

# The Federal Budget and Energy Program, October 28th, 1980: A Review

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This paper reviews the recent MacEachen budget and the Lalonde energy program. It suggests that these policy initiatives not only restore the problematical economic course of excessive fiscal deficits and unrealistically low domestic oil prices, but in addition make an excessively large intrusion into the rights of ownership and control of provincial governments over their non-renewable energy resources. As a total package, they will not only turn out to be self-defeating on such questions as security of future energy supplies and on rekindling growth in productive investment, labour productivity and employment, but they are inevitably antagonistic to the legitimate interests of large segments of the country. Although the federal government should obtain substantially increased revenues from oil and natural gas production, unilateral action and the unnecessarily slow increase in the wellhead price of conventional crude oil are simply unacceptable to Western Canadians. The low wellhead oil price will also perpetuate resource misallocation and associated rent-dissipation from both the production and consumption sides of the energy marketplace.

Le présent article étudie le récent budget du ministre MacEachen et le programme énergétique du ministre Lalonde. Il y est suggéré que ces initiatives politiques non seulement rétablissent le parcours économique problématique des déficits fiscaux excessifs et des bas prix du pétrole domestique, mais constituent, en outre, une intrusion démesurée dans le domaine des droits de propriété et de contrôle des gouvernements provinciaux sur leurs ressources énergétiques non-renouvelables. Considérées dans leur ensemble, ces initiatives politiques pourraient bien contrecarrer les plans du gouvernement, sur des questions comme celle de la sécurité des approvisionnements pétroliers à venir et celle de la croissance des investissements productifs, de la productivité de la main-d'oeuvre et de l'emploi, mais aussi elles se révéleraient inévitablement étrangères aux intérêts légitimes d'une bonne partie du pays. Même si le gouvernement fédéral devait obtenir de la production de pétrole et de gaz naturel, une augmentation substantielle des revenus, les moyens unilatéraux choisis par celui-ci et la croissance trop lente du prix imposé à la tête du puits pour le pétrole brut conventionnel seraient simplement inacceptables pour l'Ouest du Canada. Ces bas prix perpétueront aussi la mauvaise allocation des ressources et la dispersion des rentes au sein du marché énergétique, tant au niveau de la production qu'à celui de la consommation.

## I INTRODUCTION

This review of the MacEachen budget and the Lalonde energy program is organized under three main headings. Since the energy program itself contains the most profound tax changes outlined in the budget, it is useful to discuss the energy program before moving on to the

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budget. It is also useful initially to have some idea of the economic background to these policy initiatives, and some notion as to what, in my judgment, would have been the best policy initiatives to have followed given this economic background. Accordingly, the review of the Lalonde energy program is preceded by a section on the economic background, which also outlines the appropriate framework for Canadian energy policy. It is followed by a discussion of the MacEachen budget, after which the paper concludes with an overall assessment of these two inter-related policy initiatives.

## II THE ECONOMIC BACKGROUND

Prior to October 28th, 1980, we had in Canada a situation in which the wellhead price of conventional crude oil was less than half the world market price, and the regulated internal price of natural gas (the Toronto gate price) was less than half the price at which (with the approval of the National Energy Board) gas could have been exported to the United States. Although we have been a net exporter of natural gas, we have been importing significant and growing net quantities of crude oil to supply the markets for energy in the Atlantic provinces and Quebec, and were previously subsidizing the refiners of this crude oil from the federal purse for the difference between the import, or world, price and our internally-regulated and politically-determined domestic price. While this subsidy put a huge burden on the federal purse and added to the government's fiscal deficit, it was in part offset by an export tax on the falling quantities of conventional crude oil shipped to the United States from Western Canada. However, the main effective subsidy in place was the subsidy from the oil producers and the producing provincial governments, particularly in Alberta, to consumers right across the country because our internal prices of conventional crude oil and natural gas were maintained at somewhat less than one-half their true market value.

If we value all of our non-renewable energy resources, and particularly our remaining stocks of low cost conventional crude oil and natural gas, at world market prices, it is clear that there remains an enormous surplus in market value above extraction cost. Economists call this surplus economic rent. Prior to the recent budget and energy program, this economic rent was being distributed in part to the producing firms, in part to the governments of the oil and gas producing provinces, and in part to the federal government. But the major share of these potential rents was being distributed to Canadian consumers by the maintenance of artificially low domestic prices. This has been an inequitable and wasteful distribution scheme, since it has encouraged excess consumption of non-renewable resources. We have been depleting these resources all too rapidly and they would have greater economic value if put to other uses, or saved for future generations of Canadian residents. Moreover, the most wasteful individuals and firms in society have obtained the largest share of the rents and the conservers in society have gotten short shrift. There has been some trans-boundary slippage, tankful by tankful, of subsidized petroleum products, particularly gasoline, to the United States. Rents have also been captured by large-scale multinational petro-chemical firms which have been able to sell their products into the market at world prices while purchasing feed-stocks at artificially low input prices.

