

**Direct and Derived Policies:
Illicit Drug Use and Greenhouse Gas Emissions in Australia**

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Abstract: We distinguish two types public policy issues: direct issues, in which concern comes bottom-up from the electorate at large; and derived issues, in which pressure for change comes top-down from expert opinion. We outline two continuing, contentious issues: policies towards illegal drug use and towards the prospect of global climate change. We argue that the media play a role in both policies' formulation: channelling concern up in direct policy, and maintaining general interest and motivating the electorate to accept the pain of change in derived policy.

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1. Introduction

As an engineer-turned-economist, I have a stronger belief in outcomes than in processes, but where the outcome is a function of the process undertaken to attain it, I study alternative processes. Indeed, many economists have been criticised for their unwillingness to consider second-best policy (what is achievable) and only to adhere to first-best policy (the ideal). (Engineers often avoid all concern with messy politics, focussing instead on the inanimate.)

How does this approach sit in a journal devoted to policy analysis? Some may believe that such analysis is its own reward, but, as the editors remarked in the first issue (Geva-May and Lynn 1998), the *Journal* will publish papers that, inter alia, compare across jurisdictions, cultures, and disciplines in order to generalise across domains, as well as identifying the rocks on which attempts to transfer policy might founder.

The dichotomy of action versus explanation (following MacRae 1998) is not always orthogonal: realisation by this author and others (Marks 1974, Koch and Grupp 1971) that the issue of illicit drug use could be better explained by using a supply/demand framework also revealed that policies directed to suppressing supply would have quite different outcomes from policies directed at reducing demand, in ways that in some respects would be quite counterproductive to the avowed aims of policy: specifically, attempts to suppress supply, ceteris paribus, would, in the first instance, result in higher prices on the black market for illicit drugs (and lower prices on the black market for fenced stolen property), which would in turn result in higher rates of social “harm”, without much reducing demand for the addicting drug. As MacRae also points out, analysis of an issue, in order to better understand it, might also result in clarification of the underlying similarities between issues (and hence policies) in different cultures or jurisdictions, and between different issues in the same jurisdiction.

This paper compares two policies in the same jurisdiction: Australia’s policies for reduction of greenhouse gas (GHG) emissions in order to slow global climate change, and Australia’s policies in the face of rising levels of the use of illicit drugs, and accompanying social ills, such as disease and death of users and others.

As with Molière’s character who had no idea he was speaking in prose, those of us who live in countries with secure property rights usually have no conception what life is like without such rights. Vining and Weimer (1998) provide a salutary reminder not only of the importance of property rights in analysing and designing policy, but also of the importance of the analyst’s being aware of them, and, for comparative purposes, stating them as explicitly as possible. In what follows, I shall attempt to highlight the institutional differences and commonalities of the two policies under consideration.

In Vining and Weimer’s words, first-order policy instruments are the “rules, incentives, and other devices that are aimed directly at prohibiting, requiring, permitting, encouraging, or discouraging various behaviours with the manifest intention of promoting social values” (1998, p. 14). Crudely, the two policies under consideration below fall into the “prohibiting or discouraging” category: reducing emissions of GHGs, reducing the use of illicit drugs, or at least reducing the adverse consequences (social costs) associated with their use overall.

In their emphasis on property rights and institutional differences across countries, Vining and Weimer define second-order policy instruments as the mechanisms of institutional design. For GHG policies, institutional alternatives could range from regulation of types of fuels or activities using these fuels, to taxing fuels based on their carbon contents, to exhortation or education or information dissemination about the impact

in terms of carbon dioxide and methane emissions of the use of a particular fuel. These three approaches mirror Lindblom's (1977) three-fold classification of institutions into command-and-control, market-based, and persuasive/educational. For the issue of illicit drug use, institutional alternatives could range from the tightening of the current prohibition with further resources for law-enforcement agencies, to provision of previously illicit drugs to users at cost by health agencies (in an attempt to reduce the profitability of black-market trading to the unscrupulous entrepreneurs who supply illicit drugs), to attempts to reduce demand through educational campaigns directed to young people and their parents.

It should be clear that institutional designs in the third of Lindblom's categories — educational/persuasive — must rely heavily on the particular cultural norms of a society, but what is not clear is that the first two — command-and-control and market-based — also occur in a milieu of laws, rights, obligations, behavioral norms, and cultural beliefs. Thus any attempt to “borrow” first-order policy across borders should be sensitive to differences not only in second-order institutions, but also the wider milieu. This is sometimes forgotten or overlooked, in simple-minded attempts to apply models from first-year texts to complex social issues, such as reducing GHG emissions and reducing the costs associated with illicit drug use.

Whence the origins of new policy? Following deLeon's (1988) metaphor, new policy might be pushed from the supply side, from the “analysts having the capability and willingness to engage in public policy research” or it might be pulled by “clients from both the public and private sectors ... asking for high quality research” (deLeon and Resnick-Terry 1998, p.19). What is not clear here is that there are at least two kinds of “clients:” concerned citizens pressing their elected representatives, and concerned experts, expressing their beliefs, both publicly (in professional avenues and in op-ed pieces and in interviews on the electronic media) and privately.

A deeper analysis is given by May (1991), who describes two different political environments for agenda building (Cobb Ross Ross 1976), policy design, and implementation. He describes (1) policies “with publics” and (2) policies “without publics.” The former type correspond to bottom-up pushing, when the initial pressure for a new policy comes from a “public,” broadly based interests groups (such as producer groups, consumer groups, professional associations, or even unions), which use political leverage to insert the issue into the political agenda, often employing the mass media to do so. The latter type correspond to issues when the initial concern comes from a limited group of technical or scientific experts, who use private channels to alert policy makers of their worries.

May argues that for many issues which require a collective action solution (such as “public” goods, without rivalry in consumption or exclusion), there are diffuse incentives for publics to form or coalesce. He also asserts that when the probability of harm is low, even though the potential harm is high, it is costly to mobilise public opinion quickly. (High probability of low harm is similar, especially when the risk is pervasive, what May calls “public risk,” so that there are limits to any individual's avoiding the risk.) He uses the phrase “catastrophic natural and technological hazards” to illustrate issues which lead to policies without publics.

