

National Emissions Trading Taskforce Discussion Paper Possible Design for a National Greenhouse Gas Emissions Trading Scheme

Submission by Tim Edwards, MD Ecoflex Australia

Introduction

The format of the submission is to select the topics relevant to Ecoflex Australia. Our comments pertain only to these elements.

For our comments to make sense to the reader it is important for the reader to have a basic understanding of the nature of our technology and the basis upon which it delivers GHG abatement. The following introductory comments are intended for that purpose.

Ecoflex Systems are recycling systems that serve to cause recycled materials to be used for civil engineering in the sense of public infrastructure construction: roads, retaining walls, erosion control systems, concrete slabs, water storage devices. The recycled materials include both recycled tyres and recycled concrete or similar materials (fly ash, asphalt, slag). The production of these materials involves a low level of energy consumption and they are used to replace materials that have a high level of energy consumption.

The use of recycled materials for these purpose has the effect of dramatically reducing the amount of energy required to achieve a given volume of construction. Ecoflex systems are proven in all regards – engineering, commercial and environmental. As a result they are available for use as a means to effect public infrastructure construction at much lower levels of GHG production than would be the case if conventional engineering systems were employed.

The volume of GHG abatement is easily measured on a project by project basis and therefore aggregated over a series of construction projects.

Ecoflex holds patents for its unique products and engineering systems that are granted in large target markets like the USA and China, and pending or granted in most of the industrialised world. It is also true that Ecoflex systems have substantial value for the developing world regardless of the feasibility of IP protection in these markets.

Australia and the industrialised world disposes of a large volume of tyres every year - 30 M car tyre equivalents and 1 billion car tyre equivalents respectively. Because the majority of tyres can be used in Ecoflex systems there is high potential for Ecoflex systems to be used for construction and the resulting GHG abatement.

The degree of potential GHG abatement is in the order of 100,000 tonnes per annum in Australia and 3,000,000 tonnes per annum on a global basis. Please note that over a series of years the potential GHG abatement that will flow from the use of Ecoflex systems is substantial.

Please contact me for further explanation of how Ecoflex Technology delivers GHG abatement.

Please note that the central issues related to converting Ecoflex GHG abatement into carbon credits are:

1. The tendency for Australian based carbon credit programs to be based on stationary energy production and consumption systems. Ecoflex GHG abatement is a mix of stationary and transport sourced savings that do not fit easily into the definitions suggested by existing and proposed carbon credit systems due to the reliance of these systems on stationary energy production and use.

Whilst a significant portion of Ecoflex GHG abatement could be seen as stationary such recognition is not obviously available from the proposed mechanisms. At the very least Ecoflex needs encouragement from the proposed plans to incur the considerable cost of validation and certification.

2. Ecoflex GHG abatement is delivered by a large flow of construction activity , albeit a dynamic and ongoing series of construction projects each one of which is discreet and delivers a knowable level of GHG abatement. This structure also does not fit easily into the proposed carbon credit validation parameters.
3. Despite these definitional issue the fact is that Ecoflex sourced GHG abatement is real and immediate. The GHG abatement delivered by Ecoflex systems is realized immediately as a result of energy efficient materials use and is permanent. Even when a given construction project is decommissioned the Ecoflex products will be reused and deliver similar levels of GHG abatement in the second and any subsequent reuse.
4. There are a series of additional environmental benefits including waste disposal avoidance and the associated GHG abatement and cost savings as well as the fact that Ecoflex engineering systems are preferred for their immediate environmental impact such as reduced excavation of acid sulphate soils and being less subject to wash out than conventional engineering.
5. The apparent inability of Ecoflex GHG abatement to be considered under the UN program because Australia is not a signatory to the Kyoto Protocol, albeit uses of Ecoflex systems in international markets that are signatories to the Protocol may well be able to access the UN program.
6. A key principle underpinning the program is the role of carbon credits to stimulate development and commercialization on new energy efficient technology. Ecoflex technology is well developed in the sense that it has been proven effective in every regard – engineering, commercial, environmental. Achieving this level of development has been funded by private industry and government – the latter primarily by way of R&D tax concessions.