To an economist, our maintenance of unrealistically low domestic energy prices has not made much sense at all. Indeed, it has long been obvious that we must adjust fairly rapidly towards world oil prices, or at least towards Chicago prices (even to reach 75–85 per cent of these prices would be a major step forward), for at least three reasons, namely to conserve our depleting conventional oil supplies, to generate larger discoveries of new oil reserves, and to create the appropriate substitution effects (and an orderly transition) towards alternative

energy sources. Anyone who thinks about the day after tomorrow, and the question of inter-generational equity related to the needs of our children for secure energy supplies, will agree that we cannot go on subsidizing the consumption of a non-renewable resource in the manner of the past six years. When one considers total North American petroleum consumption in relation to world supplies, it is clear that we have been forcing higher oil prices on the poor countries of the third world by our own over-consumption, as well as borrowing heavily from the consumption possibilities of future generations.

Another obvious reason for moving towards world oil prices is to cut our substantial reliance upon expensive and insecure imported oil supplies. Clearly, this reliance has created a serious import drain on the balance-of-payments, and has necessitated larger foreign borrowing and higher real interest rates in Canada to attract these borrowed funds. It has also enlarged the federal deficit through the subsidy on imported oil, which itself has fed back into interest rates via additional public sector borrowing. Thus, there are linkages between energy policy, fiscal policy and real (or inflation-adjusted) interest rates, to which I shall return.

In moving towards world energy prices, appropriate incentives require the producing companies to obtain virtually the full world price (or at least the Chicago price) on the expensive marginal barrel of oil, including (as a reasonable approximation) those barrels whose extraction requires the tertiary recovery techniques. However, the intra-marginal rents on currently low-cost barrels should largely be captured by the public sector. There is little sense in Canada providing 21c (as Bruce Wilkinson and I have calculated for pre-October 28th tax and royalty regimes, though this may well be an over-estimate)<sup>1</sup> to the foreign shareholders of multinational oil companies whenever we raise the price of Canadian oil to Canadians by \$1 per barrel. This clearly implies that our tax and royalty structures would have to be altered as we move towards world energy prices, but not in such a way as to prevent the oil companies from finding it profitable to extract the high cost barrel of oil. Although an appropriate tax and royalty structure to achieve these ends is not easy to construct, and is made all the more difficult if our neighbour to the south is de-regulating its industry in such a way as to permit intra-marginal producer rents largely to be captured in the private sector, surely it can be crudely approximated.

The public sector's share of the intra-marginal rents, however captured, should be divided between the producing provinces and the federal government on some appropriate formula, and it is here that much of the inter-regional and inter-governmental bickering has gone on. In my view,<sup>2</sup> as we move towards world prices for energy the federal government should receive the share that it would get if all the resource rents fell into the hands of private citizens in the producing provinces and were taxed as income at appropriate marginal rates, or perhaps as capital gains, since one is here dealing with the sale of natural capital assets. On this distributional principle, there is of course wide room for manoeuvre since it is rather imprecise about exact tax rates. Nevertheless it has the major benefit of tying the taxation of resource rents into other known and familiar parts of the tax system.

If part of the additional revenue accruing to the public sector from higher domestic oil prices accrues to the federal government, as it inevitably must, much of the revenue should be used to give all Canadians with taxable income below a certain amount a refundable energy tax credit, payable to taxpayers and non-taxpayers alike, to compensate the lower and lower-middle income groups for higher energy costs. A refundable energy tax credit is an essential component of any scheme for moving quickly towards world energy prices since strong and vocal resistance will continue to be raised by the populous oil and gas consuming provinces

1 See Wilkinson and Scarfe (1980). A more recent estimate in Watkins (1980), based on the latest ownership data, puts this figure at 15cents on the dollar.

2 See also Gainer and Powrie (1975).

unless to some extent the gainers compensate the losers as the transition is made.

A refundable energy tax credit was, of course, one of the important elements of the Crosbie budget of December 11, 1979, which led directly to the defeat of the Clark government shortly thereafter. In that budget, for comparative purposes, there also were four main energy-related ways in which the federal government would have been reducing its deficit: (a) reduced depreciation and depletion allowances, which in part are capitalized in the lease-sales revenues of the producing provincial governments, (b) some not completely specified form of windfall profits tax on the industry, and especially on the multinational oil companies, to capture a share of the economic rents, (c) the impact of higher domestic oil prices on the size of the oil price subsidy to Eastern Canada, and (d) the increased excise tax on gasoline. Incidentally, the 18 cents boost in the per gallon excise tax on gasoline, which seems to have been the most contentious aspect of the Crosbie budget, made considerable sense from a recycling point of view since it in no way would accrue to the producing provincial governments. Indeed, it represented one clear-cut way of moving gasoline prices sharply upwards, which would reduce consumption and be good for conservation as well as our import bill, but would also give the federal government larger revenues without directly taxing Alberta's economic rents. On the other hand, the increased excise tax (which would have been used to finance the refundable energy tax credit) would have done nothing to provide incentives for securing larger domestic supplies of fossil fuels.