May further argues that implementation of these policies requires compensation for the lack of publics through one of two strategies: either direct government provision (such as being risk bearer of last resort after September 11, 2001), or the mobilisation of publics through incentives and information. Of course, such mobilisation can be costly if

not impossible for expert groups to achieve, in the face of public apathy and government resistance. This last points to a role for the mass media, in stimulating the emergence of a public and so transforming an issue from May's second type to his first. We shall see how this happened for an issue below.

2. Australian policies for two issues.

The Australian government's responses to the issues of deaths due to illicit drug use and of concern over global warming and GHG emissions provide a comparison of May's (1991) two types of public-policy issues: one driven initially by concern in the electorate at large, and one driven initially by expert opinion. In May's terms, the former is a policy with a public, while the latter, at least initially, was a policy without a public. This paper provides a framework for comparison, with brief histories and discussions of Australian policies in these areas.

Distinguish two types of public-policy issue:

1. *Direct policies*, in which concern is with the actual behavior per se, rather than with the effects of the behavior (or policy), and
2. *Derived policies*, in which concern is with the effects of the behavior (or policy), rather than with the behavior per se.

As a consequence of these definitions, direct policy issues are usually "bottom-up:" pressure for change comes initially as a political movement from the electorate (May's public), whereas derived policy issues are usually "top-down:" pressure for change comes initially from experts and the elites, not predominantly from the electorate (May's second type).

Examples of "direct" issues are: abortion, racial integration, capital punishment, and illicit drug use. Examples of "derived" issues are: uranium mining (where concern in Australia in the 1970s was with the uses that might be made of uranium once mined — concern over nuclear weapons, of course, but also concern over the possibility of accidents at nuclear power plants, as well as concern over the disposal of nuclear waste [see Elliott 1977, Grey 1994]); prohibition of alcohol or other illicit drugs (where concern is about the effects of the policy, rather than the aspirations of the policy-makers in originally determining the policy — were the prohibition complete, there would be no illicit drug use, perhaps at some social cost in terms of restrictions on civil liberties, but since no prohibition can be complete against a continuing demand for psychoactive substances — at least, not in a Western democracy — there will be unanticipated costs to the prohibitionist policy); substitution of chlorofluorocarbons (CFCs) in aerosol sprays; constraints on GHG emissions (where the concern is not with the emissions of the gases per se, or with increasing concentrations of these gases in the atmosphere per se, or even really with global warming itself, but with the *possible effects* of global warming, such as higher ocean levels, changed storm patterns, migration of pathogens, and the prospect of other unforeseen costs).

It may not always be easy to categorise an issue as direct or indirect: recent populist reaction against "globalisation" could be seen as reaction to behaviour (of corporations) or reaction to the perceived effects of government and corporate policies (with the environment, with ownership of intellectual property, such as anti-AIDS drugs, or with perceived inequity of income both nationally and internationally) (Marks 2000).

The focus here is on two policy issues in Australia, one direct — illicit drug policy — and the other derived — the emission of GHGs in general (and carbon dioxide CO₂, specifically). The distinction between the two types of policy issues may not always be clear-cut, however: what if the policy response to a direct issue results in unforeseen costs elsewhere? Many have argued that policies attempting to stop illicit drug use have only increased social costs overall, leading to pressure to change or even abandon such policies — an example of a derived policy issue.

With “direct” policy issues, government policy makers are driven by May’s public: popular concern, channelled through such media as newspaper letters to the editor, citizens’ petitions, crusading editorials in print and electronic media, talkback radio — in Australia an increasingly influential channel — pieces by academics and others on the op-ed pages, as well as direct representations to politicians.

“Derived” policy issues, by contrast, are not so easily placed on the political agenda. In the case of GHG emissions, the alarm was first raised by scientists concerned that the observed increase in CO₂ concentrations in the atmosphere would enhance the “greenhouse” effect of the atmosphere, warming the globe and thus resulting in the effects mentioned above. Because of the earlier concerns of the effect of the CFC gases on the atmospheric ozone layer, with the Antarctic ozone “hole” a confirmed risk to human populations living in high southern latitudes (such as southern Australia) because of exposure to unscreened ultraviolet radiation, scientific concerns about CO₂ concentrations might have been received with less skepticism on the part of the politicians than otherwise. This issue clearly falls into May’s second type.

I became involved in the GHG issue 1989, when approached by CRA Pty. Ltd., an Australian coal miner that had become aware of the possible adverse influence on the value of its coal-mining operations that efforts to reduce CO₂ emissions by reducing the use of fossil fuels might have. The Toronto conference of 1988 had alerted many organizations around the world to the new issue, and scientists were looking at the combustion of fossil fuels as an activity which might be controlled in order to control CO₂ emissions, leaving aside land-clearing as a net source of CO₂ emissions (Marks et al. 1991).

Use of certain drugs, however, had been a “direct” issue since the temperance movements of the nineteenth century, and since the concerns about the effects of the unknown ingredients of patent medicines at the turn of the twentieth century. Although Australia had not undergone alcohol prohibition, certain restrictions, such as six p.m. closing of hotel bars, resulting in the notorious “six-o’clock swill,” which survived its introduction during World War I for fifty years, mirrored political concerns with the misuse of alcohol. The use of other illegal drugs remained low until the late 1960s. Pharmaceutical heroin (diacetylmorphine) had been a valued drug until its criminalization in 1954; cocaine, too, had been in use by dentists until supplanted by novocaine in the 1930s, when its use in Australia virtually disappeared.

How do these two issues compare in the Australian context? Can we generalize about the difference between direct and indirect issues? Is it possible to speak of a strategy of policy implementation? How can May’s second type of policies (without publics) be transformed into his first type (with publics)? These are some of the questions we examine here. We adopt an historical approach to the two issues.

3. Policies towards illicit drug use in Australia

A succinct, but slightly inaccurate, summary of aspects of Australian drug use practice is given by an article in the *Wall Street Journal* during the Sydney 2000 Olympic Games (Horowitz 2000). It stirred Alistair Cooke (2000) to comment that, in Australia, reality had beaten idealism, with regard to prostitution and drug policy. The inaccuracy is the claim that governments distribute heroin to addicts: a trial of heroin maintenance has been blocked by the conservative Australian Prime Minister, John Howard, despite support for it by his health minister and the State health ministers involved. Reality has not quite overcome idealism.

