate in the abatement of greenhouse emissions
  - And that should at least include some real action in the second commitment period
- There must be an acceptable agreement on inclusion of sinks under the Protocol
- Other major countries or regions must also ratify, especially the USA, Russia and Canada, which are major producers and exporters (Russia and Canada) of aluminium

#### Specific issues raised by the Committee

The implications for Australia of proceeding or not proceeding to ratify the Kyoto Protocol and meeting its target emission levels by 2008 with regard to anticipated and/or predicted economic, environmental and social outcomes both nationally and in specific regional areas

- In the view of the aluminium industry Australia must ensure any decision to ratify the Kyoto protocol is taken against the criteria set out above.
  - And subjected to thorough analysis of the specific implications before commitment is made
  - When the details are clearer such analysis should be undertaken by ABARE and others who have developed the tools to make such assessments
- A unilateral ratification would hold serious risks of economic, social and environmental disadvantage for Australia and should not be contemplated under any circumstances
- The achievement of the requirements put on Australia by the Protocol will be very difficult and thus the detail under the provisions of the Protocol must be very clear, and other countries must accept their responsibilities, before Australia ratifies.
  - The nature of the Australian economy (energy intensive, fossil fuel based and export oriented) means our potential economic cost is different to that of all other Annex B countries.
- There must be some understanding of future commitments by non annex B countries before Australia contemplates ratification
  - These are the main competitors for future investment in the aluminium industry
- Australia must be prepared to make every effort to meet the requirements of the protocol if it ratifies and thus it must be satisfied that all the flexibility mechanisms and other provisions are in place before ratification.
  - This is the only way the least cost path can be found to achievement of the very challenging target Australia will be taking on.
  - Any move away from full flexibility or towards taxing of these mechanisms should be strongly resisted.
- Unless great care is taken, ratification of the protocol could lead to the loss of major investment in the aluminium industry in Australia, with the associated impacts on a number of regional areas and on the balance of payments
  - For no global environmental benefit

• Providing the criteria set out above are met Australia should consider ratification of the Protocol as a first step toward the long term resolution of greenhouse as an issue.

The veracity of conflicting current scientific theories on global warming and any solution proposed for it.

- There is still an active debate on the science of climate change and global warming
  - The next report of the IPCC will be available in 2001 and that may help clarify some of the uncertainty
- It would be highly desirable if the scientific reports could provide greater certainty as to the level of greenhouse gases in the atmosphere that is dangerous
  - This might make decisions on actions to not exceed those levels easier
  - But such increased certainty is unlikely in the immediate future
- At the present time the aluminium industry accepts that there is sufficient reason for concern at the increasing levels of atmospheric greenhouse gases to justify global action to move towards stabilizing the level of greenhouse gas emissions, providing this is done with the long term view in mind, on a fully global basis and in the most cost effective manner possible taking account of the particular circumstances of all countries.

## What definitions and criteria Australia should develop and actively pursue in its national interest with regard to a number of specific items

- Administrative allocation, trading credits and carbon credits
  - These are all aspects of an emission trading regime
  - No domestic trading regime should be implemented before an international scheme is agreed and in operation
  - An international trading scheme must be market based and subject to as few restrictions as possible
    - The aluminium industry accepts that an efficient and effective international trading system could help provide the lowest cost solutions within the parameters of the Kyoto protocol if it is ratified, providing properly functioning markets can be established
      - Even allowing for the fact that it is a suboptimal solution, as the scheme will not include non annex B countries
    - Any scheme must be subjected to thorough economic analysis once the details are known before being endorsed by Australia
  - Credits must be fully fungible between the flexibility mechanisms of emissions trading, CDM, JI and sinks
  - The compliance mechanism should be effective but not punitive
    - A punitive and inflexible compliance mechanism would not be consistent with a least cost approach and could disadvantage countries like Australia with trade exposure
  - If a domestic trading scheme is to be considered after an international scheme is fully detailed and accepted
    - Credits should be administratively allocated and not auctioned

