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(Other publications welcome to use material if source acknowledged)

All-States Issue

As mentioned in Ecoso Exchange No.6 this and subsequent issues will carry articles, news items and comments from other States as well as Victoria. We are a small country. Barrier Reef, Save the Kangaroo; Lake Pedder, the Little Desert, Clutha are all "local" in a sense, but they are of national concern too. So are green bans, anti-freeway protests, anti-consumerist movements and resident action groups. All are local but success in one can inspire others, just as a defeat in one can teach lessons to others. Contributions small or big (but not too big!) are invited. Send to "Ecoso Exchange" P.O. Box 87 Carlton South Victoria 3053.

Apologies to some contributors---and readers---for delay in publication of some of the articles in this issue held over because of special editions on the energy crisis and Melbourne regional plan. All contributions, however retain their interest

THIS ISSUE :

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SMOG---LONDON, LOS ANGELES,-----AND MELBOURNE?

(Contributed by D.D)

(An appeal is currently being heard in Melbourne by the Environment Protection Appeal Board on the Newport Power Station which it is proposed be built on the lower Yarra. Conservationists are appealing against the granting of a license to build the station. This article was written before the appeal began but remains valid.)

What is "photochemical smog"? This question has become increasingly relevant, with Melbourne on the verge of entering the Big League of cities with this kind of air pollution. The question is even more urgent in view of the battle over the proposed new Newport Power Station.

Photochemical smog is a relatively new kind of air pollution. It is characteristic of Los Angeles, and is often called by that name. The older kind of smog is generally called "London smog". This older type of smog consists of the simple sum of all the pollutants released, such as smoke and fumes plus water vapour.

It is important to grasp the difference with photochemical smog, otherwise the smart P.R man can easily lull the public into a false sense of security. What happens here is that various gases released from factory stacks and car exhausts react with each other to form new poisonous substances. Sunlight is an essential factor in promoting these chemical reactions.

There are at least 80 different chemical reactions involved in the formation of photo-chemical smog. The most common poisons formed are called peroxy-acyl-nitrates, or PAN. They cause watering of the eyes and the symptoms of 'flu without high temperature. They make people irritable. The other important substance formed is ozone.

It should be emphasised that the gases which react in the first place to form PAN may be invisible. The observer may see a thin wisp of vapor emerging from a smoke stack and get the impression that no pollution is taking place.

The various photo-chemical poisons are being formed all the time, but they are particularly dangerous when there is a temperature inversion—that is, a layer of cold air acting like a lid on top of a layer of warm air over a city. Such conditions occur frequently in Melbourne, particularly in autumn. On such days, a dirty brown pall hangs over the city.

The ingredients for photo-chemical smog are mainly hydrocarbons and oxides of nitrogen. Car exhausts make a big contribution to these ingredients. But the proposed Newport Power Station would be a major contributor of oxides of nitrogen, known as NOx.

So, a fundamental objection to the building of the Newport "D" station is this: why add more NOx to Melbourne's air at a time when the city is just entering a new phase of air pollution? Why add a new source of NOx precisely when all efforts should be directed to reducing the amounts of this ingredient for photo-chemical smog?

The Newport "D" station would be less than 5 miles from the centre of the city, and is designed to burn mainly natural gas. Four unions have placed a ban on its construction.

The Environment Protection Authority after an enquiry issued a license for the building of the \$145 million station after laying down certain conditions. One is that the Station should reduce the NOx content of the effluent gases from 165 to 125 parts per million. But why is any more NOx permitted at all? As the EPA report itself states, from 1976 the citizens of Melbourne will be paying out some \$18 million per year in projects designed to reduce NOx released into the air. But at the same time the State Electricity Committee is to be permitted to replace some of this reduction.

Another condition of the EPA license is that if weather conditions are such as to "make it necessary for the Authority to protect the environment", then the power station can be required to "cease or alter operations temporarily".

How often will this occur? We do not know with any certainty. But is it sensible for a \$145 million project to be subject to shut down when weather conditions are unfavourable? Surely not, when it can be sited elsewhere! Some estimates are that the power station may have to close for at least 78 days a year, based on previous weather history. Will this happen, or will some way be found for the power station to keep going? Will a clash be engineered between the "conservationists" and "environmentalists" on one hand, and workers stood down due to power cuts on the other?