In an earlier paper (Marks 1990a) I summarized the development of Australian drug policy through the framework of Peyrot (1984), who characterized the evolution of a social issue in five stages: mobilizing agitation, the policy formulation stage, the policy-implementation stage, modification of the policy when lack of success is seen as evidence not that the policy is a failure but that the policy has not been applied sufficiently rigorously, and finally a reform-agitation stage which may mark the end of a cycle and the beginning of the next cycle, with a new definition of the issue and new policies.

3.1 Early drug policy in Australia

Using Peyrot's framework, I argued that societal responses to drug use in Australia fell into four cycles: poisons, Chinese opium dens, patent medicines, and international conventions.

The first Poisons Act in the Australian colonies (South Australia 1862) antedated the equivalent British law by six years in its treatment of opium. Despite the objections of pharmacists, it required the labelling of opium as a poison, but, perhaps because of their objections, it excluded patent and proprietary medicines despite often high concentrations of opium. Previously, vagrancy laws had stated that any person possessing any "deleterious" drug was deemed to be "idle and disorderly," probably in response to "hocussing," the use of stupefying drugs in cases of theft.

Previous attempts in the colonies of New South Wales (NSW) and Victoria to pass Poisons Bills in 1849 and 1857, respectively, had foundered on the opposition of the pharmacists, who had complained of the "indiscriminate injustices" against them, arguing that the Bills favored the business of unqualified merchants who sold drugs and poisons, especially in the country. At this time there was strong competition among pharmacists (a group seeking to break away from the image of suppliers of abortifacients and V.D. cures), general retailers (who could sell what pharmacists could sell), and doctors (who could dispense). Before the development of today's scientific medicine, beginning with the sulphanilamide antibiotics of the 1930s, there was little doctors could do for bacterial or viral infection apart from easing the pain, often with opiate-based medicines, the constipating effects of which were often useful for treatment of diarrhoea.

If most opiate use among European Australians was therapeutic, there was, however, a significant recreational use of opium, which was providing the Revenue with a substantial source of income. The gold rushes of the 1850s had attracted many Chinese diggers, with their habit of smoking opium. In 1857, an import duty of 10s. a pound was levied on opium for three reasons: to raise revenue, because everyone else did it, and because few European Australians indulged.

Despite their contribution to the Revenue, imports of non-medicinal opium became increasingly threatened as the tide of xenophobic, anti-Chinese sentiment rose in the 1880s and 1890s. The first successful attempts to use the law to prohibit the sale of a

drug in Australia, however, were to prevent the use of opium by Aborigines in the colonies of Queensland in 1891 and South Australia in 1895. The debate in Adelaide introduced themes which would echo through parliamentary chambers down the years: various speakers argued that a ban would not prove effective since users would go to any lengths to procure opium, that the proposed law was no more than an attempt to dictate to people how they should carry on their affairs, that since taking opium was not immoral it should not be banned, that using (but not supplying) opium was a personal choice, and that the ban would promote immorality and smuggling. Clauses forbidding the importation and use of non-medicinal opium were removed. There was a realization that successful bans on importing would require concerted action by all colonies, and even that such a ban would increase smuggling, which was already occurring, in response to the duty of 30s. a pound. A particularly enlightened commentator, Quong Tart, argued in 1894 that if opium smoking could not be stamped out, then the proper alternative method of control would be the establishment of government-run offices to sell the drug to users (Lonie 1979, p.4). It may have been that the dominant sentiment was pro free trade, even in opium: one voice against banning imports to NSW said, “we are a British community and are not inclined to adopt the extreme measure of prohibition” (Lonie 1979, p.10).

In 1905, forgoing the revenue from the duty (Lonie 1979, p.18), the new federal government of Australia banned the import of non-medicinal opium, and required licences of medicinal-opium importers: doctors, manufacturing and wholesale chemists, and pharmacists. In the same year, the States of South Australia and Victoria prohibited the sale, manufacture, and use in dens of smoking opium, and the Victorian law attempted to outlaw its possession. In a move to impose controls over the demand for non-medicinal opium as well as over its supply, Queensland had banned unauthorized possession in 1897.

Manderson (1993) notes that the criminalization of possession was novel, and a clear attack on the drug users, seen as “other” — either Chinese or Aboriginal, or latterly “degenerate” hippies and “perverts.”

In the sometimes lengthy debates over the “oriental vice” of opium smoking, there seems to have been little awareness that there were cheap, plentiful substitutes for the activity. But, during the debate over the Victorian Bill in 1905, one member pointed out that:

Unless we provide by legislation to prevent the morphia habit, we will have these people knowing that they will get the same result by injecting morphia or taking laudanum, relieving themselves by resorting to a vice which will have the same effect as the smoking of opium. (Lonie 1979, p.14)

Morphine had been extracted from opium in 1805 and produced commercially by E. Merck and Co. Invention of the hypodermic syringe in the 1850s had enabled the use of morphine as a painkiller. In 1898 the Bayer Co. had started to sell the new semi-synthetic opiate, diacetylmorphine, under their tradename of *Heroin* (McCoy 1980, p.52). Despite these more potent forms, opium in various guises had continued to be popular, both with the public and with the doctors, pharmacists, and general retailers.

In the 1890s there was increasing awareness among the medical profession that the new opiate analgesics were addictive. Given the preëminence of these medicines, many patients had developed a therapeutic addiction, which may explain why drug addiction was usually regarded as a disease, not a socially criminal offence. In 1904 Victoria established institutions to treat “inebriates” (from alcohol or narcotic drugs). A proposal that a doctor’s prescription be required for the purchase of opiates and opiate-based medicines was defeated.

Meanwhile, the manufacturers of patent medicines relied on advertising and the addictive properties of the opiates in their products to maintain sales. Exempted from the provisions of the Poisons Acts, patent medicines were freely available to consumers mostly unaware of what they were dosing themselves with. Between 500 and 600 different brands of patent medicines were being imported into Australia soon after Federation (Lonie 1979, p.31), and even their manufacturers acknowledged the issue of therapeutic addiction. Despite this, these firms were in the vanguard of lobbying to prevent implementation of the Commonwealth Commerce Act 1905, which set limits on alcohol and opiates in imported medicines, and of the Victorian Pure Food Act 1906 which did likewise for domestic medicines (McCoy 1980, p.68).

