

工月商刊 THE Bulletin

A Hong Kong General Chamber of Commerce Magazine 香港總商會月刊



Port of Antwerp See Page 16

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The Challenging Case for Nuclear Energy

There is still widespread reluctance among sections of the public, the media and politicians to accept that nuclear energy should be relied upon as part of our future energy supplies. Questions are raised about environmental impact, safety and economics to which positive and convincing answers can be given. This article, reprinted from the "The Director", the magazine of the British Institute of Directors, is a further contribution to *The Bulletin's* recent series regarding future sources of energy. Previous articles appeared in the November and December 1981 issues.

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More Hong Kong Shippers Use Well-located Antwerp

Incoming cargo from Hong Kong at the Port of Antwerp has almost doubled every year since 1975. But the volume is still small and a mission from Antwerp will visit Hong Kong from 1-4 April to discuss with local exporters the advantages of shipping through Antwerp.

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廢料還原再用——港人迴避的工業

現時香港把大部份可供再利用的廢物輸送出口。不過把廢料還原再用既是最終能保持環境清潔的方法之一，又是綜合生產的一部份，若其利潤與出口競爭能力受到環境保護法例、能源成本與所有公共事業更大的影響，則其經濟方面的可行性勢將更受垂注。

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安特衛普地點適中，香港船隻漸多使用

自一九七五年開始，由香港運至安特衛普的貨物每年均增加近一倍。不過這個數量仍屬細小，而安特衛普將於四月一日至四日派遣訪問團來港，與本港出口商研討使用安特衛普進行航運的優點。

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有關核能的爭論

社會大眾、傳播界以及政界人士對於採用核子能作為人類未來能源的一種大部份仍不表贊同。他們提出有關環境受到影響、安全及經濟狀態等問題，其實這些問題全都有肯定而令人信服的答案。本文轉載自英國董事協會的「董事雜誌」，是本刊報導有關未來能源資料的一篇文章。較早前的報導見載於本刊一九八一年十一月及十二月號。

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簡報匯編

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The Chamber in Action

This page summarises for members' information recent activities of the Chamber. These are extracts from the Director's monthly reports issued to General and other committee members.

Finance

The Chamber's draft annual accounts for 1981 show a small surplus of income over expenditure of about \$73,000. It is pleasing to note however that the cost of the U.S. Mission, which was not included in our 1981 budget provision, was included in the expenditure figure. Income included a windfall of several hundred thousand dollars resulting from exchange gains realised by transfer of deposits.

Membership

Total membership at month end was 2,689. This figure takes into account 59 resignations received since the issue of collection notices for 1982 subscriptions. A total of 2,298 members (85.5% of 1981 membership) have already paid, representing income of HK\$4,136,400. A further 333 have not yet paid their subscription fees but many will do so before the cut-off date at the end of February.

Committee Members' Dinner

The 1982 Committee Members' Dinner took place successfully on 21st January in the Mandarin Hotel. Following a wide ranging address by David Newbigging during which he complimented the Governor on ten years of solid achievement and growth, Sir Murray delivered a comprehensive and encouraging assessment on Hong Kong's present and future economic and social development. Sir Murray was kind enough to refer particularly to the contribution of the Chamber, its Committees and its members to this development, also to the excellent relations between the Government and the Chamber.

Textiles Committee

Members met on 13th January to discuss specifically the likely impact of the newly initialled Protocol to the Multi-Fibre Textiles Arrangement.

Subsequently, I prepared a paper on the views of the Committee and submitted this to the Director of Trade, Industry and Customs. The submission was copied to other interested organisations and may be published elsewhere in due course.

Shipping Committee

The Committee met on 14th January. A Tariff Standing Sub-Committee was formed and chaired by Mr. Simon K.Y. Lee. The Sub-Committee will examine issues relating to pilotage fees, wages for tally clerks and stevedores, rates for mooring/unmooring services etc. and make recommendations to the main Shipping Committee.

West Europe Area Committee

The Committee received a eight-member trade mission from Britain on 19th January, jointly sponsored by the Hong Kong Trade Development Council and British Airways. There was useful discussion on a wide variety of subjects of interest to the group and particularly on the latest developments in the PRC.

Arab Area Committee

On 12th January, the Committee received a three-member delegation from Saudi Arabia which was led by Mr. Abdullah Dhalan, Director General of the Jeddah Chamber of Commerce. The delegation wishes to organise a seminar in Hong Kong to promote industrial investment in Saudi Arabia. The Chamber agreed to provide assistance where appropriate.

Trade Mission to Nigeria, 9th - 23rd Jan., 1982

The Chamber Business Group led by Mr. W.S. Chan, Senior Trade Manager, left Hong Kong on 9th January for a two-week tour of Lagos. The Mission was a considerable success. Over 2,500 merchants attended the four-

day product exhibition and initial firm orders worth HK\$92 million were concluded.

Trade Mission to Australia, March 1982

A briefing meeting for members joining the Chamber mission to Australia was held on 22nd January. The group will visit Brisbane, Melbourne and Sydney.

China

Arrangements are being made for the Secretary-General of the Economic Commission of the State Council, PRC, to visit factories in Hong Kong. The purpose is to conduct field studies of the electronics, textiles and metal industries in Hong Kong.