So far I have suggested that a refundable energy tax credit is required to compensate consumers *as taxpayers* for the loss of their current share of the economic rents as we move towards world prices for conventional crude oil. This clearly requires some considerable act of generosity on the part of the producing provincial governments, in order that some substantial portion of the additional producer rents can be redistributed to Canadians across the country. But the higher energy costs must not be evaded by continuing the wasteful federal and (for the most part) Alberta subsidies to Canadian consumers. We must not shelter economic agents from reality by maintaining uneconomic prices. Rather we must follow policies which do not retard essential and inevitable economic adjustments; for the costs of not adjusting to economic realities, or severely retarding the process, are always larger in the longer run.

The case for moving domestic prices for natural gas towards world levels is not so clear-cut. Although the potential market value foregone on marginal units of natural gas consumed in Canada is the price which could have been obtained if the gas were sold into the US market at prices sufficiently shaded below world market prices to permit larger sales into that market, we clearly do not have a free export market for gas since all applications for additional gas exports must be approved by the regulatory agency, the National Energy Board. The NEB has clearly taken the position that it would be better to use current gas surpluses to expand the penetration of natural gas sales into Quebec and the Maritimes so as to replace the use of imported fuel oils in industrial and home heating uses there. Since the extension of existing pipeline systems and the conversion of existing capital equipment will take considerable time, we temporarily have substantial locked-in and surplus gas reserves. As a result, some of our smaller domestic gas producers have short-run cash flow problems which may lead them to sell their holdings to the large multinational companies at low prices. To my mind, a larger quantity of natural gas exports could currently be permitted on fairly short-term contracts, while we are trying to expand the penetration of natural gas sales into new market areas. Not only should we be divorcing domestic gas prices from domestic oil prices (they have been tied together by the archaic 85 per cent commodity equivalent rule) so as to expand the use of natural gas relative to fuel oil in Eastern Canada, we should also be allowing some new short-term export contracts for natural gas and shading the prices appropriately to make this gas

reasonably attractive once again to US buyers. The proceeds of these sales should not be allowed to appreciate the Canadian dollar; rather they should be used to buy a slightly lower profile for our interest rates relative to those in the United States.

So far, I could be accused of being inconsistent, as a world (or Chicago) price advocate for the domestic pricing of conventional crude oil and as a sheltered price advocate for the domestic pricing of natural gas. However, I do not believe that there is any inconsistency involved, since the supply conditions underlying these two different non-renewable energy resources are radically different. On the one hand, we are a substantial and rising net importer of conventional crude oil, and larger future shortages are likely unless we get our internal prices right. On the other hand, we are a substantial net exporter of natural gas, and temporary surpluses of this commodity are already apparent. A change in the relative price of these two resources to domestic users is an essential ingredient in shifting demand away from the commodity in short supply and towards that with which we are more generously endowed, and for which the longer-term reserve picture looks reasonably buoyant.

Finally, I return to the interface between energy policy and macro-economic management, including the balance between fiscal and monetary policy. The main needs of Canadian economic policy are first to move quickly towards realistic domestic energy prices as suggested above, and secondly to get both Canadian savings and foreign borrowing into productive investment rather than into the financing of current government sector deficits, since our real problem in Canada is an investment rate (and therefore a productivity growth rate) which is too low. In order to achieve this, we must get our fiscal-monetary balance back on course. We must make real progress towards reducing the federal government deficit and the associated substantial absorption of funds from the money market so that we can afford to reduce our real interest rates somewhat by a slightly more expansionary monetary policy. This would be good for both the level of productive investment and, via keeping the exchange rate in the 83–85 US cents range, exports (and therefore the composition of the balance of payments) as well. Indeed, part of the effect on the competitiveness of production in Canadian manufacturing industries that would result from higher domestic oil prices could on average be offset by a slightly lower exchange rate, though the effects on real wages and consumption are unavoidable. The real danger is that the inevitable feed-through of higher domestic oil prices would lead to additional inflationary effects through the attempt by wage and salary earners to bargain for compensatory pay increases, and it is this danger that a substantial refundable energy tax credit would in part offset. But inflationary side effects do not provide a good counter-argument to the basic need to get relative prices right.

In summary, an appropriate federal budget and energy program should avoid putting us back on the old course of excessive fiscal deficits and unrealistically low domestic energy prices, for these two aspects of the former Trudeau government's economic policy were fundamentally responsible for high real (or inflation-adjusted) interest rates, large-scale foreign borrowing and our substantial current account deficit on the balance of payments, and for generating more unemployment than may have been necessary to keep our high inflation rate in check. Indeed, the looseness of our federal fiscal policy, and the determination of the Bank of Canada not to monetize the growing fiscal deficit and thereby exacerbate our inflationary situation, has placed an additional burden on monetary policy in our anti-inflationary fight, and therefore led to apparently tighter monetary policies than might otherwise have been necessary.