Pressures for labelling of all medicines and for no-repeat prescriptions for narcotic-based medicines were beginning to build. The pharmacists opposed labelling, and argued that it would promote hardship on the poorer and middle classes, that it would frighten the buying public to know what the medicines contained, and that the public would self-administer if they knew what the active ingredients were, which might induce them to become addicted. Medicines were exempted from the labelling requirements, in general. But in 1913 Victoria legislated to require prescriptions for “narcotics” (opiates and cocaine), and in 1923 limited the repeat filling of a prescription to four times.

Meanwhile, in 1909 the Western Australian Parliament had rejected a bill to introduce the Poisons Act “tracing controls” for opium. In discussion, the Commonwealth Comptroller of Customs suggested that prohibition of opium would simply force up the price of opium on the illicit market, stimulating the ingenuity of smugglers, resulting in more organized importation, which would make tracing even more difficult.

From the revenue-raising cycle of import duties, the criminal-justice cycle of the prohibitions of non-medicinal opium, to the consumerist cycle of the pure food laws, the new federation was influenced by events abroad. Australia became a signatory to the international Hague Convention on Narcotics in 1913, and a year later introduced a system of import licencing for wholesale and manufacturing chemists, pharmacists, and doctors. With fits and starts, the States proceeded to tighten their legal controls over authorized importers, manufacturers, wholesalers, dispensers, and users, with an increasing emphasis on controlling the user.

As the controls tightened, the opportunities for profiteering on the black market grew. Indeed, this was recognized in a 1927 debate on a NSW bill to provide for criminal sanctions against the recreational use of opium and other drugs: “by forcing the minor recreational use of drugs into the nether world of gangs and pushers, the state created the conditions whereby good profits could be realised by [drug] runners and necessarily required the police to seek more and more powers and the criminalizing of more and more related activities” (Lonie 1979, pp.72,73). The pharmacists’ advocate claimed that the greater the number of drugs placed on the dangerous drugs list, the greater the potential for crime, the greater the number of opportunities for the black marketeer, and so the greater the need for police. The bill would promote expansion of the police force. But in 1934 the bill passed, and the pharmacists lost the right to self-regulation.

Perhaps because of the effects of cocaine sniffing after the First World War, or perhaps in response to the criminalization of the opiates, or the growing black market in recreational narcotic drugs, the image of drug taking was changing. Rather than an illness, it began to be looked at as a hereditary psychological flaw, with corresponding

disapproval: in 1926 the Queensland Health Commissioner referred to drug users as “perverts” (Lonie 1979, p.79).

The import prohibition on recreational opiates was not unchallenged after 1915. In response to reports that the Japanese occupiers of Taiwan had adopted a successful policy of opium maintenance and withdrawal, supplying addicts with the highest quality opium in order to stop smuggling and to “wean addicts off opium” (Lonie 1979, p.78), the Commonwealth sounded out the States in 1925 about a similar policy in Australia. All were negative. In 1935 the Chief Medical Officer of the Northern Territory made a similar suggestion, but objections were even stronger, (Lonie 1979, p.79). “Because of the possible international repercussions,” a conference of Commonwealth and State “Protectors of Aborigines” in 1937, although expressing agreement with the principle involved, rejected a resolution asking the Commonwealth “to supply certified [opium] addicts in the Northern Territory with opium at a price that would render illicit importation uneconomic” (*The Age*, April 23, 1937).

Despite the tight controls on legal opiate use, Australian consumption remained high: in 1936 Australians were consuming 14% and 7.5% of the world’s legal supply of morphine and heroin, respectively—in per-capita terms three times the British consumption of heroin (McCoy 1980, pp.42,92). Despite U.N. figures that showed that in per-capita terms legal Australian heroin consumption had risen by 70% since 1935 to the world’s highest of 4.2 mg. per person per year in 1951, heroin addiction was reported as “rare” (Davies 1986, pp.40–1). Nonetheless, in 1954 Australia banned heroin imports unconditionally, and it became a prohibited drug in all States except Victoria (Williams 1980, p.A94). Protests by individual doctors followed, but a request in 1956 by the Australian council of the British Medical Association—forerunner of the Australian Medical Association—that the Commonwealth lift the ban on prescription heroin was unsuccessful (Davies 1986, p.43). Although it has been possible since December 1974 to import heroin for scientific research—and small amounts have been imported for samples and forensic purposes—the general prohibition has remained in force, despite testimony to the unique properties of heroin for use in the treatment of a limited number of special medical conditions (Williams 1980, pp.C178–195).

By 1955 the Victorian police announced that there were no heroin addicts in that State, but by November 1963 heroin—smoked, not injected, in the Chinese community of Melbourne—was back in the headlines. In 1964 a record amount of heroin was seized by Customs officers, and by 1965 increasing numbers of non-Chinese were being charged with opiate offences. In 1966 a seminar organized by the Department of Customs and Excise in conjunction with the Institute of Criminology in Sydney heard of the growing issue of heroin and morphine abuse in Australia, even before Australian and American servicemen had begun the acceleration in demand for heroin which accompanied the Vietnam war. In 1966 with nine members the NSW Drug Squad made 39 arrests; in 1978 with 46 members the Squad made 1,461 arrests (Davies 1986 pp.41–48).

Two surveys (Irving Saulwick and Associates, 1985, 1988) provide evidence of changing Australian attitudes towards heroin addicts in the 1980s. (Below we examine a more recent survey.) The 2,000 people surveyed in 1985 were asked which of three possible courses of action was “the most important as far as they were concerned.” The suggested courses were:

- (1) to provide more police resources and heavier penalties for those involved;
- (2) to provide more treatment centres and help for heroin addicts; or
- (3) to provide free heroin or methadone for registered addicts.

We can identify the first with the criminal-justice approach, the second with the treatment approach, and the third with the social-control approach discussed above, or with Lindblom's (1997) command-and-control, education, and market-based methods, respectively. The responses were: (1) 55%, (2) 39%, (3) 8% across all respondents. Across sub-groups of respondents the criminal-justice approach was most popular (62%) with Liberal (conservative) Party voters, and least popular (37%) with the 18–24 year-olds. Popularity of the treatment approach varied inversely with popularity of the criminal-justice approach, while the popularity of the social-control approach remained low, across all sub-groups.