There are a number of aspects of the proposed "D" station. One is the use of enormous quantities of natural gas, a rather valuable fuel.

We conclude this article with this point: Although the action against the power station has centred mainly in the Williamstown-Newport area, the people there may in fact suffer less than people in other suburbs. Photo-chemical smog is a phenomenon affecting the whole city.

When the old Newport Power Station belched grit and soot over surrounding homes, the rest of Melbourne could afford to ignore it. That does not apply any more.

2. THE SILENT GIANTS

Contributed by Mr. Tony Trienen, President
Port Stephens Conservation Society

Vast areas of Central Australia, comprising approximately 40 per cent of the total area, are occupied by deserts and semi-deserts. The total area of Australia comprises approximately 760 million hectares and only 16 million hectares are set aside for national parks and other reserves. Agricultural land takes up an area of 240 million hectares or 31.6 per cent of the total area of Australia, while forest and woodland, including scrub, covers 5.6 per cent. Further broken down, this leaves us with 2.5 per cent of true forest.

This is an alarming figure when one realises this is not a static but a declining figure. Where does this leave the trees, the silent giants of nature on whom all land dwellers depend?

The most highly developed creatures on earth depend upon them for their very existence. The history of an intricate and very important stage in our evolution cannot be dismissed. On the contrary, it is said, without trees there can be no life. Trees take from the atmosphere and soil inorganic materials which cannot be used by animals. They combine these with solar radiation and, through the chlorophyll in their leaves, turn them into organic materials. They return to the soil humus, in the form of falling leaves, fruit and branches. They absorb excess water from the atmosphere during rain and release moisture during dry periods—in other words, a natural air-conditioning process. Their roots, which are in constant movement, increase porosity and elasticity of the soil. They further break the wind to protect the surface from erosion.

Today, man's greatest tragedy is his inability to accept that he or she evolved from a natural environment and his entire well being is contained in nature. The lust to exploit for wealth is taking 400 million dollars worth of trees annually for the Japanese woodchip industry, while in Japan trees are treated as divine gifts from the heavens. Trees reduce pollution levels around obnoxious industry and produce life giving oxygen; honey, oils, fruits, drugs, cork etc. are produced from trees.

Ironically, as the forests are being destroyed man learns to appreciate their value. Let us make the motto for 1974 and 1975 "for each tree felled two must be planted to survive".

3. UNIONS BESTIR THEMSELVES

(a) Wollongong - First Prize for Pollution ?

(A reader sent newspaper clippings in February from the "Illawarra Mercury" which give an astounding picture of the massive pollution encountered by workers and residents in the Port Kembla-Wollongong area on the south coast of N.S.W. A few extracts follow)

"Pollution disrupts cricket matches" (4/2/'74)

"Pollution whipped up by a strong southerly wind stopped play in a number of Illawarra cricket matches at the weekend---Wollongong's team vice-captain Mr P. Newell, last night said "It is a disgrace to think we can't escape filth anywhere in this pollution-bound city - it even annihilates our weekend sport. We had to run to the changing sheds as a huge black cloud of coal-dust took over the field about 4 p.m."

"Another player said he was convinced 'it was a tornado'. 'The southern sky was a black blanket. Very soon we all realised what was happening when black spots of filth covered our whites.'"

"Coal storm chokes area" (7/2/'74)

"Choking ! That was the only description for the Inner Harbor yesterday as the whole area fought to breathe in a seething ocean of coal dust. It was like walking into a black empty void which only hours before had throbbled with men and machines."

"Port men wage war on smog" (12/2/'74)

"Maritime unions are set to generate a storm to settle the dust at Port Kembla. The campaign of anti-pollution protests at individual wharves broadened yesterday to involve the complete inner harbor."

"---Mr R. Sykes President of the Firemen and Deckhands Union told the Mercury" (speaking of 24 hour ban on all shipping plus a 48 hour ban at the coal loader) "---there will be other bans---we will lose earnings but we want the community to know we are honest about this. We are not worried just for ourselves but for Wollongong too."