### III THE LALONDE ENERGY PROGRAM

The Lalonde energy program has three basic principles: (1) security of supply and ultimate

independence from the world oil market, (2) opportunity for all Canadians to participate in the energy industry, particularly oil and gas, and to share in the benefits of its expansion, and (3) fairness, with a pricing and revenue-sharing regime which recognizes the needs and rights of all Canadians. The main elements in the program include: (a) a blended or 'made-in-Canada' price of oil consumed in Canada, an average of the costs of imported and domestic oil, which will rise gradually and predictably but will remain well below world prices and will never be more than 85 per cent of the lower of the price of imported oil or of oil in the US, and which will be financed by a Petroleum Compensation Charge levied on refiners (which generalizes the existing Syncrude Levy) designed to raise \$10 billion over the next three years; (b) natural gas prices which will increase less quickly than oil prices, but which will include a new and rising federal tax on all natural gas and gas liquids; (c) a petroleum and gas revenue tax of 8 per cent applied to net operating revenues before royalty and other expense deductions on all production of oil and natural gas in Canada, which together with the new federal tax on natural gas is to yield \$11.7 billion over the next three fiscal years; (d) the phasing out of depletion allowances for oil and gas exploration and development, which will be replaced with a new system of direct incentive payments, structured to encourage investment by Canadian companies, with added incentives for exploration on Canada Lands; (e) a federal share of petroleum production income at the wellhead which will rise from about 10 per cent in recent years to 24 per cent over the 1980–83 period, with the share of the producing provinces falling from 45 to 43 per cent and that of the industry falling from 45 to 33 per cent over the same period; (f) added incentives for energy conservation and energy conversion away from oil, particularly applicable to Eastern Canada, including the extension of the natural gas pipeline system to Quebec City and the Maritimes, with the additional transportation charges being passed back to the producer; and (g) a Canadian ownership levy to assist in financing the acquisition of the Canadian operations of one or more multinational oil companies, with the objective of achieving at least 50 per cent Canadian ownership of oil and gas production by 1990, Canadian control of a significant number of the major oil and gas corporations, and an early increase in the share of the oil and gas sector owned by the Government of Canada.

The schedules for wellhead and consumer (or blended) prices for conventional crude oil when the Oil Compensation Charge is included and for natural gas when the new federal tax is included are shown in Tables 1 and 2. It is noticeable from these two schedules that \$8.30 or 58 per cent of the \$14.30 increase per barrel in the blended oil price over the next 3 years is taken directly by the federal government through its Oil Compensation Charge, and 75 cents or 56 per cent of the \$1.35 increase per thousand cubic feet in the effective price of natural gas to the consumer over the next 3 years is also taken directly by the federal government through the Natural Gas Tax.

In addition to this, the phasing out of depletion allowances in traditional producing areas, the reduction in producer net-backs from natural gas exports (since the tax cannot be passed on to the US consumer when we have already virtually priced ourselves out of the US market) and from gas sold into new domestic market areas (where the producer will bear the additional transportation charges), the 8 per cent net operating revenue tax on all oil and natural gas production (effectively a federal wellhead royalty), and the Canadian ownership levy will all substantially reduce the share of wellhead oil and natural gas prices going to the industry, and via reduced industry operations and lower land bonus and rental payments for new production leases to the producing provincial governments as well. These latter changes are supposed to bring about the change in shares from 10 per cent federal government, 45 per cent provincial governments (Alberta, Saskatchewan and British Columbia taken together), 45 per cent industry prior to the budget and energy program to the respective shares of 24, 43 and 33 per cent over the 1980–83 period, after estimated incentive payments to producers from

TABLE 1

Schedule of prices and taxes per barrel: conventional crude oil

	Wellhead oil price	Petroleum compensation charge	Blended oil price
Sept. 1/80	16.75	1.75	18.50
Nov. 1/80	16.75	2.55	19.30
Jan. 1/81	17.75	5.05	22.80
July 1/81	18.75	5.05	23.80
Jan. 1/82	19.75	7.55	27.30
July 1/82	20.75	7.55	28.30
Jan. 1/83	21.75	10.05	31.80
July 1/83	22.75	10.05	32.80
Jan. 1/84	25.00	4.50/yr for 2 yrs.	
Jan. 1/86	35.25	7.00/yr for 5 yrs.	
July 1/90	66.75		

- Notes: 1. The oil sands reference price starts at \$38.00 on Jan. 1, 1981, and the tertiary recovery oil incentive price starts at \$30.00 on the same date; both prices escalate each year to 1990 with the consumer price index.
2. The world price of oil is approximately \$39.00 Canadian, and the Chicago price is approximately \$35.00 Canadian at time of writing.
3. The blended oil price translates into a 3c per gallon increase at the gasoline pump now, and a further 50c increase over the next three years.