No question was asked about decriminalization of heroin use in 1985, but the 1988 survey focused on this issue: "It has recently been suggested that in an attempt to reduce crime and the spread of AIDS, registered heroin addicts should be given free heroin under supervision. Others suggest that this will not solve the problem and will lead to more addiction. From what you know at the moment, would you support or oppose the supply of free heroin under supervision to registered addicts?" Of the 1,000 registered voters polled, 35% said yes, 60% said no, and 5% were undecided. Amongst all sub-groups by age, sex, politics), support in favor was greatest (41%, 57%, 2%) amongst the 18–24 year-olds, and least (25%, 69%, 7%) amongst the 55+ age group.

Manderson (1993, p.201) characterizes the forces acting on Australian drug laws:

The fear of drugs has grown from a moral concern about use, to a medical concern about addiction, to an economic and political concern about "the drug trade". Drug users themselves have variously been pictured as evil fiends to be outlawed, as sick and pitiable slaves to be "treated", and as insignificant side issues. The crime of possession has moved from a daring innovation, to a crucial orthodoxy, to an unimportant one. And the main focus of political intervention has also changed, from opium smoking, to cocaine sniffing, to marijuana smoking and the injection of heroin.

Manderson argues that as concern, first, about the pushers, pedlars, and traffickers of illegal drugs, and, second, about the "Mr Bigs" and other shadowy unscrupulous entrepreneurs who reap the huge profits (Marks 1990b) from smuggling illegal drugs to the final consumers has grown, these hapless users and their previously excoriated possession of the illegal drugs have lost the limelight of public concern. As a consequence, lower penalties, expiation fees, and even decriminalization have been enacted in many Australian jurisdictions, especially for marijuana use.

Economists examining the evolution of drug laws (Marks 1974, 1990a, 1990b) have argued that the increased relative emphasis on staunching supply rather than demand will prove counter-productive in terms of social costs, or what has become known as "harm minimization:" simple economics tells us that in the face of continuing, and ever more inelastic, demand at higher prices, squeezing supply will push the price up on the black market, with higher costs to society as well as the users of the illegal drugs.

3.2 Recent drug policy in Australia

In the past fifteen years, the emergence of the H.I.V. epidemic, especially among intravenous (I.V.) drug users, has led to a genuine human crisis. In Australia, in 1985 the States and Commonwealth agreed to a National Campaign Against Drug Abuse, which, despite its name, dealt equally with legal and illegal drugs, and confirmed the principle of harm minimization when dealing with illegal drug use. As a consequence, the medical model of I.V. drug use policy was able to dominate the criminal-justice model when the public-health issues of H.I.V./AIDS became clear: Australia was at the forefront of

countries to introduce needle-exchange schemes in locations of high I.V. drug usage (such as Sydney's inner eastern suburbs), and consequently has been able to reduce the spread of hepatitis C and H.I.V. among its I.V. drug users and the population at large. Previously small methadone-maintenance programs for heroin users were greatly expanded (Penny and Wodak 1997).

Recently, the Australian Capital Territory (A.C.T.), which includes Canberra, attempted to undertake a trial of prescription heroin supplied to a small group of registered addicts, but was blocked by bottom-up public agitation in the tabloid press and talk-back radio, which persuaded the federal government to act to ban it (Bammer 1997, Marks 1997). A similar trial in Switzerland was based on preparations by Bammer and her colleagues for the A.C.T. trial (Lagan 1997).

During the height of the debate over the proposed A.C.T. heroin trial, in August 1997, A.C. Nielsen-McNair surveyed 2,053 people nationwide (Cockburn 1997). They found divided attitudes to a heroin trial: (45% supported it, 51% opposed it, and 4% were undecided, with no difference between male and female respondents). Amongst the sub-groups, support was greatest among the 18–24 year olds (55%, 42%, 3%) and lowest (32%, 68%, 7%) among the 55+ age group. Asked whether fines should replace jail sentences for the possession, for personal use, of small amounts of marijuana, support was high (65%, 30%, 5%), highest (at 75%) for the youngest, and above 51% for all age groups. Support was lower for decriminalization of marijuana possession, for personal use, of small amounts: 45% supported and 51% opposed. But support for the legalization of heroin was low: 15% supported and 80% opposed.

If needle exchange was to protect the rest of us, and only incidentally to protect the I.V. drug users, the same cannot be said for the most recent attempt at changing drug policy: legal safe injecting rooms, places where drug users can self-inject under medical supervision. The motivation for such an innovation has come from the rising death rate among I.V. drug users associated with overdosing or poly-drug use (now running at about 1,000 per year in Australia), when quick medical care could have saved lives. The rapid increase in the numbers of fatalities among I.V. drug users occurred in Sydney, Melbourne, and Canberra (in the A.C.T., which had previously attempted to introduce a heroin trial, unsuccessfully, as mentioned above). Consequently, pressure to save I.V.-drug users' lives was evident most strongly in those three cities. Pressure for change was "top-down," coming from lawyers, police, and physicians — those professionals most closely working with illicit drug users.

Legal injecting rooms have been established in Europe without incurring the intervention that occurred in Australia, the roots of which were that State governments, although supportive, did not want to take sole administrative responsibility for the injecting rooms, perhaps from lack of political will. In Sydney, the Roman Catholic order, the Sisters of Charity, already known for their pastoral care and ministering to street people and the poor, and under whose auspices nearby St. Vincent's Hospital is operated, agreed to operate the room, to be located in the Kings Cross district, close to a large population of I.V. drug users. But, despite strong, published endorsements from Catholic Health Australia, from the Australian Catholic Bishops Conference Committee for the Family and for Life, and from the Sydney Archdiocese, in Rome the Congregation for the Doctrine of the Faith, in a pronouncement that will have world-wide ramifications for Catholic organizations involved with helping I.V. drug users, in late 1999 banned the Sisters from taking part in medically supervised injecting rooms.

As Marr (2000) reports, one of the reasons given in the six-page report from the Vatican, “Moral Evaluation,” was scandal: “One of the most important bad side effects to this proposed service is scandal, which the Sisters of Charity are aware of and would take serious measures to address... Nevertheless, precisely because of the extreme proximity of the cooperation of a Catholic institution in a serious evil some people will be scandalized; it will *seem* to them to be formal cooperation.” [the Congregation’s italics]. The focus of the report is the serious evil of drug addiction, rather than the possibility of saving the lives of addicts/users.