(b) "Save Public Transport Protest Day" - N.S.W

As this newsheet goes to press a "Save the Public Transport Committee" in Sydney is preparing for a novel form of protest for Aug. 1st

1. Transport unionists will be asked to run transport services free.

2. The commuting public will be asked to leave their cars at home and patronise public transport for the day.
3. University students will have a push bike rally through the city
4. There will be a public rally in Hyde Park.

Protests are aimed against deteriorating services of ferries and taxis as well as trains and buses (trains often break down leaving thousands stranded); against threatened fare increases; against staff cuts; against traffic pollution; against expressways.

The Committee arose from a seminar in May organised by the Combined Transport Shop Stewards Committee. It now includes a number of unions, anti-expressway groups, environmental groups, students and the Campaign Against Rising Prices.

(c) Redcliffs South Aust. - Petro-chemical Plant

(The process of the gradual increase in demand for a more informed union membership on environmental issues is evidenced by the fact that the Australian Council of Salaries and Professional Associations (ACSPA) "school of labour and industrial studies" in November 1973 arranged for Mr R.J. Giles who is South Aust Secretary and Federal President of the Plumbers Union to give a paper which he entitled "Unions—on Maintaining Social Relevance in the Era of the Environmental Revolution" - our copy from Plumbers Union P.O Box 144 Goodwood 5034)

Amongst other issues, Mr Giles dealt with proposals for a Redcliffs Petro-chemical Plant. Redcliffs is some 14 miles from Port Augusta on the eastern shore of Spencer Gulf, and would process natural gas from the Moomba gas field in North-east of South Australia.

Mr Giles writes: "Such a plant would produce caustic soda for use elsewhere in the manufacture of aluminium; chlorine would be a by-product of the caustic soda production and it would suit the current world shortage of ethylene di-chloride for the chlorine to be converted into ethylene di-chloride. It is not clear whether further industrial expansion at Redcliffs would make use of the ethylene di-chloride by manufacturing it into poly-vinyl chloride but, wherever that took place, that is what would eventually happen to it."

"Now it so happens that poly-vinyl chloride is one of those modern substances having characteristics which could be described as permanent; that is, it will not rust away like steel, it will not break down like wood and return to the biosphere in its basic components, it can't even be burnt as rubbish because to do so is to release hydrochloric acid gas—"

After discussing the danger of spillage of liquid di-chloride in Spencer Gulf 200 miles from its mouth, and other associated environmental dangers Mr Giles discloses that the Redcliffs Environmental Impact Report promised by the Government turns out to be an "exercise of recording a pre-Redcliffs marine history to be compared with post-Redcliffs developments after the plant has commenced operation!"

Giving his own constructive alternatives, Mr Giles writes: "—the suggestion should be made that the natural resources of the Cooper Basin would be best used for something other than the production of plastics." (He suggests this could conceivably be gasoline fuel). "However, if it is inevitable that our natural gas must be used to produce plastics, certain conditions should be attached. These include insistence that ethylene di-chloride be not transported away from the site but be fully processed on site—also insistence upon the production of long-life products and upon a recycling capacity".

(Note: for Mr Giles' view on the Treasury—see item below)

(d) Can Skyscrapers Educate Children ?

The Victorian Branch of the Amalgamated Metal Workers Union (174 Victoria Parade East Melbourne 3002) has produced "Speakers' Notes" with the intriguing rhetorical title: "Can Skyscrapers—educate children; provide community health needs; fill the housing gap; make life happier for the elderly; create kindergartens, health centres, creches, play centres?"

Liberally peppered with a compilation of factual news items, its theme is that there is ~~an~~ over-expenditure on city skyscrapers by big,

corporations hedging against inflation and using up raw materials and labor badly needed for houses, schools and the other social needs listed in the title.

The bulletin finishes with information about the newly formed "Melbourne Commuters Committee" (P.O Box 304 Carlton South 3053), which has a similar policy, but which also demands better public transport, and better opportunities for cultural and social diversity for city workers in the city. The Commuters Committee, with which some unions are associated, calls for a total ban on all new office and commercial projects in the city until the backlog of housing schools and hospitals have been met.

(e) Is the ACTU Travel Scheme a Good Idea ?