TABLE 2

Schedule of prices and taxes per thousand cubic feet: natural gas

	Pre-tax city-gate price	Natural gas tax	Toronto City gate price (or price to consumer)
Oct. 31/80	2.60	-	2.60
Nov. 1/80	2.60	0.30	2.90
July 1/81	2.60	0.45	3.05
Jan. 1/82	2.60	0.60	3.20
Feb. 1/82	2.75	0.60	3.35
Aug. 1/82	2.90	0.60	3.50
Jan. 1/83	2.90	0.75	3.65
Feb. 1/83	3.05	0.75	3.80
Aug. 1/83	3.20	0.75	3.95

- Notes: 1. The average gas prices to consumers as a % of oil prices in 1981, 1982 and 1983 will be 71%, 68% and 67% respectively. \$2.60 per thousand cubic feet corresponds to \$15.09 per barrel of oil on a full BTU equivalent basis, or \$17.75 per barrel on an 85% commodity equivalent basis.
2. The export price of natural gas is \$4.47 US or approximately \$5.30 Canadian at time of writing.
3. The schedule of taxes on exported natural gas is the same as above except that the first 30c is delayed until Feb. 1, 1981. Since this tax cannot at this time be passed on to US consumers, it will eat directly into existing producer net-backs, and associated provincial government revenues.

the federal government are taken into account. The shares in 1983, however, divide up as follows: 27.5 per cent federal government, 40.9 per cent provincial governments and 31.6 per cent industry. Of course, the industry bears the production costs out of its so-called share. Notice also that in both of these calculations most of the erosion of the provincial government share is at the expense of Alberta, whose revenues from energy production are programmed to grow very slowly in each of the next three years and between 1980 and 1981 at considerably *less* than the rate of inflation. Indeed, Alberta's revenues are flattened for three years, with the promise that they may rebound again later if the rules are not arbitrarily changed again by the federal government in the meantime. The same is true for the industry's share. Indeed, actual industry revenues are projected to decline in real terms between 1980 and 1981, and they also decline in nominal terms before projected incentive payments are added back. These revenues are also thoroughly flattened for three years.

The projected distribution of the previous paragraph is from producer, or wellhead, prices. If the same distribution were done from 1983 consumer prices, after the additional large-scale tax wedge created by the Oil Compensation Charge is also taken into account, the ballpark shares in 1983 would be much more substantially shifted to the federal government. Indeed, the federal government share would be at least 36 per cent, with the provincial government and industry shares dropping to slightly below 36 per cent and 28 per cent respectively. These overwhelming share changes imply marginal tax rates which are close to being confiscatory and are much larger than those which would be implied by the Gainer-Powrie (1975) solution (e.g., 30 per cent). This is all the more so when one realizes that on a net basis, after the imported oil price subsidy is taken into account, federal revenues from oil and gas may well have been negative before the budget, a situation which resulted entirely from federal government pricing and incentive policies and through no fault of the producing provincial governments. Since the Oil Compensation Charge will, however, be used to finance a blended oil price which remains much below world (or Chicago) prices, it also remains true that the largest share of the potential economic rents will still be distributed to Canadian consumers via their ability to consume non-renewable and depleting resources at far less than their opportunity cost. Although we may not like the level of world prices for oil and natural gas, or the manner in which they are set, these prices do represent the opportunity costs for every subsidized barrel of oil, or thousand cubic feet of natural gas, consumed within the country.

Since the consumer and the federal government are the main winners in the energy program, it is obvious that the producers and the provincial governments of the producing provinces (especially Alberta) along with the residents they represent will be the losers. There will, however, also be substantial wastage of potential Canadian economic rents. Real income will be lost from the diversion of crude oil to lower-valued domestic uses when this oil has been purchased at the higher world price (or could have been sold for the world market price); this loss clearly represents subsidized waste, with the revenue to provide the subsidy being largely extracted from the industry and the producing provinces. Real income will also be foregone by preventing resources from being rechannelled into higher value employment in the energy industry from other sectors of the economy. The program is therefore inefficient from both the consumption and production viewpoints.<sup>3</sup>

It can easily be seen that the pricing regimes perpetuated by the Lalonde energy program

3 See Appendix. Recent estimates of the efficiency losses include \$3.8 billion per annum (Watkins, 1980), an average \$5.0 billion per annum over the next twenty years (Daniel and Goldberg, 1980) and \$133.0 billion in present value of all foregone economic rents (Helliwell, 1980b), all figures expressed in 1980 Canadian dollars.



only make sense if the efficiency losses are negligible, that is if the price-elasticities of supply and demand are very small. Ballpark estimates of the elasticity of demand for crude oil over the longer-term clearly place it as larger than 0.5 in absolute terms, which is not a negligible number. Although the elasticity of supply for conventional crude oil from traditional producing areas may be quite small, the smaller it is and the more exhaustible are those provincial resources (that is the faster the domestic flow supply curve shifts to the left), the larger is the justification for the Alberta government's position, namely that wellhead prices should rise quickly to ensure that a sufficiently large pool of savings is available in the form of the Alberta Heritage Savings Trust Fund when the conventional crude oil supplies are exhausted. A low supply elasticity (more strictly, a low reserve or stock supply elasticity) appears to be an underlying assumption of the energy program, but somewhat inconsistently the Alberta government's need to maintain its share of the economic rents is being denied.