That the Church is seriously affronted by the prospect of scandal, however misguided on the part of those scandalized, suggests that, despite the strength of the medical approach to drug policy supported by both the growing H.I.V. epidemic and the growing death toll, the view of the drug epidemic as a legal and moral issue, with demonization of the addicts and addiction, is alive and well and living in Rome, Canberra, Melbourne, and Sydney. Indeed, support for the latter view seems to be growing in Australia, with a conservative chairperson of the Australian National Council on Drugs who is clearly opposed to legal injecting rooms and to the “softening” of drug laws, and explicitly supporting winding back “dangerous” harm-minimization policies such as needle exchange.

Following the Catholic Church’s ban, the Sydney injecting room was opened in 2001, managed by members of the Uniting Church of Australia, a Protestant church, but a similar proposal for Canberra was narrowly defeated in the A.C.T. parliament, and a proposal for Melbourne awaits approval by the Victorian parliament.

3.3 *Drug policies: direct or indirect?*

In the late nineteenth century, pressure to regulate drugs in Australia was driven from the bottom up by the temperance movement. This movement was evident in other English-speaking countries, and partly drew on the teetotal traditions of Methodism. But the Hague Convention on Narcotics of 1915 was also influenced by the anti-European-imperialism of U.S. policy in China (Booth 1996), a top-down pressure in Australia. Indeed, while illicit drug use in Australia was negligible after the First World War, the only pressure to criminalise and prohibit heroin in 1954 came from abroad. There was no underclass using illicit drugs in Australia: the drugs of the poor remained alcohol and tobacco. So although nineteenth-century policy was an example of May’s first type, later policy was not popularly driven (May’s second type), with no obvious public.

But during and after the 1960s, probably driven by the influx of servicemen from Vietnam, both Australian and American, and also influenced by the growing use of cannabis by the rebellious young, there was growing public concern about illicit drug use, with the tabloid press highlighting drug use and “busts”. In the late ’seventies, the Federal Senate published a report (ASSCSW 1977) on “drug problems”, the first of many government inquiries, both State and Commonwealth, still mainly in response to public concern about illicit drug use. The issue had returned to May’s first type.

With the emergence of H.I.V./AIDS in the mid-1980s, expert opinion became increasingly aware that the strict prohibitionist line on injected illicit drugs would result in rapid spread of the virus among the I.V.-drug-using population, and thence to the general population, via sexual contact. In addition, expert opinion became aware of additional costs being borne not just by the users but also by society at large (Gittins 1985), and attempts were made to separate the costs due to the drugs themselves from the costs due to the illicit nature of the drugs under the prohibition (MacCoun 1998)—back to

May's second type. The three polls discussed show that public opinion has fluctuated over the period 1985 to 1997 (from 8% to 35% to 15%) on the question of moving from the prohibitionist policy for heroin, although the wording of the questions also varied.

As things stand, the conflict among those who see the drug-use issue as primarily one of the criminal-justice system, and those who see it as primarily as a medical issue (with one solution to use market mechanisms to reduce the adverse effects due to the black-market supply), and those who see it primarily as a symptom of social pressure, with educational and other measures as solutions, remains unresolved. Policy response to the initial bottom-up issue (May's first type) in turn has led to expert top-down response (May's second type) which calls into question much of the initial policy. Both public opinion and expert opinion is split, although the latter leans away from the criminalization response.

4. Policies towards greenhouse gas emissions and global warming

On the same day that Marr's article (Marr 2000) on the Catholic Church's attitude towards members of the Church being involved in legal injecting rooms was published, another op-ed article appeared that argued that the Australian government should move faster to take action to reduce CO₂ emissions (Quiggin 2000). Both issues remain alive and contentious.

Quiggin argued that, despite continuing scientific uncertainties, to meet its Kyoto obligations Australia should immediately implement "no regrets" measures to "reduce global warming at a low cost or even a net social benefit independent of CO₂ effects" and that institutions and policies that can be used to increase reductions of CO₂ in the future, after 2010, should be developed. "No-regrets" actions are actions that have benefits of their own (or at least no net cost), so that some benefit occurs even if the greenhouse effect does not cause the feared climate change.

Quiggin exemplifies one of three types of actor in the Australian GHG debate: those who urge action now, even if it may be costly to industry and the national economy. A second group of players argue that, given the scientific uncertainties, the government should hasten slowly. The governments of the day stand in the middle. The first group includes environmentalists and many voters in the middle. The second group includes many fossil-fuel and resource-sector companies. Federal governments have been Labor (1983–1996) and conservative (since 1996), although State governments have also been involved, with constitutional responsibilities over many environmental issues.

Uncertainties abound: is the globe warming? If so, is this caused by the measured increase in atmospheric CO₂ concentration over the past century? To what extent has the rise in CO₂ concentrations been caused by the burning of carbon-based fossil fuels for energy generation? There are other, more potent GHGs, such as methane and CFCs. To what extent has the measured increase in methane's atmospheric concentration been caused by human activities? Answers to these questions must come from a consensus of scientific findings.

Even if a clear scientific link is found between fossil-fuel combustion and global warming, what is the best response? Answers to this question may depend on perceived gains and losses. Possibilities are: quarantining the carbon, using lower-carbon fuels or renewable energy (perhaps after carbon taxes have been imposed), investing in more fuel-efficient machines, lowering the level of economic activity. Recently, a preeminent atmospheric scientist, James Hansen, has argued that focussing on reducing methane emissions may be cheaper and politically more acceptable than the attempts to reduce

CO₂ emissions (Revkin 2000).

In order to discuss how these groups and these questions have interacted in the policy debate in Australia, it is necessary to consider the international processes triggered by concern over global warming.

4.1 International deliberations

The Australian Academy of Science website (2001) provides a concise summary of the history of Australia's official involvement towards international agreement on steps to reduce the emissions of GHGs. Following the successful Montreal conference which led to agreement to control the emissions of the ozone-eating CFC gases, in the 1980s the World Meteorological Organization and the United Nations Environment Programme established an international panel of government representatives and scientists to review the science of climate change. Known as the Intergovernmental Panel on Climate Change (IPCC), it published extensive reports in 1990, 1995, and 2000 that have become the source for much of the material used in discussions and decision-making about the enhanced greenhouse effect.