Last year the executive of the Australian Council of Trade Unions (ACTU) decided to "take the Trade Union movement into the travel business" with the help of the travel firm T.N.T. It produced a 33-page Catalogue (valid from 1/6/73 to 1/8/74) listing about 50 different package holiday arrangements as part of the "New World Travel" scheme.

According to Secretary Mr R.J.L.Hawke, one of the ACTU's objectives is that "the responsibility of the Trade Unions does not stop at the achievement of increased leisure, but extends into the area of improvement of people's living standards. Providing you with holiday and travel facilities at the lowest possible cost is consistent with these objectives"

Better quality holidays is certainly a most laudable aim as is the emerging union desire to go beyond those aspects of their members' lives that consist of pay rates and job conditions. With full support of such aims, however the next question is: in what style ?

Examination of the catalogue shows that some of the holidays provide for travel to a particular place, such as Surfers Paradise or the Wrest Point Casino Hotel ("you could come back rich"). But 30 or so of the 50 package deals involve constant travelling i.e Day 1, Day 2, Day 3---etc. each day in a new place.

Plane travel is very expensive in fossil fuel consumption. Encouragement of the "Day 1, Day 2" type holiday will use more and more fossil fuel per head, whether by plane, coach, boat or car; more especially if this is to become the typical annual holiday for the industrial or whitecollar worker.

Is it necessary to go to far distant places and be constantly on the move to relax or enjoy yourself? Could it not be made more relaxing, more satisfying and cheaper (as well as conserving our energy resources and creating less pollution), if there were near-at-hand holiday complexes with interesting activities entertainment and culture available for all age groups near unspoiled, unsubdivided beaches or countryside? Should not the union movement be pushing for holidays of this character rather than than heavily travel-based holidays ? Comments are invited.

4. THE TREASURY AND ECONOMIC GROWTH

Z.P.G; Mr Stone & "Club of Rome"

A recent newsletter of the Zero Population Growth Society (Melbourne Branch), which calls itself "Z.P.G News" draws attention to a statement by Mr J.O.Stone from the Treasury. The Z.P.G article describes him as "No 2 man in the Treasury". These paragraphs from the newsletter speak for themselves :

"At a seminar next day the speakers were the three visitors" (Dr. Peccei, Dr. King and Dr. Thiemann from the Club of Rome--producers of the book "Limits to Growth" by Meadows and others), "and Prof. Charles Birch. Following an inspiring address by Dr Peccei, Mr J.O.Stone contended that we did not need to change the present policy of economic growth. He proceeded to attack the Club of Rome on many other grounds. He delivered his arguments with deep sarcasm, and cleverness at undergraduate level. Some of his criticisms of these overseas guests of the Government were as amazing in content as they were in rudeness. He for instance accused the Club of Rome of 'name dropping', as if such men had need to drop any names but their own !".

"The audience was momentarily stunned, but a comment in reply that we

were deeply alarmed that such inadequate and out of date thinking should prevail in such high places of power in Australia was resoundingly applauded by the 300 or so people present. This 'confrontation on the Molongo' was reported in the 'Age' at some length by Peter Smark."

"It seems important that such organisations as our own take note of this blindness in Treasury. It was noticeable that people working in Canberra in places dependent on Treasury financing had already noted Treasury opposition to the Club of Rome and had abated their enthusiasm accordingly. One businessman described them as 'having gone to water'. It seems fortunate that the Australian Council for the Club of Rome is being financed by industry - a somewhat ironic situation for those who are inclined to think that governments care about the future of mankind but that business men do not."

For our part, we would rely on ZPG and all manner of other peoples' organisations rather than either governments or business to apply pressure to reverse the "growth-at-all-costs" philosophy.

As the latest ZPG newsletter quips:

"Growth for growth's sake is the philosophy of the cancer cell"

("ZPG News" is obtainable : P.O Box 95 Parkville, Victoria 3052)

Treasury Economic Paper No. 2

The Treasury booklet "Economic Growth: Is it worth having ?" published in June 1973 (obtainable from the Treasury), argues very strongly that it is.