It is also inequitable from the viewpoint of the industry and the provincial governments of the producing provinces. The producing companies can of course gradually move their operations south of the border, a trend whose beginning is very much in evidence, and the smaller-scale production and exploration operations, which are largely Canadian owned and controlled, can choose to sell out to the larger multinationals in exchange for share-holdings in these multinationals. In either case, however, de-Canadianization of *control* in the private sector of the industry will result from the energy program despite its objectives (which, unfortunately, come out much more clearly as nationalization than Canadianization).

Residents of the province of Alberta (and to some extent BC and Saskatchewan) will, however, be stuck with the substantial real capital losses that the energy program thrusts upon them. Their petroleum wealth is being taken from them, at prices far below its true market value (indeed, the wellhead oil price increases contained in the energy program are smaller, by \$2.50 per barrel in 1983, than previously placed on the table by Trudeau in his talks with Lougheed in July 1980). Moreover, the growth rate of economic activity they have been led to expect will be substantially curtailed. This will affect both real incomes and asset (especially land) prices, which will both follow lower timepaths than previously anticipated. Recent immigrants who have just bought into their share of the Alberta Heritage Savings Trust Fund by buying land and housing in Alberta (the prices of which tend to capitalize the stream of future tax benefits implied by the Fund) will be the largest losers, at least in real terms in the short run. Thus, in effect, a discriminatory wealth tax has been applied to residents in the producing provinces, and in a rather inequitable way.

This is *not* to say that the federal government should not get substantial additional revenues by capturing some of the economic rents from oil and gas production (for obvious reasons of equity that are clearly illustrated in the Appendix), nor that individual consumers should not share substantially in the benefits derived from our energy resources, but more as taxpayers than as petroleum users. The marginal tax rates of the Lalonde energy program, however, are too large and too harsh to be digested easily all at once. Were wellhead prices for conventional oil allowed to rise considerably faster over the next few years so that the blended price moved closer to Chicago prices more quickly, then the remainder of the energy package might be palatable to the producing provinces and perhaps also to much of the industry. The whole package would also make more economic sense. By further increasing the price of oil relative to natural gas, greater incentives towards substitution would occur. Moreover, since net federal revenues would rise more quickly with a much faster increase in wellhead oil prices, a refundable energy tax credit as described earlier could be put in place to compensate lower and middle income Canadians for the higher oil prices, with the energy conservers sharing more heavily and the energy squanderers less heavily. Four to five dollars at the wellhead in each of the next

three years would be a welcome compromise, if coupled with some reasonable but more moderate increase in natural gas prices. In addition, the implementation of the first 30 cents of the Natural Gas Tax on exported gas should be postponed until such time as it can be passed on to foreign buyers.

Unfortunately, however, the current benefits to Canadian consumers may well be short-lived, for there is very little chance that the objectives of security of supply and independence from the world oil market will be achieved within the confines of the Lalonde energy program. Despite the apparently reasonable initial oil sand and tertiary recovery reference prices, these prices are only scheduled to escalate each year to 1990 with the consumer price index. This may turn out to be incompatible with Hotelling's rule which suggests that escalation in the *real* resource rental rate at the real rate of return on capital (or at least at the social rate of discount) is required for efficient use of an exhaustible resource. There may still be insufficient incentives for oil sands and tertiary recovery developments to come on stream, despite the respective initial \$38.00 and \$30.00 reference prices. And there certainly are insufficient producer incentives for further exploration and development in traditional oil and gas producing areas. In addition to this, many of the incentives to consumers to conserve oil supplies will be frittered away because one is trying to accomplish oil conservation with the big lever tied behind one's back, namely price. Moving quickly towards much higher domestic oil prices is a necessary, but perhaps not sufficient, condition for successful conservation, and the associated conversion to alternative energy sources, to occur.

#### IV THE MACEACHEN BUDGET

I turn now to the interface between energy policy and macro-economic management, and particularly to an evaluation of the MacEachen budget. While projecting continued 10 per cent inflation (a probable under-estimate), an 8.5 per cent unemployment rate for next year, and a return to a 4 per cent real growth rate by late 1981, the budget also projects a small decrease in the overall fiscal deficit from \$14.2 billion in fiscal 1980 to \$11.8 billion in fiscal 1984. This projected reduction remains small despite very substantial increases in revenues over the next three years, increases which come almost entirely at the expense of one sector, petroleum and natural gas. On the other hand, we see no attempt in the budget to cut into the discretionary part of the government's overwhelming expenditures. Thus, there is a real danger that large-scale rent-dissipation may well result from the federal energy resource taxes. At least more of these rents would likely have been saved *and* invested had a larger share remained with the private sector and the producing provincial governments.