In 1988 a conference in Toronto was the first attempt at focussing international attention on the issue of global warming and GHG emissions, in particular, CO₂ emissions from fossil-fuel use. The conference proposed that industrialized countries aim to cut their emissions of CO₂ associated with human activity to 80% of their 1988 levels by the year 2005 (Marks et al. 1991). In the event, with less scientific consensus than later (Channel Four 1990), this target was politically and technically unattainable.

At the 1992 Earth Summit I in Rio de Janeiro, Australia and about 150 other countries signed the U.N. Framework Convention on Climate Change (FCCC). Australia ratified the FCCC in December 1992. As a party to the FCCC, Australia must report its GHG emissions and the strategies and measures it has adopted to reduce them, as it did in 1994 and 1997, with reviews of these reports published in 1995 and 1999.

The stated objective of the FCCC is to achieve:

...stabilisation of the greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

The countries party to the FCCC met in Berlin in early 1995 in what is known as the first meeting of the Conference of the Parties (COP1). They agreed to continue cooperating internationally on the enhanced greenhouse effect. But there was little agreement on what measures could be implemented. After much negotiation, delegates started work on a protocol. In 1995 the IPCC found that "the balance of evidence suggests a discernible human influence on global climate" (ADFAT 1997, p.1), although some remain unconvinced (Singer 1998). COP2 was held in July 1996 in Geneva, where the countries agreed that talks on reducing GHG emissions should be accelerated.

Earth Summit II in New York in June 1997 reviewed how successfully Earth Summit I commitments had been implemented in the five years since they had been agreed to. Australia's opposition to legally binding, uniform targets on GHG emissions received international criticism (Taylor and Ryan 1997). The Australian Government argued that all nations start at a different base with respect to GHGs (ADFAT 1997). For example, some countries have copious supplies of hydroelectricity, others depend on inputs of energy-intensive methods, still others have economies that are less energy-

dependent. Within the European Union, differential targets were allowed for these and other reasons; in this regard, Australia's approach was not so different.

Nonetheless, the Australian government faced a battle, especially with the Europeans, to get differentiated targets agreed to at Kyoto. The Australian government was playing to two audiences: the domestic electorate, and the international community, neither of them monolithic. To bolster its case, the government was armed with a study by the Australian Bureau of Agricultural and Resource Economics (ABARE) on the impacts on the Australian economy of the adoption of the uniform targets of GHG reductions for industrialized nations proposed by the Europeans, of 85% of the 1990 emissions by 2010 (ABARE 1997). The study estimated that this target would cost each Australian A\$9,000 a year by 2020, which is 22 times the cost faced by each European, and six times that faced by each North American, on average.

When the Australian Conservation Foundation drew attention to the fact that, under guidelines which required government agencies to raise up to 40% of their revenues from outside sources, ABARE's climate-change model had received funding from Australian and overseas commercial energy and resource concerns (Taylor 1997b), this reduced the impact of the study, and weakened the Australian argument. In rejecting the Australian stance for differentiated goals at Kyoto, the U.S. administration dismissed the ABARE results, an official saying they were "generally skeptical of industry-funded models" (Taylor 1997a). Australian conservationists, who favored uniform, legally binding GHG-reduction targets, were heartened.

Debate in Australia was occurring among economists, both neo-liberal and conservationist. Neo-liberals ("economic rationalists" in the Australian parlance) were skeptical of the claims of the conservationists and the Europeans, characterizing the E.U.'s proposal for a uniform target as "self-interest masquerading as environmental concern" (Warby and Hartley 1997). On the other side of the debate, 131 Australian economists signed a statement declaring that Australia could reduce its GHG emissions without economic harm (Hamilton 1997). There was a tendency for the debaters to be at cross purposes: confusing the ends and the means. Amongst the neo-liberals, there were those, such as the U.S. administration, who favored creating a system of internationally traded GHG emissions permits, and those Australian economists who argued that a system of national permits and GHG emissions fees would be more equitable across countries and so more likely to be ratified and implemented (McKibbin and Wilcoxon 1997). Environmentalists remained skeptical of the use of market-based instruments to reduce GHG emissions (Marks 1992).

Moreover, although in principle no-one could take issue with the concept of "no regrets" measures, there remained great disagreement about the potential for large "no regrets" reductions in emissions. (In the appendix of Marks 1992, I take the position that the potential is much less than many more optimistic economists believe. I believe that the identification of costless emissions savings is evidently not sufficient to result in their adoption, since otherwise the savings would already have been made.)

On the international stage, John Howard, the Australian Prime Minister, having missed Earth Summit II in New York (Taylor and Ryan 1997), had a successful out-of-town tryout in Edinburgh, at the Commonwealth Heads of Government Meeting, which, after Australia's urging, agreed to a loose statement on GHG emissions, with no mention of targets (Grattan 1997).

COP3 took place in Kyoto in December 1997, resulting in the Kyoto Protocol, which sets the collective global target of reducing GHG emissions by about 5% of 1990

levels by 2012. Australia, which argued that it was a special case because of its increasing population, its dependence on fossil fuels, and its decentralised economy, was successful in having its target set *above* 1990 levels (8% above), as well as gaining the inclusion of the impact of slower land clearance in GHG reckoning (Oxley 1997).

COP4 took place in Buenos Aires in November 1998, where a two-year plan of action was adopted to reduce the risk of global climate change. COP5 was held in Bonn in October/November 1999. Progress was made on the following issues: accelerating the negotiation process; Kyoto mechanisms; land-use, land use change and forestry; and compliance. Significant decisions on Kyoto mechanisms were expected to be reached at COP6 in November 2000 but no agreement was reached. Earth Summit III will be held in 2002 and will have to deal with the consequences of the new U.S. administration's apparent abandonment of the Kyoto proposals.

4.2 Australia's policy response

Australia's energy-producing profile is remarkable among industrialized countries, as the government pointed out in the lead-up to the Kyoto conference, when it argued for differentiated responsibilities among nations in dealing with GHG emissions (ADFAT 1997). Australia is the world's largest exporter of coal, and one of the world's leading exporters of aluminium ("solid electricity") and uranium. Australia is a net energy exporter, with growing exports of natural gas and oil products, as well as other GHG-intensive products (basic metals, chemicals, cereals, and livestock). Australia has an especially heavy reliance on coal in electricity supply. Marks (1986) outlines in detail this profile, and provides a brief historical overview of energy policy in Australia before the global warming threat appeared.