Roundtable Luncheon

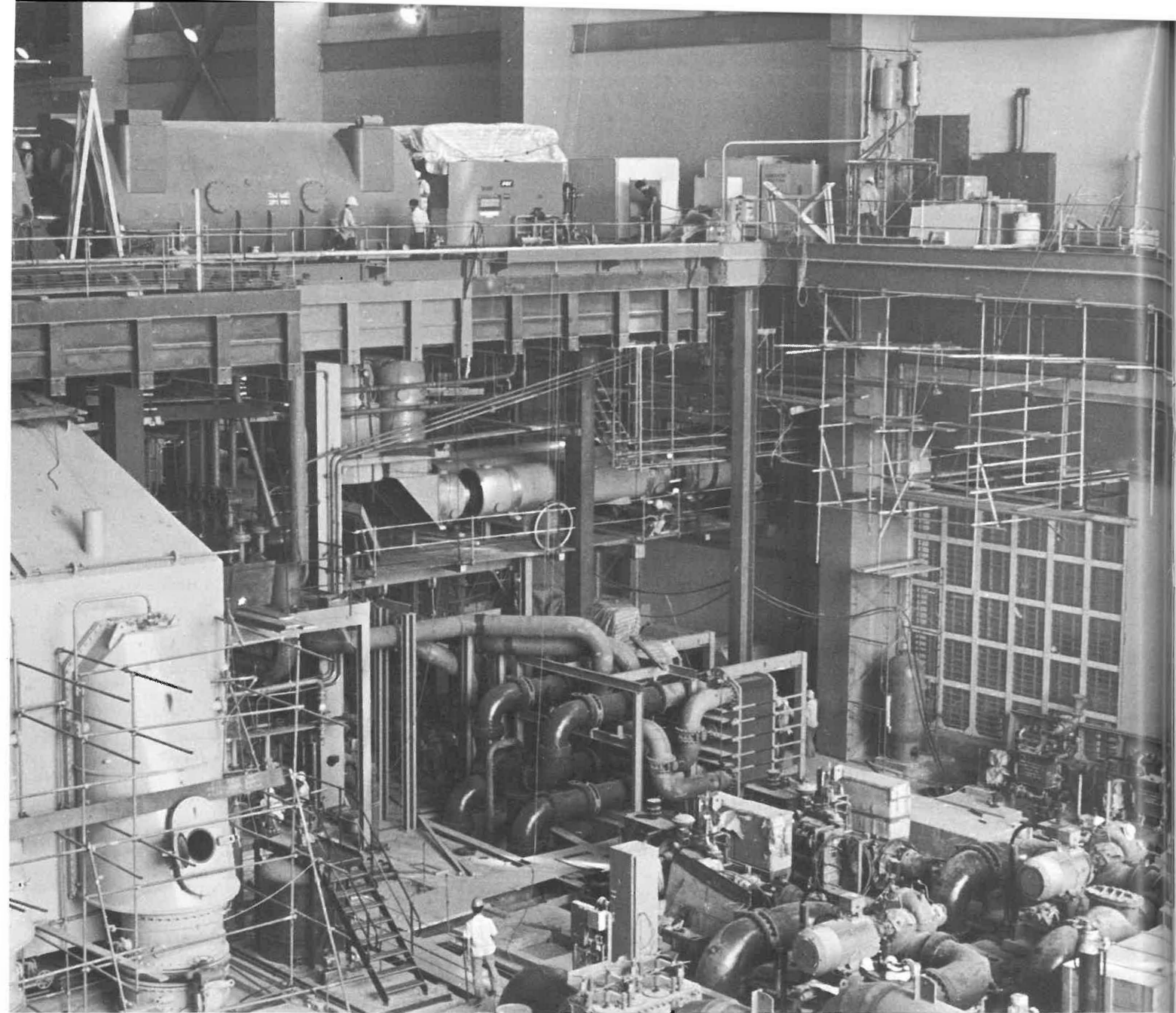
Mr. R. Fell, Commissioner for Securities, spoke to a Roundtable Luncheon on 11th January. Due to a high demand for places, the venue was moved to the Furama Hotel.

Chamber Spring Dinner

We had a successful (and very noisy) Annual Spring Dinner on 5th February, attended by over 600 members and guests. Eliza Chan, well known local singer and a most vivacious personality really belted out many of the old favourite songs and some new ones. Prizes in the ever popular lucky draw were very attractive and happily received by the lucky ticket holders.

Telex Services

Members had been notified of this new service which begins in March. Users will be bound by terms of business set down by the Chamber and accepted by the Cable and Wireless Limited. □



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Viable Recycling: An Industry We Mainly Duck, But . . . ?

Hong Kong is in its infancy in introducing into industry methods of converting its residual waste back into raw material that could be used again, called recycling. It exports most of its recyclable waste. But the economic viability of recycling, as part of eventual clean technology and integrated production, is likely to be looked at more closely when environmental protection laws, energy costs and cost-efficient charging for all utilities have a greater impact on profits and export competitiveness. Meanwhile, Hong Kong's part salvation from its enormous animal waste problem could depend upon successful introduction of an earthworm, called the red wriggler, that recycles every day its body weight of waste into a highly sought-after fertiliser.

Existing recycling methods of waste in Hong Kong and their possible extension and improvement are now being studied by the Environmental Protection Agency (EPA).

The Agency will report in 1982 to the Waste Management Policy Committee set up to advise the Hong Kong Government on policy relating to the disposal and possible recycling of all wastes prescribed in the Waste Disposal Ordinance passed in 1980.

The Ordinance provides for a statutory waste disposal plan for the whole of Hong Kong and the report on recycling and its future is one of nine subjects being studied to prepare the plan. Consultants are also being employed. One consultant study is to develop a computer-based model to help in the operation, planning and control of the collection and disposal services. Another will examine toxic and difficult wastes and recommend on the provision of facilities for treatment and disposal. The Ordinance, like other enabling legislation passed or in the pipeline to protect the Hong Kong environment, is not generally retroactive. Thus, basically, it will be new investment and re-located industries that will be subject to environmental impact assessment and control by regulation.

But Hong Kong can expect more than just an environmental *status quo*.

There is, for example, provision in the enabling Ordinance, to prevent littering by specifying the capacity, design, materials and construction of containers holding beverages and fluids. Government could insist on bio-degradable containers, instead of plastic and aluminium ones.

