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**THE PROPOSED 'WASTE PLASTIC TO FUEL CONVERSION' FACILITY AT HUME –
CALL FOR AN INQUIRY PANEL¹**

Dear Ministers,

As you would be aware the Foy Group proposes to construct a 'Landfill Diversion Facility' at Hume, however, in practice it is a fuel refinery. It breaks down plastic into 'gas and liquids resembling crude oil'.² The gas is then burned to further heat the liquids into petrol and diesel. When fully operational it would produce more than 205,000 litres of fuel per day (the equivalent of processing, conservatively, some 1,300 'barrels' of oil) and store 1,890,000 litres of fuel above ground on site. In addition to a large number of submissions received by ACTPLA on the desirability, viability or safety of this proposal, we draw your attention to a range of community submissions at: <http://www.nopowerstation.com/>.

It is our understanding that the Planning Minister has the authority to establish an inquiry panel and that the Health Minister may give notice, under the *Public Health Act 1997*,³ that such a panel conduct an inquiry about an EIS in relation to the effects of the proposal on public health (that is the subject of the EIS).

We are of the opinion that the EIS proposed by the Foy Group should be subject to an inquiry for the following reasons:

- **Health Impacts.** There remain serious discrepancies in the EIS that have not been adequately addressed. In particular, on initial information, FOY suggests up to 52 tonnes of any one day's 200 tonne consumption could be 'allowable contamination' that is undesirable in the production of fuel and will therefore be expended into the atmosphere. In subsequent information provided by the proponent, there appears to be little if any limitation on what can actually be ingested in this process. Given the proximity of residences, pre-schools, businesses (including the popular Rose

¹ Pursuant to s228 of the *Planning and Development Act 1997*.

² <http://igenergy.com.au> (IGE website)

³ Section 134 to that Act.

Cottage), an important freight distribution hub and solar farm, the exact nature of the emissions needs to be clearly understood before this proposal can progress.

- **Particulate matter health concern.** At full production, the factory is expected to burn the equivalent of 30 tonnes of gas per day, amounting to the burning of nearly 11,000 tonnes / year, which seems a formidable gas burning exercise. However, it is unclear from the EIS what amount of PM_{2.5} (tonnes / year) will be produced from the burning of all this gas by the refinery, taking into account that most of the gas is not commercially provided LPG, but “home-made” gas derived from potentially contaminated plastic feedstock with additional toxic elements added-in upon oil-to-plastic conversion. It is highly likely that the quantity of PM_{2.5} produced will vastly exceed that of “a single domestic woodstove” as claimed by Foy’s representative at the community consultation meeting (30 Aug 16). A recent report for the NSW EPA “*Methodology for valuing the health impacts of changes in particle emissions – final report NSW Environment Protection Agency February 2013*”⁴ identifies Canberra-Queanbeyan as the region with the second highest PM_{2.5} damage cost (\$230,000 / tonne PM_{2.5}) after Sydney. An Inquiry Panel should establish the yearly production of PM_{2.5} by the proposed Hume refinery, estimate its yearly cost to the community, and make a recommendation whether these costs should be borne by FOY or by the ACT Government.
- Furthermore, the Federal government states: ‘Recent epidemiological research suggests that there is no threshold at which health effects [from particulate matter] do not occur’.⁵ The published health effects include:
 - toxic effects by absorption of the toxic material into the blood (e.g. lead, cadmium, zinc)
 - allergic or hypersensitivity effects
 - bacterial and fungal infections (from live organisms)
 - fibrosis (e.g. asbestos, quartz)
 - cancer (e.g. asbestos, chromates)
 - irritation of mucous membranes (e.g. acid and alkalis)
 - increased respiratory symptoms, aggravation of asthma and premature death
- **Inadequate community consultation.** According to the EPD Scoping Document, FOY was required to identify and consult with community and stakeholders, including leaseholders potentially impacted by the proposal. The community and stakeholder consultation was, and remains, entirely inadequate. A letterbox drop to nearby suburbs was ineffective. Maoneng, the operators of the 13 MW Mugga Lane Solar Park across the Monaro Highway from the proposed site, were not contacted by Foy at all, despite being a major stakeholder affected by the proposal. The Jerrabomberra Residents Association had less than two days to respond to the EIS. One community consultation meeting was held on 30 August 2016, but was poorly attended due to a lack of advertising. An extension of the consultation period was not used by Foy for additional public consultation or advertising.
- **Effect on ACT CO₂ Greenhouse Targets.** The ACT has legislated targets to reduce its emissions by 2020.⁶ Combustion of the fuels and gases produced by the Hume refinery will add 220 kilotonnes of CO₂ / year to the ACT carbon footprint. This represents 11.7% of the anticipated 2020 carbon footprint and more than negates (by