Australia began addressing the enhanced greenhouse effect and its consequences in a formal way through the National Greenhouse Response Strategy, which was endorsed in 1992. The first phase of this strategy identified "no-regrets" actions. Many energy-saving measures (e.g., improved house insulation) are examples of "no-regrets" actions, which can be characterized as buying insurance while the premiums are cheap.

The National Greenhouse Response Strategy was replaced in late 1996 by the National Greenhouse Strategy, which is now the major policy initiative of the Commonwealth, State and Territory governments, providing a strategic framework for Australia's greenhouse response. It is the primary mechanism through which Australia's international commitments will be met. Under this strategy, a number of programs have been launched or continued. For example, the Greenhouse Challenge is a cooperative effort between Australian industry and the Commonwealth Government to reduce GHG emissions through voluntary industry action, subject to independent verification (Parer 1996). By mid-1997, 128 enterprises had joined the program, although few small or medium-sized businesses had, and still only a minority of large energy users had (Griffin 1997). A recent report found that efforts by industry would reduce their GHG emissions in 2000 by 16% compared to what would have occurred in the absence of those efforts (AAS 2000).

In November 1997, the Prime Minister announced a A\$180 million package of GHG measures, including the establishment of the Australian Greenhouse Office, requirements to increase the use of renewable energy, mandatory energy standards for new buildings, allowing carbon revegetation sinks to offset GHG emissions, and a new national carbon accounting system (Taylor 1997d). This was followed in May 1999 by an announcement that the Australian Government would commit an additional A\$400

million through the Greenhouse Abatement Program to assist Australia in meeting its commitments under the Kyoto Protocol. These funds combined with new allocations for renewable energy generation, alternative fuels use and household energy reduction initiatives amount to nearly A\$1 billion.

4.3 Greenhouse gas policy: direct or indirect?

From the discussion above, it should be clear that, as with the Montreal meeting in the 'eighties that resolved to deal with CFC emissions, in order to protect the ozone layer, concern about the prospects of global warming owing to the enhanced effects of GHG emissions was first expressed by atmospheric scientists, the experts, a top-down alarm, an indirect policy pressure, a clear example of a policy without a public, in May's terms. None the less, as we discuss below, popular opinion was eventually mobilised in the industrialised world including Australia, so that the issue became one with a public, May's first type.

5. A strategy of policy implementation and the mass media

Policy is announced. For a policy with publics (May 1991), reaction comes quickly from those whose interests are adversely affected, especially if they keep themselves informed. Responses may vary from grudging acceptance to strong critique of some aspects, to outright opposition. At the stage of announcement, commitment, especially political commitment, may be weak, since reversal consequent on opposition may not be costly, especially for politicians, who can claim they or their policy was misunderstood or misrepresented or both. For policies without publics, the political cost of backtracking will be even lower.

All but the most naive analyst would expect some opposition to a contentious policy, especially if it was a reversal of earlier policies or if it adversely affected one of May's publics (such as middle-class citizens), who have the incentives, the education, and the wherewithal to make their feelings known, in order to dilute or to reverse the new policy.

At the same time, those who stand to gain from the new policy may believe that, at the announcement, the battle has been won, with no need for any statements of support. Moreover, if there is a redistribution of income or wealth, implicit or explicit, from richer members of society to poorer, those who stand to pay may complain more loudly than those who stand to gain, especially if the gains lag implementation, which in turn lags announcement.

With the recent announcement of safe injecting rooms in Sydney and Melbourne, the hapless drug users stand to gain from ready access to medical help if an overdose threatens, with less risk of using infected needles. The self-perceived losers are the neighbors of the sites. Perhaps their opposition seems strange to an outsider, given the prevalence of drug-injecting in the neighborhood, and we cannot rule out objections on moral grounds, but their fears of the "honey-pot" effect drawing a concentration of anti-social behavior to a small area may be proved correct.

The role of the media at moderating and channeling popular concern at the use of intoxicating substances in the temperance movements of the nineteenth century, which led to the tightening of laws regulating the supply and use of alcohol and other drugs at the turn of the twentieth century, is repeated a hundred years later, but with a new theme: the impact of the ineffective prohibition of many drugs on the hapless drug users themselves (most notably with a rising death toll among I.V. drug users) and on the costs

borne by the rest of society. The emphasis of policy can be seen to swing towards harm minimization or towards a harder line as the political mood waxes and wanes. It would take a much longer and deeper historical analysis to discern the process by which temperance became a clear policy with a public in the nineteenth century, to mould the development of policies towards illicit drug use in twentieth century Australia.

Expert concern (May's second type of issue) about the prospect of global warming is magnified by the media's exposure of the issue, and eventually transformed into May's first type of issue. The national reports on GHG emissions and the strategies and measures taken to reduce them mandated by the U.N. FCCC serve an additional purpose. To encourage political support for action in an issue initially without a public, such as global warming, moving the issue in the public eye is essential, especially when such actions might impose costs on sections of society, that is, establishing a public, in May's terms, in order to lessen reliance on government commitment in successfully implementing the policy.

As Hengeveld and Edwards (2000 p.19) explain, awareness of the risks of climate change in most countries is at best flawed, and not in general sufficient for voluntary acceptance of the changes in behavior ("lifestyle changes") necessary to reduce these risks. Effective interaction between scientists and the media can help increase awareness (and develop a public), but there is always the risk of distortion, especially in the mass media (Bord et al. 1998, Henderson-Sellers 1998).

This is evidenced by the results of a survey of 2,200 Australian company directors in August 1997, after several months of publicity in the media about the Australian government's goal of obtaining differential GHG emission targets at Kyoto. Contrary to this stance, almost half supported legally binding, global GHG reduction targets. Most (69%) favored global targets, and of these 70% favored legally binding targets. Of those who favored global targets, half favored *uniform* targets across all countries, quite at odds with the government's position (Taylor 1997c).

The media continue to be the battleground between those, such as some energy and mining companies, who believe themselves disadvantaged by the proposed policies to reduce GHG emissions (or who believe that they are being asked to bear a disproportionate share of the burden), and those, such as environmentalists and others, who believe that, for practical and moral reasons, Australia must respond to calls for greater action in reducing these emissions. These people may well remember the tale of the proverbial frog in the saucepan which is boiled alive because the water is warming too slowly for the frog to become aware of its danger.

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