And, there is nothing to stop Government eventually shifting industry's own share, on a cost-efficient basis, of

the total waste disposal costs to Hong Kong directly to industry instead of, as at present, having these costs borne by the community as a whole.

One way of doing this could be the construction of convenient waste transfer stations for industry where a charge could be levied that would be less than the cost of the transport cost industry incurs now in taking their waste directly to controlled tips.

Industry and commerce generates nearly half the total of 6,000 tonnes of waste now being disposed of daily by the Hong Kong Government.

Experience elsewhere suggests that economic charging would encourage Hong Kong's existing industries to take another look at the economics of recycling. Nevertheless, no views on this have yet been formulated and recycling is unlikely to be more than supported and encouraged, rather than required as an environmental protec-

tion policy.

A basic reason is that when industry does consider the economics of recycling it inevitably begins to ask itself the question: Why create waste at all?

From this has developed the concept of clean technology which Hong Kong will, at least in part, adopt as it upgrades its own technology through transfers from abroad.

The economic risk in recycling is that it could take more energy and equipment, even transport, to recycle waste than to win the corresponding material from virgin ore or raw materials. And that possibility challenges industrialists to design a total system from the beginning in which residuals can be easily converted into new resources.

The total system goes further than that. It begins in the biomass and research into biochemistry and appropriate crop cultivation to pro-

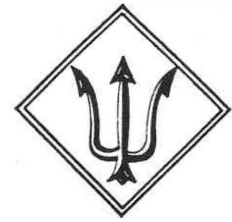


Waste timber buried at controlled tips in Hong Kong, ignoring its calorific value.



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The Hong Kong General Chamber of Commerce,
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11 Chater Road,
HONG KONG.

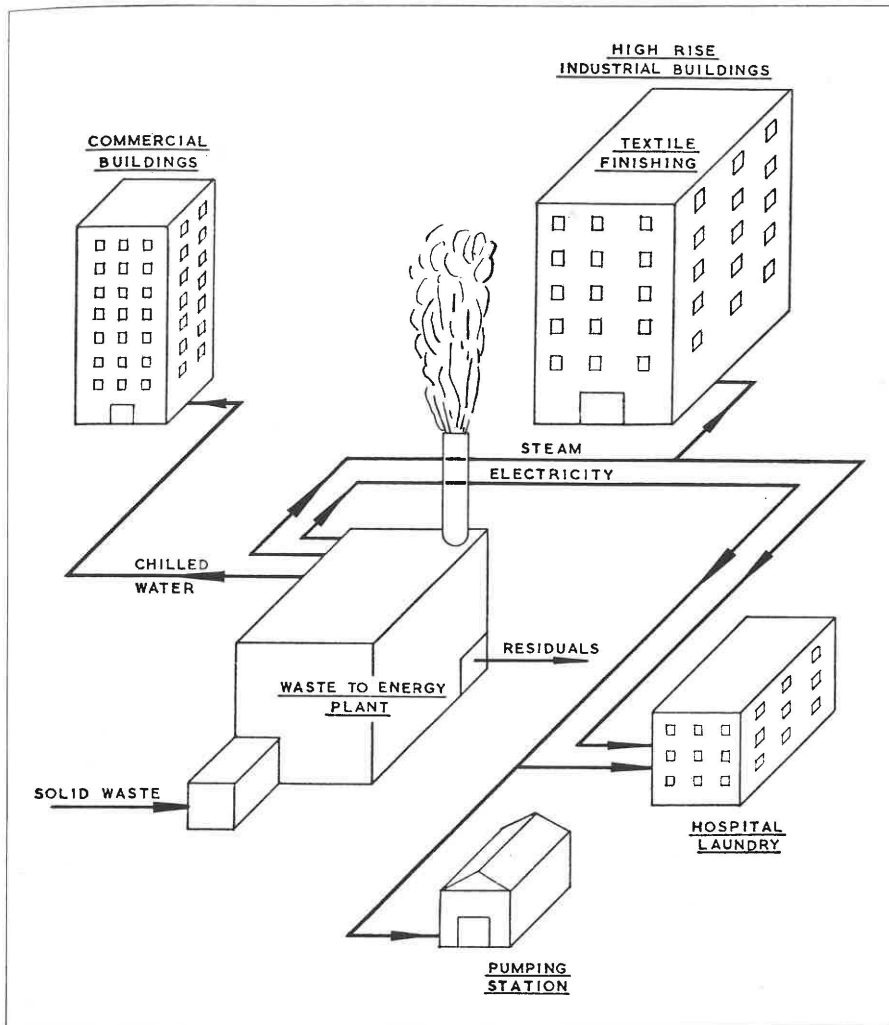
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Diagrammatic outline of what a Waste-to-Energy plant in Hong Kong could supply in the process of waste incineration.

Source : Mechanical and Electrical Engineering Division of PWD.

vide renewable resources. It ends in integrated production where the waste of one industry becomes the raw material of another.

Hong Kong's shining new example of integrated production is the current construction of China Cement Company's cement works beside the new coal-fired generating plants being built at Castle Peak. The cement works will consume as a raw material the pulverised fuel ash from Castle Peak.

But even that integrated production is not a total answer to the 750,000 tonnes of pulverised ash and 240,000 tonnes of furnace bottom ash that will by 1990 be produced yearly at Castle Peak and at Hong Kong Electric's coal-fired generating plant on Lamma Island.

Hong Kong Electric's ash is expected to be used in part as an additive to cement and part used in land reclamation. But even fluctuations in cement demand could alter Castle Peak's full use of the ash there as a raw material.

Still, dumping itself, where it is socially acceptable, does fit the Hong Kong future total system. It produces new land in land-scarce and almost natural resourceless Hong Kong.

Dumping has, in the past, produced health problems such as in the early days of Kwun Tong part of which was virtually built on a rubbish dump. But nowadays disposal experts say their methods eliminate health hazards. Thus dumping today in Hong Kong is an economic form of recycling, even a possible source of methane gas.