4 <http://www.epa.nsw.gov.au/resources/air/HealthPartEmiss.pdf>

5 <http://www.npi.gov.au/database/substance-info/profiles/pubs/particulate-matter.pdf>

6 Climate Change and Greenhouse Gas Reduction Act 2010

approximately 1.5 times) the combined total CO₂ savings of all four ACT solar farms and rooftop solar installations (some 17,219).

- **Other Uncertainties in the Foy Proposal**

- **Reliance on inadequate supporting evidence.** It appears the proponents have based most, or all, of their claims of safety and non-pollution on their experience operating a pilot facility at Berkeley Vale (BKV) in NSW. The BKV facility is a fraction of the size of the one proposed for Hume. It operates on only a handful of days per month and does not melt plastic into crude oil and then into fuel, instead it separates contaminated fuel into fuel and contaminants. It is operated by another company, IGE, and under the terms of the acquisition, need only to demonstrate by mid-2017 that it is capable of processing 35 tonnes of plastic on eight days in any one month.
- **Contaminated waste health concern.** Up to a quarter of supplied waste can be PVC, PTFE or PET plastics, water, organic components and dust. Their processing will free dangerous, if not toxic, compounds of among others: lead; mercury; cadmium; antimony; chlorine and fluorine. These will affect the Canberra community in three ways: as gases spread over adjacent suburbs (the equivalent of 30 tonnes of gases will be burnt daily); as emissions from fuels used in ACTION buses, trucks and private cars spread throughout Canberra (170 tonnes daily); and as emissions from solid waste highly enriched with dangerous, toxic components, probably dumped at the Mugga Lane tip, with the danger of leaching into waterways and diffusing into the air (one tonne / day).
 - **Feedstock quality.** The proponents have failed to demonstrate the practicality of how they will ensure only “allowable” impurities are consumed and the mechanics by which contaminated feedstock will be returned to interstate suppliers. No ACT waste will be processed, however, char ash from the process (possibly containing activated bauxite) will end up in ACT landfill.
- **Technical Risk.** *Foy Group Limited CAN 003 669 163 The Replacement Prospectus*, dated 17 November 2016, lists 11 pages of risks, primarily technical. The proponents announced to their shareholders in February 2016 that they were converting their fuel reclamation pilot site at Berkeley Vale in NSW into a waste plastics-to-fuel facility however, this has not occurred – this failure to achieve their stated claims is because the NSW EPA did not approve the proposal due to a lack of empirical data. The proponents admitted to their shareholders in February 2016 that the proposed change to the Berkeley Vale facility may not be possible on technical grounds or to the satisfaction of (NSW) regulators. To the best of our knowledge, the company has undertaken no additional research between then and now on which to base the Hume proposal’s safety case. Instead, the company has paid a deposit on a block of land in the ACT.

Finally, there are several other issues any one of which should indicate to the ACT Government that it ought to be careful in selling land for this purpose:

- The ACT produces insufficient quantities of relevant plastic waste to make the process viable here with ACT waste alone.
- Foy representatives indicated at their community consultation that the ACT government was (quote) “*far easier to deal with*” (unquote) than the NSW EPA – suggesting that they may not be acting in good faith.
- The environmental cost of trucking plastic waste into the ACT from Queensland, NSW and Victoria - and trucking fuel back out – has not been considered.
- The bushfire risk to the 1,890,000 litres of fuel and gases stored above ground.
- The unproven ability of the company to safely manage a facility of the size and complexity proposed.

- The fact that the company has been delisted from the ASX since mid-2015 and appears to be almost bankrupt and struggling to raise sufficient capital to proceed.

Any one of these issues in isolation should be sufficient grounds on which to convene an inquiry panel into the proposal and we respectfully request you do so.



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For more information: <http://www.nopowerstation.com/>