- The baseline for allocation should take account of growth in output and use verified inventories
- The detail of any domestic trading system needs careful assessment, including of:
  - The possibility of trading being limited to only part of emissions through a baseline and credit system
  - The point of allocation of credits
    - This is particularly important for the aluminium industry, given the emissions that are associated with the electricity generation that is vital to the metal sector of the industry
- There must be provision of legally based recognition for early action initiatives
- Greenhouse gas abatement policies and measures that discriminate against new entrants or major expansions or disadvantage early movers who have previously implemented abatement measures must be avoided
- The scheme must set up a free and effectively functioning market with as few restrictions as possible
- <u>Sequestration, revegetation, land management and sinks generally</u>
  - All sources and sinks must be involved through a comprehensive approach
  - Sinks are a key feature from Australia's perspective and the provisions of the Protocol must be maintained.
    - The methodology of crediting sinks is still under discussion and may be critical to Australia's overall task
    - The effectiveness of the Article 3.7 recognition of Australia's national circumstances on land clearing is critical to our interests
  - Sequestration must be a long term priority and recognized in the context of any flexibility mechanisms
    - This may well be one of Australia's best options in the longer term and research and development resources should be allocated to this area

## The economic, environmental and social implications of a punitive approach to any domestic regulation of industry including such proposals as a carbon tax and an incentive based approach

- The costs to Australia of a punitive approach through regulation and mandatory measures will be considerable
  - The competitiveness of efficient Australian industries such as aluminium will be diminished if abatement measures result in the diversion of resources from internationally competitive industry sectors to other sectors that are not competitive in their own right
  - The 2% renewable electricity target is a case in point
    - This will cost the aluminium industry about \$70 million per year when fully operational in 2010 and will not deliver cost effective greenhouse emission abatement
    - Such mandatory schemes can divert resources from efficient sectors where they can best be used to contribute effectively to greenhouse emission abatement while also maintaining competitiveness

- The aluminium industry is pursuing discussions with the Government on a broad based Action Agenda for the industry that will develop a shared vision for the future growth of this industry in Australia
  - This would include an agreement on what further contribution the aluminium industry can make on greenhouse abatement
  - Consistent with the flexibility measures and other market based mechanisms that may be put in place.
- The economic implications of a punitive and mandatory approach would clearly be that there would be no significant further investment in the aluminium metal smelting sector, little investment in the alumina refining sector, and probably some growth in the bauxite production sector
  - This would effectively result in a loss of much of the value adding components of this industry, with the associated impact on many regional areas of Australia
    - Including Hunter Valley, Geelong and Western Victoria, south west WA, Central Queensland, Northern Tasmania, Cape York and the NT.
- There would be no global environmental advantage if this investment is forced from Australia to developing countries (Africa, Middle east, Latin America, India etc)
  - And much of this investment in developing countries would be based on electricity from coal, as it would be in Australia
- In the medium to longer term there will be new aluminium production technology introduced into Australia that will dramatically improve energy efficiency. New technology will reduce electricity consumption and direct process emissions per tonne of metal.
  - Thus care must be taken not to lose the investment base in the short term, or set up a policy regime that is not attractive in the longer term, so these benefits can have time to flow through
  - Once the investment is lost it will not easily return, given the very long term and high capital nature of investments in this industry
- The environmental benefits of aluminium also need to be kept in mind, even though they are not properly taken account of in the Kyoto Protocol
  - End use in reducing the weight of transport vehicles
    - Aluminium used in this way saves greenhouse emissions over the life of the vehicle, even when the emissions associated with the metal production is taken into account
  - Recycling of the metal
    - This uses only 5% of the energy used to make primary metal and the metal can be recycled almost indefinitely
    - Effectively the electricity consumed in making the primary metal is stored for future and continuing reuse in recycling
- In finalizing its policies on greenhouse the Australian Government may need to make provisions to offset unfair impacts on certain sectors, such as aluminium, of the Kyoto protocol negotiations
  - The negotiated agreement approach should give the framework for such policy measures

#### Concluding comment

The Kyoto Protocol may be the best route to commence effective global action on greenhouse emissions abatement but it must be able to pass the tests on global effectiveness in environmental, economic and social terms. It is not yet clear that it will be able to do that and the Australian Government should not contemplate ratification until it is satisfied on those counts and that the protocol will not unfairly disadvantage Australia in economic terms.

The Australian aluminium industry can be a major further success story for Australia, especially in relation to the trade balance, regional development, and technology growth. The Government will need to take account of the particular circumstances of this industry, and the long term potential (as against the short term view) when it decides on its policy responses to the Kyoto Protocol and the greenhouse challenge.

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