The budget deficit clearly declines less rapidly than is desirable. Moreover, even the projected small-scale reduction in the deficit may not materialize, since it depends upon renewed economic growth occurring from the end of 1981. But the effects of the budget may well kill off a number of large-scale investment projects, such as the tar-sands and heavy-oil developments (and particularly the Alsands and Cold Lake projects), which could have had major employment spin-offs for the manufacturing heartland of central Canada. Thus, from the point of view of stimulating productive investment and employment growth, as well as making substantial inroads on the deficit, the budget may well be simply perverse.

The substantial increase in unemployment insurance contributions may have been necessary to place the unemployment insurance fund more on a pay-as-you-go basis, but the additional employee contributions at least are a regressive form of tax. The retention of indexation for the basic deduction and the various tax brackets in the personal income tax system

is a welcome measure, but the indexation factor should probably be changed from the total consumer price (CPI) index to the CPI after extracting the direct energy component. This would, of course, be particularly desirable if wellhead oil prices had been allowed to escalate faster *and* a refundable energy tax credit had been put in place. It would represent federal government leadership in educating the public to the notion that not everything can be indexed if essential terms-of-trade changes are to be accommodated in the system.

The budget does pick up on a number of useful offerings put on the table by Lougheed in his total energy package. The Lougheed package included (a) an agreement to increase conventional oil prices in stages (consisting of about \$2.50 every six months for the next three years) to no more than 75 per cent of the Chicago price to preserve a competitive edge for Canadian industry, (b) the accelerated development of the oil sands, (c) a larger federal royalty share from future oil sands plants and an equivalently smaller provincial share, (d) a \$7 billion investment by the Province of Alberta in the Alsands, Cold Lake and a third new oil sands plant, (e) the provision of costly infrastructure associated with permanent towns to accommodate the work force associated with oil sands developments, (f) no increase in provincial royalty rates on conventional oil and natural gas with lower incentive royalties on new discovery wells, enhanced recovery schemes and low productivity wells, (g) a gas price set at 85 per cent of the oil price, on an energy equivalent basis, with a 65 per cent incentive price for all new gas going to Eastern Canadian markets for a five-year period, (h) producer absorption of the additional transportation costs required to provide gas to these new market areas, (i) Alberta funding for five new energy projects in other provinces, including the proposed Quebec and Maritime gas pipeline system, as well as much additional oil sands research, (j) the non-deductibility by producing firms of the cost of mineral leases for federal income tax purposes, costing the province at least \$400 million a year through reduced lease bids, (k) an unconditional Alberta loan of \$2 billion over five years to a national energy and development bank, which might be used to fund significant rail transportation improvements in Western Canada and the Prince Rupert grain terminal, and (l) continued inter-provincial loans from the Alberta Heritage Savings Trust Fund at concessionary (Aaa) bond rates to any other province requesting them. These offers were conditional on there being no federal wellhead tax on either oil or natural gas, and no federal tax on natural gas exports. Since both these kinds of taxes are contained in the budget, albeit in a thinly disguised form, what Ottawa has said is that it likes some of the proposals, but it wishes to increase its ownership and control of oil and gas production and in the process garner substantially larger revenues so that it can carry out some of the projects itself, partly through a so-called Western Development Fund. However, despite its intrusion into provincial revenues, ownership rights and control, Ottawa still wants the Province of Alberta to finance some of the more expensive items at issue.

Perhaps it is understandable why so many Western Canadians, and not just those resident in Alberta, are angered and bewildered by the Lalonde energy policy and the MacEachen budget, and why the oil and gas producing industry is considering drastic retrenchment of its activities. For the energy program contained in the budget is an affront to our economic intelligence, and an attack on our regional interests. Why should not an energy growth pole be allowed to lead the whole Canadian economy closer to full employment through buoyant investment demand; why must this growth pole be hacked back when the market forces generated by the world energy problem clearly dictate otherwise; why must security of supply and eventual oil independence be thrown out the window because of predominant short-run concerns for inter-regional equity which pay scant attention to either economic efficiency or inter-generational equity? Although there is something to the argument that fiscally-induced

migration is inefficient, migration in response to terms-of-trade changes is part of an efficient adjustment process. It makes little sense to undermine economic efficiency by preventing appropriate terms-of-trade changes from occurring simply because the revenue-generating consequences may imply other inefficiencies, inefficiencies which a genuine inter-provincial rent sharing scheme, perhaps set up under the initiative of the producing provincial governments, could avoid. Any such scheme should of course include all rental incomes from resource extraction and development, and not just those accruing to provinces which happen to be well-endowed with non-renewable energy resources. Albertans are genuinely willing to be generous for the sake of the whole of Canada, since their earnest desire has always been to play a mainstream role in building the future of this great nation. It is therefore with bewilderment and some anger that Albertans and Western Canadians more generally now feel that Ottawa has clearly taken the negative beat-back-the-provinces approach to confederation, with particular damage to its relationships with this region of the country, rather than trying to harness the differences and diversity contained within this country in a positive way for the greater common good. Liberal government policies in Ottawa are actually making this country less than the sum of its parts.