Used timber of high calorific value is buried at controlled tips. This waste energy whereas, for example, the Kennedy Town incinerator uses domestic waste to generate electricity to light the government abattoirs next door.

Waste timber comes from construction sites where often it is not de-nailed and used again. Instead, it is delivered to control tips as industry is required to do with its solid waste, rather than providing a fuel for use in furnaces.

There are many reasons why waste like that goes on in Hong Kong, militating against total economic use. One could be the fragmented nature of industry, with its 45,000 manufacturers mostly small with low capital investment horizons; another industry's relatively narrow base.

The Hong Kong Productivity Centre has already established an Environmental Control Services Unit which can advise on the economic feasibility of treating or recycling waste on a case by case basis.

Most companies are expected to opt for less expensive treatment, not more capital-intensive recycling, if and when regulations and economic disposal charging were to force them to do more than whatever they are doing now with their waste.

Contracting to take it away to a controlled tip, like the extravagant use of new raw materials, are both built into their costs plus profits structure.

Besides, labour is expensive on a building site and it is usually working against a contract deadline. Cost and time both deter efforts to de-nail and re-use timber.

This is not necessarily a general rule. Some timber is re-used. But too much of a "why bother" attitude does tend to prevail, though there are exceptions, such as in the jewellery trade where every precious minute speck of gold is recovered from ornament manufacture.

Another deterrent to recycling as a means of lessening Hong Kong's resourcelessness is often the fact that it would be necessary for an industry to re-locate to achieve efficient recycling. In other cases the capital cost may be very high.

The deep-carving traditional furniture industry is a good example.

Deep-carving wastes about one third of the timber used. The waste could be recycled at a central location into chip-board. The industry has not found the capital for such a plant. Instead the plan has led to a demand for cheap industrial land, suggesting a shift in Government's non-intervention policy.

A solution may yet be found in the introduction of a third party that sees chip-board production as economically feasible. One "Hong" is examining the proposal.

A risk it will have to assess is whether or not the traditional furniture industry will eventually disappear as cheaper

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modular furniture production increases.

Another industry seeking cheap land at a central location to recycle water collectively is dyeing and finishing. But while some bigger firms are prepared to re-invest in better technology to accomplish a dye and a water saving, some smaller companies have looked at it differently.

They see energy cost savings in recycling their own hot water and have installed plants in multi-storey factory buildings to give them hot water clean enough to use again.

Water, to them, will not be more than a subsidiary factor in their recycling incentive until it is charged for more cost efficiently.

The principle that the more you waste the more you pay is already incorporated in Hong Kong's scale of water rates. But water is still too cheap to make the principle very effective.

Hong Kong has a per capita domestic consumption rate that exceeds countries where water is charged for cost efficiently, hence periodic rationing.

Cost-efficient Government utility charging would make the Hong Kong economic climate more conducive to clean technology, integrated production and recycling.

But the desirability of doing that is certain to be questioned by industrialists who would not want to see anything happen that they fear might reduce their export competitiveness.

And they might well point out Hong



Waste cardboard exported from Hong Kong.

Kong industry, because of its narrow base, in general is a relatively low water user compared with per capita domestic consumption. With the exception of dyeing and finishing and the electro-plating industries, Hong Kong has few of the heaviest industrial water users, like chemicals, mining, steel, general engineering, machine tools, motor-cars and paper.

A total system of optimum economic use of raw material residuals would certainly cut back on Hong Kong's import bills. But whether or not that would contribute to closing the balance of payments gap could only be assessed after carefully considering what Hong

Kong's "totters" or scavengers, scrap dealers and a few glass recyclers now generate in exports to markets, mainly where there are viable recycling industries.

It is largely an unskilled, labour-intensive industry, but not an inefficient one.

Waste reaching Hong Kong's controlled tips, either direct from industry or through Urban Services Department collection points fed by domestic households, is largely devoid of recyclable materials. These are picked out by hand by Hong Kong's army of scavengers who would have to find alternative employment if the situation were otherwise.

Scrap dealers and scavengers and even industry itself, exported \$605.62 million in waste materials in the year ended September 30, 1981. Earnings were nearly \$100 million more than in the corresponding previous year.

Principal waste export categories are ferrous and non-ferrous metals, paper, precious metals, base metals and synthetic fibres and yarns. They virtually go all over the world. Main importers are Japan, Taiwan, Indonesia, the Philippines, South Korea, Singapore and Thailand.

Japan recycles most of Hong Kong's aluminium cans. The Hong Kong value of a coca-cola can, for example, is roughly eight HK cents. The Japanese determine its value, not on the aluminium content, but on the energy used in the recycling process, illustrating the importance of the energy factor in recycling viability.