Quoting estimates from other countries that to counter air and water pollution and dispose of solid waste would require only between 1% to 2% of the Gross National Product (G.N.P), it comes to the conclusion that "the quality of the environment can be improved much more-and more quickly-by measures to counter pollution than by steps to contain economic growth" (p.21); and the reason is that "a diversion of an additional 1% or so of a country's G.N.P to a particular use is not negligible but a growing economy can clearly take such a diversion in its stride" (p.20).

The paper rubbishes efforts, such as that of the Club of Rome, to estimate known reserves of non-renewable resources, arguing that "rising demands for a mineral (so long as its price is free to move in line with rising demand) will lead to investment in new extraction facilities and treatment plants and to a sufficient exploratory effort to satisfy the producers concerned that reserves exist to employ the facilities and feed the plants during their economic life." (p.31)

"Limits to Growth", incidentally, not only gave the then current (1972) figures for known reserves of various minerals and fuels, but figures of projected growth limits based on an assumption that 5 times the known reserves would be discovered or become economic to process (See table 4 at pp 56-59 column 6.). So, correct or no, allowance was made for exploration

Mr R.J Giles takes on the Treasury thinking in the same paper given to ACSPA school last November (See item on "Redcliffs" above). Giles quotes the Treasury papers' conclusion:

"Whatever views might be held as to whether society's preferences as between present and future consumption show an excessive or deficient regard for our descendants - and there cannot be an objective answer - the 'policy' of anti-growth helps no-one. It reduces the resources available to current and future generations alike". (p46)

Giles writes : "In order to have got to that exceedingly presumptuous and wrong conclusion, this was said at p.6:

"In a real sense, technical progress 'creates' resources, so that the faster and further growth continues, the greater the availability of resources (at a given cost) will be."

Giles observes of this formulation of the Treasury : "it is imperative to analytically demolish this pseudo academic rubbish precisely because the Treasury is an extremely influential enemy. In a society which largely doesn't realise the pre-eminent role which economics plays in our social ethos, it is simply overpowering to have such an influential institution barracking for industrial, technological, population, economic and environmentally hazardous growth."

Stephen Boyden on Economists

Prof. Stephen Boyden of the Australian National University, had this to say in a memorial lecture delivered in 1970, which anticipated by three years the appearance of "Treasury Paper No.2".

"In view of the ecological situation, it seems clear the greatest economic problem of all time is to work out a steady-state economic system which allows the maximum opportunity for individual self-fulfilment and enjoyment of life, but which does not involve continual industrial expansion----the emphasis in university departments of economics is on development of more and more sophisticated techniques for analysing economic trends and for predicting short-term economic developments; and this work appears to be based almost entirely on the assumption that economic and industrial expansion ad infinitum is possible inevitable and desirable. By and large, the efforts of economists are aimed at lubricating the machinery so that the expanding and spiralling processes go faster and faster."

(Quoted from "The Politics of Finding Out - Environmental Problems in Australia." ed. R. Demsey, Chesire . at p.13)

Big question looming: Are Federal and State governments and all their departments and instrumentalities going to continue to submit to this Treasury theory and continue to base their practice on it? To do so is tantamount to submitting to the expansionist compulsions of the sectional interests of business big and small. Or is there to be a decision for a conscientious approach to ecological problems and a human non-consumerist way of life?

5. MISCELLANY

(a) Discord over Concorde

The Melbourne "Age" 22/7/'74 has reported that the French and British Governments had reached agreement to build 16 Concorde which "appeared to be a compromise between the French Government's wish to increase production from 16 to 19 and a temptation on Britain's part to abandon the project altogether."

This is really bad news. Apart altogether from noise pollution, air pollution and stratosphere pollution, consider the quantity of fuel involved. A reader who recently returned from England supplied this snippet of information:

"At the height of the energy crisis last year the Minister for Fuel in the British Government made an impassioned appeal to motorists, airlines and private aircraft operators to exercise maximum effort to conserve fuel in the interests of the nation."

"Next day Princess Ann and Mark Phillips went for a special joyride of 1½ hours in a Concorde. It is estimated that approximately 7500 gallons of fuel were consumed by the aircraft for this trip."

(b) Narrow Access Streets Enough !

