

vehicles, construction equipment, railway tank cars and trucks — the potential is enormous, says the manufacturer.

#### Military use

Government and military interest in the system is also encouraging. Many military vehicles use it now, and soon it will be installed in underground hazard areas in Ontario mines.

Tests performed by the Canadian and U.S. Governments show that Explosafe containers may safely be subjected to severe vibration, and that containers and tanks holding highly explosive vapour mixtures can be safely repaired and subjected to welding and brazing without danger.

Andy Szego, son of the inventor of Explosafe, and manager of research and development for Vulcan, says the installation of Explofoil in large road transport fuel tankers would eliminate the weight shift in transit that causes many highway tanker accidents. Continuing tests with thinner foils may allow a reduction in displacement, making the system attractive for commercial airline use.

*(More information may be obtained from Alcan News, Alcan Canada Products Ltd., Box 269, Toronto, Ontario M5K 1K1*



### Gross national product — 1978

Gross national product for 1978 increased 10.3 per cent to a level of \$231.8 billion, states a report recently published by Statistics Canada.

As in the previous year, external influences dominated economic developments in Canada in 1978. While real final domestic demand increased only 2.1 per cent, real exports were up 8.5 per cent; this increase accounted for about half of the total increase in the volume of output, and had a positive effect on profits and employment in export-oriented industries. The over-all contribution of the foreign sector to real growth was reduced somewhat by a 4.1 percent increase in the volume of imports, which rose as a proportion of real GNP despite an increase of 12.7 per cent in import prices.

The decline in the international value of the Canadian dollar was partially responsible for the rise in import prices and for a fairly substantial increase in the Canadian dollar prices of exports which are priced in world markets. The dollar

weakened throughout 1978, falling by 6.8 per cent against its American counterpart and 9.5 per cent against a trade-weighted index of ten major currencies. The net effect of the resulting price movements was a decline in the terms of trade — that is, the ratio of export to import prices — to 1.03 from 1.07 in the previous year. The deterioration in the terms of trade more than offset the improvement in real net exports, and the current dollar balance of trade in goods and services worsened by about \$0.7 billion. The current dollar balance results in a substantial increase in real external debt and this may have acted to restrain domestic expenditure. The gain in production then, and employment resulting from the decline in the dollar may have been obtained partly at the expense of lower domestic expenditure.

#### Profits, personal spending

The importance of external influences on the economy was reflected in the movements in factor incomes that occurred in 1978. Corporate profits before taxes rose

16.7 per cent, an increase that raised the share of profits in net national income from 13.6 per cent in 1977 to 14.4 per cent in 1978. This is about the average of the past ten years. The increase in profits occurred despite a deceleration in output *per person employed*, a phenomenon which typically accompanies the maturation of the business cycle. Profit growth was particularly evident in export-oriented industries such as wood, paper, machinery, and metal fabricating, and at least part of these profit increases can be attributed to gains arising from the devaluation of the Canadian dollar, which increases the Canadian dollar price of commodities that are priced in world markets.

While employment gains were strong in 1978, a slowdown in the increase of average weekly earnings helped to reduce the rate of growth of labour income. Prices of consumer goods and services, as measured by the implicit price index for personal expenditure, rose more quickly than average earnings did.

Real personal expenditure on goods and services, which was restrained by price and interest rate increases, grew only moderately in 1978, despite the stimulus of direct tax cuts early in the year and indirect tax cuts later in the year.

The lower sales tax rates in most provinces for at least six months of the year strongly affected the reduction in price of most taxable goods relative to other goods and services. Together with the relatively rapid price increases for non-durables and services, particularly food and energy, consumers were induced to purchase durable and semi-durable goods at the expense of other goods and services.

Gross fixed capital formation remained the major restraining influence in 1978, with the volume of investment virtually unchanged from 1977. Residential construction was again the major source of weakness, as declining housing starts through most of 1978 and a very strong price increase of 9.5 per cent, owing to a sharp increase in wood prices, reduced real activity in this sector by 4.8 per cent.

Non-residential construction was weak throughout the year, resulting in a real increase of 2.4 per cent in 1978; severe weather conditions early in the year, and a considerable amount of strike activity in the construction industry afterwards contributed to the sluggish performance. The implicit price index declined noticeably from the rate evident in previous years.