Nine times more energy is used in pro-



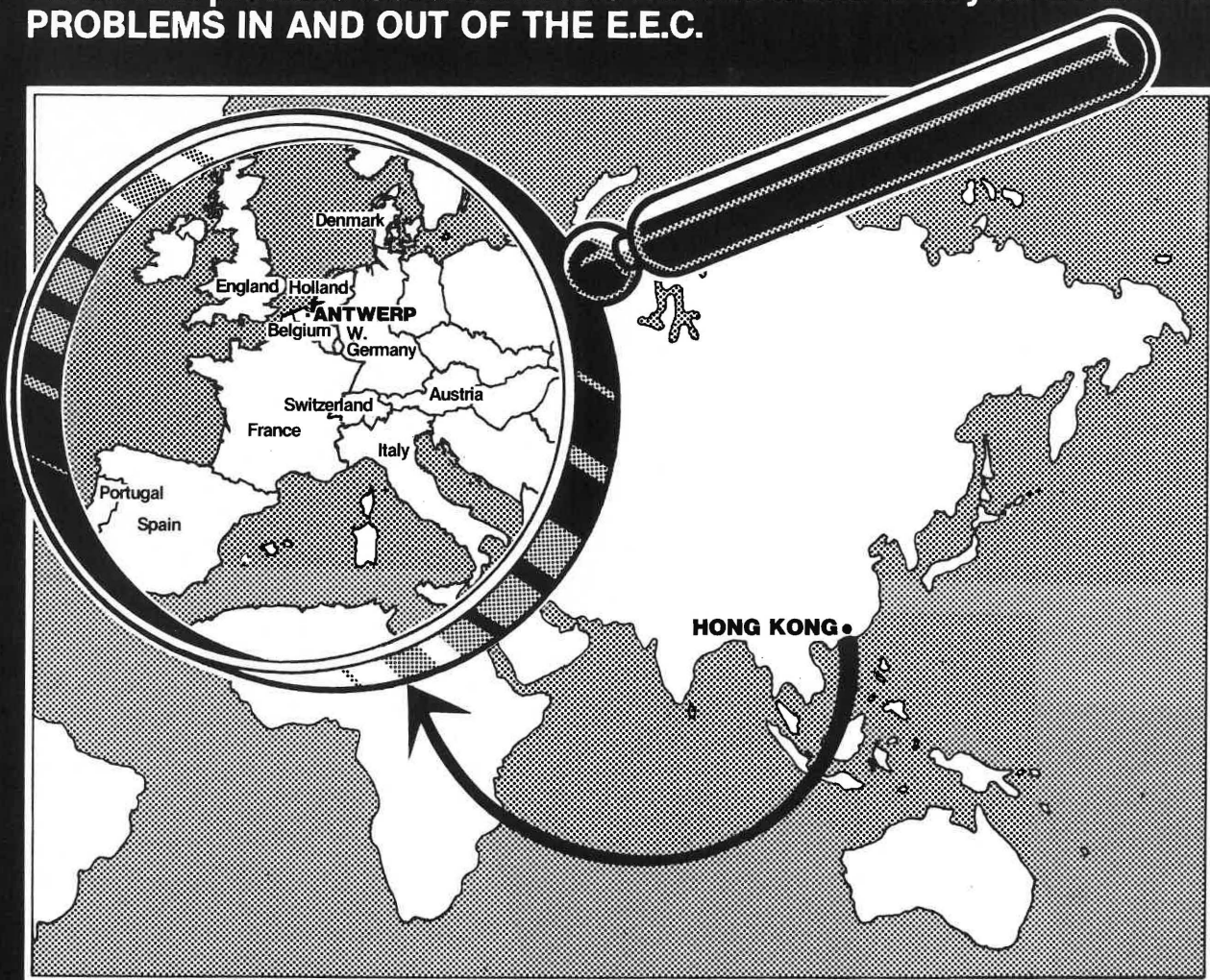
An Urban Services Department truck loads domestic waste for incineration at one of Hong Kong's three incinerator plants.

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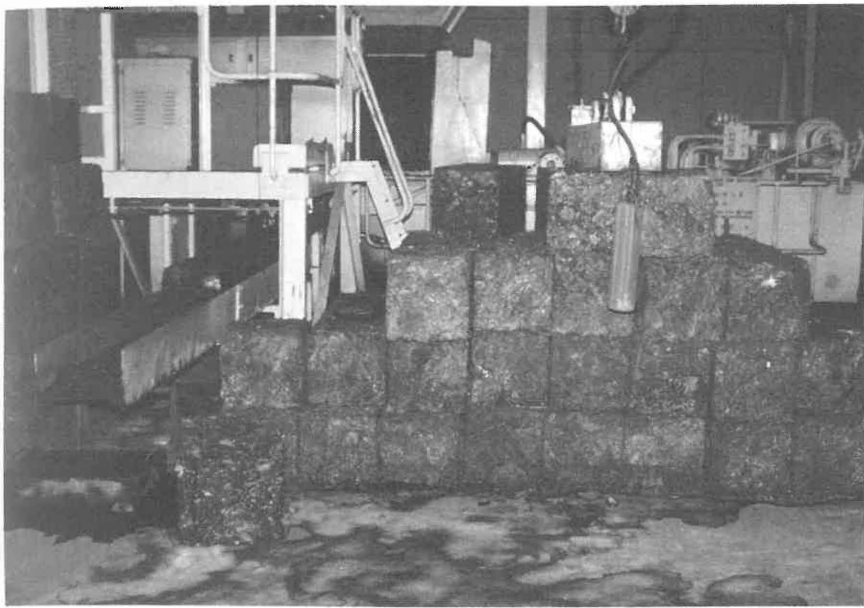


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◀
Ferrous metals crushed for export from Hong Kong to countries with viable recycling industries.

Aluminium from waste cans prepared for export to Japan for recycling that is cheaper than extracting aluminium from bauxite.
 ▼

ducing aluminium from bauxite than in recycling aluminium.

Glass bottles in Hong Kong are sorted by hand according to colour and broken to cullet. That is then mainly sold to small glass works in the New Territories and recycled into new exportable glassware.

Beverage bottles are used again by manufacturers but they are less than enthusiastic about giving up their aluminium cans exclusively in favour of re-usable bottles that require a deposit, have a value and are therefore less likely to create litter than cans.

The only other known self-supporting industrial recycling done in Hong Kong is of ferrous metal from scrapped ships at Junk Bay into reinforcement bars used in civil construction. A factory that made cardboard from scrap burned down and is not known to have reopened.

Japan, Taiwan and South Korea import most of the output of Hong Kong's old motor-car crushing plant at Tsuen Wan. The Transport Department has a contract with the plant to deliver 1,260 old motor-cars a month that are abandoned by owners and often require months of investigation and documentation to be legally written-off.