Finally, a comment is necessary on the response of the Premier of Alberta to the budget and energy program. The three 5 per cent cutbacks in conventional oil production commencing March 1, 1981, and at three-month intervals thereafter to a total of 15 per cent (cutbacks which will be restored if there is a shortfall in oil availability at the federally-imposed blended price anywhere in Canada) will only take place if no productive negotiations take place over the next few months which lead to a more efficient upwards movement in wellhead prices for conventional oil. Hopefully, negotiations will resume. But if they do not, and Lougheed acts on March 1, 1981, to cut back production by 5 per cent, the government in Ottawa has several options. One is to permit this cutback, import more oil and increase the Oil Compensation Charge slightly to prevent the fiscal deficit from rising. This calls the premier's bluff, but still may leave the oil sands and heavy oil developments indefinitely postponed. The short-run hardships (conceivably involving substantial bankruptcies) will be greatest in Alberta, and although the goal of security of future oil supplies through non-conventional developments would once again be undermined, more conventional crude oil would be left in the ground in Canada and thereby conserved. (There remains a moral question whether this country should be taking more oil from the world market, however.) Alternatively, the federal government could use a variety of its powers, including the declaratory power, the peace, order and good government power, the trade and commerce regulatory power, or other means, to order Alberta to restore its production cutback. At that point, Ottawa would have allowed an out-manoeuvred politician no escape route from his corner (and with separatist threats to deal with as well) except a provincial referendum on resource ownership and control. Such a referendum would no doubt win hands down and create even greater constitutional problems than exist at present. The reason why it would do so is quite simple. Although everyone agrees that the federal government should get substantially more revenues from the oil and natural gas sector, ends do not always justify means, and in this case the federal government would have abrogated the final most simple definition of provincial resource ownership under the British North America Act, namely the right of the owner not to sell marginal quantities of his depleting resources if the price offered is not only unilaterally imposed but also considerably less than market or commodity value.

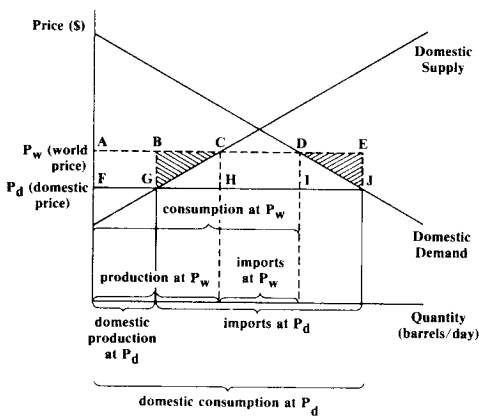
## V CONCLUSION

In summary, the MacEachen budget and the Lalonde energy program not only restore the

problematical economic course of excessive fiscal deficits and unrealistically low domestic oil prices, but in addition they make an excessively large intrusion into the rights of ownership and control of provincial governments over their non-renewable energy resources. From this point of view, as a total package, these policy initiatives will not only turn out to be self-defeating on such questions as security of future energy supplies and on rekindling growth in productive investment, labour productivity and employment, but they are inevitably antagonistic to the legitimate interests of large segments of the country. Inflation is likely to carry on relentlessly at roughly the 11 per cent level for some time, particularly as the inevitable effects of higher energy prices filter through the system. That does not mean that through changes in our fiscal-monetary mix and in our energy pricing policies we cannot begin today to set the stage for a more favourable economic structure and environment that may well ease the inflation-unemployment dilemma in the future. The federal authorities may think that is what they are doing, but I am fairly well convinced that they have not yet got it right, largely because they seem unwilling to place enough reliance on the market mechanism and the private sector to get the economy moving again.

#### A P P E N D I X

The following simple diagram indicates the efficiency losses that result from maintaining conventional oil prices well below world levels. See also Thirsk and Wright (1977).



Gain to producers from moving from  $P_d$  to  $P_w$  is area ACFG.

Gain to federal government from same move is area BEJG.

Loss to consumers from same move is area ADJF.

Net gain to society is triangle BCG plus triangle DEJ.

Triangle DEJ represents subsidized waste on the consumer side, whereas triangle BCG represents lost economic rents on the producer side. Clearly, society as a whole loses by maintaining an inefficient pricing regime. The losses involved are larger, the larger the price-elasticities of domestic demand and domestic supply. Moreover, the income distributional consequences can be ameliorated and indeed the gainers can compensate the losers provided that the redistributive agency (presumably, but not necessarily, the federal government) is able to capture at least part of the additional intra-marginal producer rents, namely ABGF.

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