Great-minds-think-alike Department : Ecoso Exchange No.5 (Irregular No. 55), wrote concerning the need to conserve fossil fuel in the form of bitumen : "If, as from now, all new residential areas were compulsorily designed according to 'environmental area' principles, all homes in such an area could be within walking distance from the local school/child centre/shops and all (through) traffic carried around the area concerned With such a design, one-way access roads to houses within such an area need be only as wide as a front drive, thus simultaneously making life more pleasant, safer and quieter, and using about half the bitumen, thus reducing the price of housing."

Unbeknown to Ecoso Exchange, 95 ratepayers at North Croydon (Victoria) have won over the Croydon Council to dropping their traditional street design, involving 25 ft. wide roads plus concrete footpaths and kerbing. Under the leadership of conservationist Mr Rafe Kimbell-Adeney, age 71, a retired Company Director, the residents have convinced the Council instead to have 12 ft. wide bitumen roads following the natural gravel paths through the gum trees. There will be table drains which fit in with the bush environment instead of concrete kerbs and footpaths.

One result is to save 500 gum trees from being cut down. The Council, at the residents' request are now to plant another 5000 gum trees of a type in which koalas will live. Approval by the Fisheries & Wildlife Department is still to be obtained. The residents hope to have tame koalas which become children's pets but live in their own habitat.

Another result is to cut the cost of the road scheme from \$267,000 to \$165,000 : a saving of more than \$100,000 (from Melb. "Herald" 12/3/1974.)

As can be seen, the Ecoso idea and the North Croydon idea are converging ones.

A full scheme would give these advantages :

1. Save bitumen
2. Enable a park-like or bush-like setting to be established.
3. Conserve trees, birds and bush beasts.
4. If associated with "environmental area" planning, cut down on traffic and increase safety.
5. Save money.

Ratepayers, planners, Councillors, energy-conservers, conservationists, young home-builders --- please note ! Why put up with the expensive and bad ? Why not demand the inexpensive best ?

(c) Resources for Peace and Social Change

In Melbourne, in May, there was a conference on "Resources for Peace and Social Change". It was addressed by Dr. J.G. Mosley (Director, Australian Conservation Foundation). The title of his keynote address was : "Is there a common denominator ?". The advertised scope of the conference was : "The arms race and international relations; education and social services; environment and population control; alternative life styles; racism, human rights and liberation; independence and economic development ---- many people are expressing concern about the way these issues are affecting them and society. Some see these issues as parallel but unconnected matters, whereas Congress for International Co-operation and Disarmament (C.I.C.D.) believes that they have a point of convergence a common denominator which is related to the nature and character of society."

This event was no flash-in-the-pan. It is being followed up with another conference on 11th. August to discuss "co-operation between social and environmental organisations", a Canberra budget lobby, and some proposed seminars.

(For information the address of the CICD is 208 Little Lonsdale St. Melbourne 3000, Phone 663,3677.)

(d) Whither the Weather ?

An Adelaide reader writes : 'Even our Adelaide Advertiser which used to be so conservative now publishes articles like the one enclosed" (of 13th July '74) "in which links are shown between man's burning of fossil fuels to produce carbon dioxide, and a resulting more unreliable world climate which in turn has caused a smaller world food production, which then has to be distributed to a larger world population. This causes food, particularly grain prices to rise i.e inflation.'

Our reader's remarks are a condensation of a possible causal chain advanced by Canadian Prof Kenneth Hare attending Adelaide University centenary. Hare described as "one of the world's most distinguished meteorologists", was chairman of a meeting of world experts on climate and agriculture at Rockefeller Foundation in New York earlier in the year

In this most inexact area into which science now ventures, the scientists nevertheless list some disturbing facts, such as :-

1. In past few years world's climate prone to wider extremes than 15 or 20 years ago.
2. 1972 climate-induced crop failures in 38 Of 53 food producing areas
3. 1972 10% increase snow/ice, mostly central Asia. Ice has not receded
4. Southern shift in monsoon rains thought to account for 5-year drought in Africa, and flooding rains in fringe areas of Australian outback. Sahara shifting south at rate 30 miles a year. Result of enforced southern migration, tragic social upheaval, overgrazing land.
5. Oceans around Australia heated up by several degrees in past 2 years (no one knows why) amounting to enormous increase in energy stored which causes release more water vapor and from this more rain.