The plant also handles cars from dealers and such jobs as crushing for export steel from the demolished Hongkong and Shanghai Banking Corporation's head office in Central. Introduction of annual inspections of old cars could raise the number of old vehicles crushed.

Old motor-cars tyres usually end up in China.

Total recyclable waste exported annually from Hong Kong is estimated to



be about 800 million kilograms which is believed to be about 95 per cent of what is collected. There are no figures on what happens locally to the other five per cent.

Examples of what waste industry absorbs in integrated production are harder to find than Hong Kong's few known examples of recycling. But industry for obvious economic reasons does tend to constrain itself and there must be numerous small examples of in-house residual use in local manufacturing processes.

What more can industry do? A lot may depend on what the EPA finds out about what is happening now in the waste stream and its evaluation of that information. A market also has to be found locally for whatever could be recycled and an optimum point determined for viability.

One initial approach could be the creation of a Waste Materials Exchange.

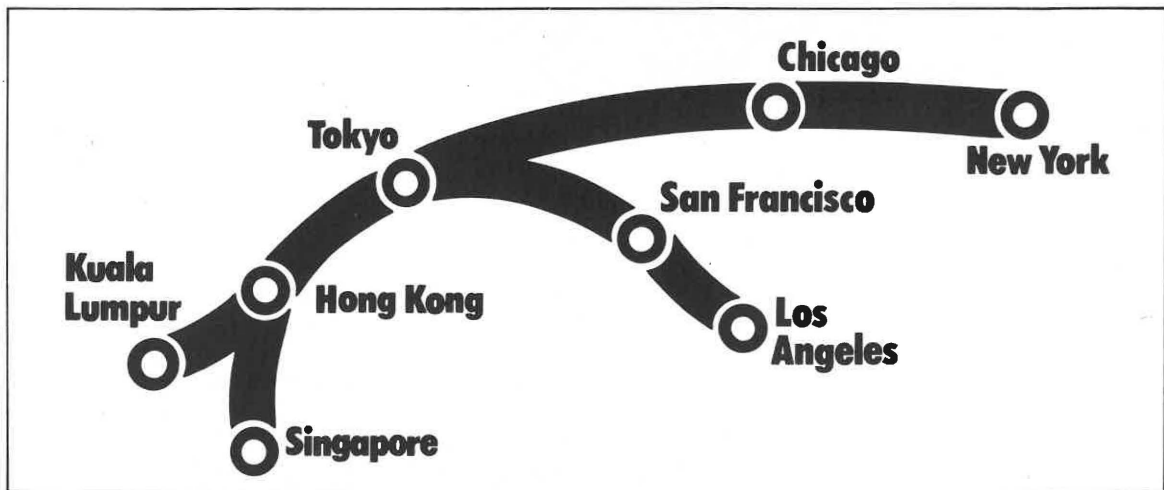
Between one industry and another there is believed to be a good deal of ignorance about what waste each produces and what each might be able to use from the other as a raw material.

Each industry tends to function as a closed shop. An exchange could put each in touch with the other and work itself eventually out of business, as it has done in Britain, where the system of who-to-contact-for-what is well enough known.

A generally more integrated industrial community, conscious of the economic and ecological value of using waste, is an obvious prerequisite to full integrated industry. The community needs also to know more about scientific developments world-wide and how new technologies might help.

An impartial consultant is available to any manufacturer. The role of the Environmental Control Services Unit of the Productivity Centre is to advise

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client companies where they stand on environmental legislation and, if eventually they could be outside the law, not to inform on them but to advise them how to conform in the most cost efficient manner.

While Government hands are full with investigations to formulate basic environmental legislation it seems unlikely to introduce much by way of regulation that would be an incentive to recycling. This loads the dice rather heavily against recycling as a form of pollution control, except on a case by case basis where economic advantage could be found over less capital intensive straight-forward treatment of solid or fluid effluents.

A lot more work has yet to be done to establish within each industry the potentials for economic recycling. Work that might first suggest waste treatment and later recycling is a subject to which the Environmental Control Services Unit will want in future to address itself, in liaison with EPA.

Recycling in its broadest sense also touches the financial sector of any economy. Money is a commodity. The Western world last decade made prodigious efforts to encourage recycling the surfeit of petro-dollars back into investment in new productive resources.

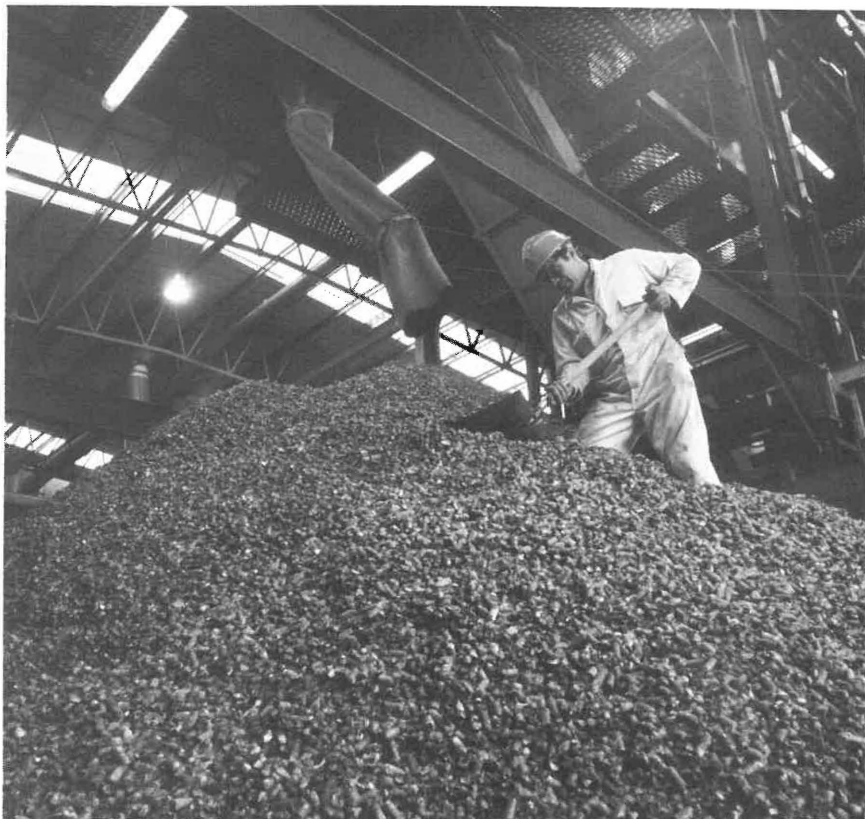
One Hong Kong banker, not so long ago, suggested the high earnings of the property sector in the last few years ought to be recycled back into investment in Hong Kong industry rather than into US dollars and investment abroad.