However the commercialization of Ecoflex systems on a national and international basis requires a substantial investment in the process of commercialization as opposed to invention. Carbon Credits can make a major contribution to this requirement by providing capital markets with a known and predictable commercial benefit from commercialization.

Submission 1.

Stakeholder comment is sought on (Page 1 of National Emissions Trading Taskforce Discussion Paper - Possible Design for a National Greenhouse Gas Emissions Trading Scheme, Proposals and Requests for Comment in the Discussion Paper)

- **the appropriateness of firm annual scheme caps for electricity generation emissions within the bounds of Scenarios 1 and 2 during 2010–19**
- **the appropriateness of Scenarios 1 and 2 as the basis for potential upper and lower gateways, respectively, for electricity generation emissions during the period 2020–29.**

Stakeholder comment is sought on the proposed approach to adjust the scheme cap to include additional sectors.

We submit that the Program would have greater value if the initial program recognized that GHG abatement from validated sources of both electricity and non stationary energy efficiency were recognized.

Submission 2.

It is proposed that the scheme's coverage commences with (Page 2):

- initial coverage of electricity generators only, where those generators have a capacity of 30 MWe nameplate rated electrical output capacity or more; then
 - expansion of coverage five years after scheme commencement to include other stationary energy sources which emit more than 25 kt CO₂-e a year from stationary combustion of gas, oil, coal and other fossil fuels.
- (An alternative coverage option is to include, from the time of scheme commencement, all facilities (including electricity generators) emitting more than 25 kt CO₂-e a year from stationary combustion of gas, oil, coal and other fossil fuels.)

It is further proposed that:

- at the time that scheme coverage is expanded to include emissions from stationary combustion of gas, coal, oil and other fossil fuels:
 - gas retailers be included in the scheme's coverage with liability for the imputed emissions arising from their gas sales to customers (excluding gas delivered to facilities emitting more than 25 kt CO₂-e a year)
 - large emitters (>25 kt CO₂-e) who receive 100% of their gas supply from retailers have the opportunity to opt out of direct coverage and become indirectly covered by retailers
 - the threshold of 25 kt of CO₂-e emissions from fossil fuel combustion be applied as the threshold for electricity generation coverage also
 - petroleum refineries be excluded from liability initially.

Comment is sought on these proposals and on other possible coverage options.

In line with our submission above we further submit that the program recognize and incorporate GHG abatement like that delivered by Ecoflex where the GHG abatement is delivered by a mix of sources that are both other fossil fuels from multiple sources – some of which are not stationary in the conventional use of this term.

The plant and equipment used to produce energy intensive products used in conventional engineering are in some instances mobile the energy savings delivered by Ecoflex can be specified in a manner that is highly analogous to stationary sources of GHG abatement. Again we seek the Commission's encouragement to validate this stance.

Submission 3.

Consistency with the Kyoto Protocol, and hence the details of the JI mechanism, should be a key principle guiding the development of detailed rules governing offsets under the NETS (**Page 6**).

It is proposed that approaches to facilitate the development of offset projects and the creation of offset credits under the NETS be as consistent as possible with those emerging methodologies, rules and frameworks being developed for the JI mechanism under the Kyoto Protocol.

Comment is invited on how this approach should be adjusted or enhanced for the creation of offset credits from forest projects under NETS.

We submit that recognition that the program would have greater value to Ecoflex if it could be seen to be in line with the Kyoto Protocol and therefore could be seen by international participants as analogous to the value of our technology for carbon credits available pursuant to the Kyoto Protocol.

Submission 4.

It is proposed that, for the purpose of the NETS, permanence rules for sequestration via CCS technologies should be consistent with those established for the permanency of sequestration in forest projects, and follow broader legislative requirements regarding site selection, monitoring, permanence and liability (Page 7).

As a transitional measure, it is proposed that facilities producing industrial process emissions in Australia be eligible to create offset credits whereby they are able to reduce their emissions intensities below the expected 'business as usual' levels.

It is proposed that credits from CDM projects (known as CERs) be recognised as equivalent to offset credits under the NETS.

Comment is sought on whether limits should be placed on the volume of CERs recognised as equivalent to offset credits, and on the implications of such limits.

We submit that this proposal seems to be in line with Ecoflex requirements as described above.