## Australian Government

SUBMISSION 2

## Department of the Environment and Heritage Australian Greenhouse Office

Parliamentary Standing Committee on Public Works
Parliament House
Canberra ACT 2600
jcpw@aph.gov.au

Re: Proposed Fit Out of New Leased Premises for the Department of Industry, Tourism (DITR) and Resources in Civic

The works outlined in the Department of Industry, Tourism and Resources submission to the Committee dated December 2004 are subject to certain provisions of the Commonwealth Energy Policy. The Policy is detailed in the then Department of Industry, Science and Resources March 2000 publication titled: Measures for Improving Energy Efficiency in Commonwealth Operations.

The relevant sections of the Policy (4.1) and (4.2) state:

4.1 Minimum Building Energy Performance Standard

All new and substantially refurbished buildings, whether Commonwealth-owned or where the Commonwealth is the majority tenant, must meet a minimum energy performance standard. The interim standard is the 1994 BOMA Energy Guidelines (with a 20% margin of leniency for substantially refurbished buildings). Funding for building construction and refurbishing will be conditional on certification, by suitably qualified persons, that the building will meet required energy standards.

4.2 Lease Agreements

New lease agreements for buildings should not include any provision permitting the recovery from the tenant of the cost of energy used by building central services during normal working hours. This will ensure that building owners have an incentive to improve the energy efficiency of building central services. Designated special purpose buildings may be excluded from this requirement if a case can be demonstrated.

Industry standards have moved beyond the 1994 BOMA Guidelines in a number of areas as technologies and practices have improved. Where this is the case, it is expected that Australian Government agencies will meet the current industry standards when fitting out premises.

The Department of Environment and Heritage through the Australian Greenhouse Office (AGO) also encourages good practice in installation of adequate electricity and water metering to facilitate accurate reporting and management by Australian Government agencies.

Section 2.11 of the DITR submission states: Specifies the building brief is compliant with current policy. AGO has sought clarification from DITR in relation to section 2.11.2 of the submission and further reviews of energy efficiency initiatives have been undertaken by DITR with the cooperation of the building developer.

AGO has been informed by DITR "that they have reviewed the estimated energy usage for the new DITR building in the light of recent design enhancements and further review of the recommendations in the Dascem and developer's reports (as provided to AGO on 16 November 2004).

The developer is now proposing to install solar hot water. This is only subject to ACT Government planning approval as the height of the solar panels on the roof exceed the planning height for the area. However, we do not expect that to be an issue. That will reduce the base building NGE by 3 kg CO2/m2.

DITR have also refined the lighting control proposals which would result in a further reduction in base building NGE of 2 kg CO2/m2 through more efficient house lighting, bringing the total base building NGE to 95 kgCO2/m2 (this is as calculated in both the Dascem and developer's reports.)

Further refinement of the design for the tenant elements of the energy consuming components of the building are expected to reduce the tenant load to at least 20% below the original Dascem estimate. The Dascem estimate was far more conservative for tenant usage than the developer's estimate. Therefore, we have adopted the more conservative approach to give greater certainty of achieving the desired result.

Those refinements to the tenant elements include full use of LCD monitors throughout the organisation (replacing CRT screens), use of large multifunction printers/photocopiers/faxes to replace large quantities of smaller machines, larger refrigerators to replace the current large numbers of bar fridges and a more active lighting control system incorporating electronic ballasts, demand assessment, time control daylight control and power factor equipment. This will reduce tenant usage by 18 kgCO2/m2 to 69 kg CO2/m2.

The revised overall usage is therefore 164 kg CO2/m2 or 487 MJ/m2 pa. (Equivalent to 4 and a half stars under the ABGR scheme.) Therefore given the above clarification from DITR and the developer, the proposed building works would comply with the current the Commonwealth guidelines relating to energy efficient buildings.

AGO also notes from the DITR PWC submission that they have taken an active approach to water conservation. This includes leading edge initiatives such as the installation of rain water tanks so that rain water can be used for toilets (WCs) and irrigation and water-free urinals.

Should you wish additional information please contact me at the Australian Greenhouse Office on 02 6274 1734 Fax 02 6274 1814.

Yours sincerely

Lloyd Woodford Buildings and Government Efficiency Team Built Environment and Communities Branch

27 January 2005