That could give an impetus to Hong Kong's acquisition of clean industrial technology, integrated production and waste recycling.

Meanwhile, there is a case for suggesting that Government itself of necessity is more environmentally conscious of the need for treatment and recycling in Hong Kong than industry appears to be from its performance.

The Public Works Department is spending \$3 billion over this decade on 40 plants to treat sewage in those designated water zones around Hong Kong where the ecological balance has been found to be most sensitive.

The first zone to be regulated will be Tolo Harbour, where EPA will monitor the water when pollution controls hopefully create a *status quo* in that almost land-locked harbour's current deterioration caused by farming and



This mountain of compressed industrial fuel pellets is made from waste at the Doncaster recycling plant, in the United Kingdom. The pellets have about 66 per cent of the calorific value of coal and the Doncaster plants' annual 10,000 tonnes output is equal to 6,500 tonnes of coal. —COI picture.

the development of new towns.

The Urban Services Department collects Hong Kong's domestic refuse but the PWD is the statutory disposal authority. In addition to PWD controlled tips that help in new land formation, the Electrical and Mechanical Office of PWD operates incinerators at Kennedy Town, Lai Chi Kok and Kwai Chung.

Electro-static precipitators have abated their smoke problem, created itself by the introduction of alternative disposal methods, a danger that always has to be watched, even in introducing recycling.

Future incinerators, if and when any are built in preference to controlled tipping, are likely to be waste-to-energy plants that could provide steam for industry, electricity for lighting and pumping stations and chilled water for airconditioning.

They could be part of whatever overall waste disposal strategy is developed for Hong Kong, in which incinerators switch to burn high calorific waste instead of household waste as they do now. Incinerator ash makes a better reclamation fill than untreated waste, settles more quickly and raises less likelihood of health problems.

The Agriculture and Fisheries Department, through its Waste Control Division set up in 1980, is also involved in treatment and recycling, mainly but not exclusively in the New Territories, in its efforts to dispose of animal waste. Most is slurry because water is used on farms to dispose of it, rather than dry animal husbandry that would use straw.

Of 1,700 tons of mainly pig and poultry manure generated every day 1,300 tons still ends up going, directly or indirectly, into all kinds of Hong Kong water courses. The remaining 400 tons — practically all pigeon and 30 per cent of chicken manure — is mainly collected by private contractors and recycled into fertilisers for vegetable farms and fish ponds.

Very little pig manure is being recycled as fertiliser.

The New Territories Services Department operates two manure collection services at Hong Shui Kiu and Ta Kwu Ling and dumps 10 tons a day at Siu Lang Shui. Another Agriculture and Fisheries Department service, at Pat Heung will be in full operation by March handling the waste from 15,000 pigs to reduce Tolo Harbour pollution.



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The Agriculture and Fisheries Department collects for recycling into fertiliser and is acquiring a site at Kai Keung Leng to process 17 tons a day into 10-15 tons of fertiliser. This is because there is a growing demand for organic fertiliser in Hong Kong not only for farming but for landscaping in the New Territories new towns and along new highways.

There is also a big potential for exporting organic fertiliser to China in the form of compost.

The Department plans to build a bio-gas plant at its Tai Lung experimental farm at Sheung Shui that will dispose of the waste from 4,000 pigs.

Bio-gas (methane) can be used to generate electricity and even drive cars. But its use for those purposes in Hong Kong has not so far been attempted. Yet in India and China thousands of small plants are operating under less stringent fire control regulations than would be enforced in Hong Kong.

Bio-gas plants become more viable at farm sites where the residual slurry can be used as fertiliser.

There is a farmers' waiting list of one year for dried poultry manure produced

by the Department's two plants at Pat Heung and Saikung.

The problem at these places is that dried manure has become expensive to produce since oil prices escalated. The Department is still looking for an alternative energy source, examining the possibility of using bio-gas or sawdust from sawmills, 200 tons a day of which is now dumped at controlled tips.

A small amount of sawdust has for long been used for boiling soya milk to make one variety of preserved bean curd.

Sawdust is also being used to mix with horse manure from the 900 horses at the Royal Hong Kong Jockey Club stables. The end-fertiliser is sold to landscape contractors, vegetable gardeners and even in supermarkets for home gardeners.

But all these recycling experiments and established disposal systems have not made much of a dent on Hong Kong's total animal waste problem. A solution possibly may eventually be found in what is called annelidic recycling of organic waste.

Aristotle long ago suggested earthworms were the intestines of the earth and they could, centuries later, be

Hong Kong's part salvation. Especially one species known as the red wriggler (*Lumbricus rubellus*).

That worm's natural habitat is in decaying vegetable matter, paper, leaves and animal waste and even non-degradable plastic. Under proper conditions the red wriggler will not only eat its body weight daily but excrete "castings" that are themselves a high quality soil enrichment fertiliser.

Besides having a voracious appetite the red wriggler reproduces itself a thousand times in a year. And it lives for three years.

