

centralized source. Employment gains in one region, or in one market sector, will be matched to some extent by losses elsewhere.

The encouragement of the conventional energy sector also has a local employment impact when a large project is undertaken in an area which does not already have the population or the infrastructure to support development. While it is true that the local economy temporarily benefits from the growth and income generation resulting from the project, severe and costly disruptions can also occur. The costs of sudden and specific labour force demands can spread across the country as the need for those workers skilled in particular trades rises and wages are pushed up — demands in one area affect the labour force balance and employment costs in other regions. There are also labour skill implications because the demand may exceed the supply of specific kinds of labour.

Labour is not perfectly mobile across Canada and not all workers have the skills which are in demand. These two problems contribute to the disruptions and costs associated with large, centralized energy projects. After the "boom" in local growth associated with the construction period, there is the danger of a "bust" when the specialized workforce moves on. The demand strains associated with the bunching of large projects can also exacerbate inflation.

The appeal of decentralized energy supply is obvious — the labour market costs associated with large projects disappear. The benefits of the economies of scale which accrue to large projects are lost with decentralized development, however.

Well-planned, large projects can be economically stimulating during recessions. The tar sands plants planned for the late 1980s can be expected to counteract any recessionary tendencies existing then, and the benefits of improved economic activity will undoubtedly spill over to the labour market.

Energy policy affects employment by changing the pattern of market activities. If nonconventional energy supply is encouraged, employment gains are promoted in these new industries but moderated in conventional energy supply industries. The net employment effect of such a policy is consequently unclear. The effects of energy conservation policies are similarly complex. Research done on the employment effects of conservation policies indicates that initially there are greater employment gains in conservation industries than there are employment losses in energy supply industries. The net gain, however, may be in lower-wage jobs. There is some doubt that long-run growth can continue with a strict energy conservation policy.

Tax incentives which promote activity in the petroleum industry are really an indirect subsidy which enhances employment. Similarly, incentives for the development of alternative energy sources and technologies can stimulate employment. Price setting can have the same effect — regulations which maintain high energy prices (such as those put into effect in the 1960s for the Western Canadian oil industry) encouraged growth and stimulated employment. On the other hand, enforcing low energy prices can depress activity and therefore employment in the energy sector.

Government employment policy has a role to play in improving labour market flexibility. The better-prepared the labour force is to respond to higher energy prices, increased alternative energy supplies and energy-efficient technologies, the better-off all Canadians will be. It is thus incumbent on government and industry to identify future skill requirements, to encourage and undertake necessary training procedures, to aid in making labour more mobile and to attempt to reduce occupational barriers. This applies to the conventional energy sector, the evolving alternative energy supply industries, the industrial sector which will be providing more energy-saving technologies and, indeed, all industry. In any event, *coping with employment effects, not aiming at creating jobs, should be the major employment concern in formulating energy strategy.*

As the attitudes and goals of society change, consumers will alter the types of services they demand. With energy efficiency and energy self-sufficiency gaining prominence at a time in Canada's economic development when concern about quality of life is becoming more and more important, the kinds of goods and services which are demanded will change to reflect these goals. These changes will be followed by the alterations in production made to meet consumer desires. As this latter development progresses, employment patterns will also be affected. Industries likely to expand will be those whose products complement altering tastes.

Canada's economic structure is undergoing modification which extends well beyond the energy sector. Employment patterns, labour participation rates and the whole industrial structure are changing as the economy and society in general evolve. The high-technology revolution, for instance, is likely to make our industrial sector less energy intensive than it is now. The growing emphasis on the service sector will also reduce energy intensity without a reduction in labour intensity. Job sharing, the substitution of communication for transportation, and similar innovations will lead to energy/output relations which are based on very different circumstances than those prevailing today.