The earthworms are used in the Philippines, Australia, Japan, Canada and the United States. If successfully introduced into Hong Kong the red wriggler could become a dollar-earning industry, exporting the fertiliser it makes as well as enriching the soil of our own farms and flower pots and beds. The worms themselves could also be sold as fish bait.

The Fisheries and Agriculture Department, conscious of the red wriggler's reproductive capability, is starting cautiously by importing a few pounds of them from the Philippines. □



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The Challenging Case for Nuclear Power

There is still widespread reluctance among sections of the public, the media and politicians to accept that nuclear energy should be relied upon as part of our future energy supplies. Questions are raised about environmental impact, safety and economics to which positive and convincing answers can be given. This article, reprinted from the "The Director", the magazine of the British Institute of Directors, is a further contribution to *The Bulletin's* recent series regarding future sources of energy. Previous articles appeared in the November and December 1981 issues.

by Dr. Donald G. Avery,
Deputy Managing Director,
British Nuclear Fuels Ltd.

Energy costs concern all industrialists. They affect our ability to compete abroad and to fend off imports from countries with access to lower energy costs, and have a significant effect on the levels of economic activity at home.

In the short term, the cost of energy to industry is determined as much by Government pricing policies as by economic considerations, but in the longer term, economics must dictate the level of energy costs. There will certainly be no return to the 'cheap energy' era of the '50s and '60s, and there will be substantial incentives for industry to be sparing in its use of energy. But conservation cannot be the complete answer. In Britain, as in the rest of the world, we need economic energy resources to guarantee our future industrial activities.

Nuclear power is such a resource. Already energy generated by 15 nuclear power stations in Britain accounts for about 13 per cent of all electricity produced. By the year 2000, when the Government's programme of one nuclear power station per year from 1982 has been implemented, the nuclear contribution might be nearer 30 per cent.

Currently, the U.K. is enjoying virtual energy self-sufficiency, but this will be transitory. The most recently published Department of Energy projections indicate, that, even after allowing a reduction of 20 per cent in demand for improved conservation, a shortfall of 35m. to 120m. tonnes of coal equivalent is expected between demand and home-produced supply by the end of the century.

Such forecasting is an uncertain business. The extent and timing of any shortfall depends upon the economic growth we can achieve, but even with zero growth, existing power stations

will need replacement, new mines must replace old, and domestic oil and gas will not last for ever. Unless we are to accept that shortage of energy itself is to dictate economic decline, alternative supplies must be found. But fossil fuels are becoming increasingly more expensive to extract, and technology for producing vast quantities of energy cheaply from sunshine, the tides or wind is still a long way off.

Neither can we consider the U.K. energy balance in isolation. The world picture is stark. Population pressures alone suggest that simply to maintain present world standards of living will require almost twice as much energy by the end of the century.

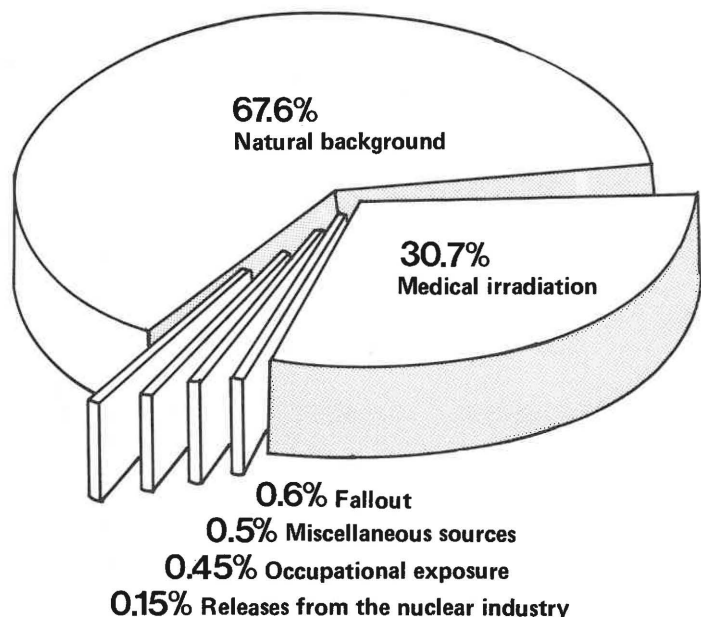
The conclusion, both nationally and internationally, must be that we need to use all the energy sources we can find. To abandon the future use of nuclear power in the U.K. would

require 50 to 75 per cent more coal than can be got today. Abandonment on a world scale would dangerously exacerbate the competition for the declining resources of fossil fuel and promote the danger of confrontation.

Because their fuel costs are low, the Central Electricity Generating Board's Magnox nuclear power stations produce electricity more cheaply than coal or oil-fired power stations. Since the early 1960s, these nuclear 'work horses' have enabled the CEGB to avoid the consumption of large amounts of non-renewable fuel—70m. tonnes of oil or 130m. tonnes of coal, while reducing electricity costs, compared with the coal-fired alternative, by about £100m.

The CEGB's figures for the costs of producing electricity by nuclear, coal and oil, show that nuclear power is the cheapest of the competing systems—in

Radiation Exposure of the UK Population



the past, present and future. The generation costs for power stations currently under construction would be nuclear 2.58–2.77 p/kwh; coal 3.84 p/kwh; oil 8.48–8.97 p/kwh.

Nuclear power offers a bonus that no other energy industry can match. Fast reactors burn plutonium as fuel and at the same time they can convert reclaimed ('depleted') uranium into more plutonium for use as fuel. So nuclear power becomes self-sustaining—a renewable source of energy.

Of all energy sources, nuclear power arouses the greatest controversy. Opponents maintain that it is too hazardous.

But society already accepts that people run risks in other energy industries. Figures for the U.K. since 1970 show that in the coal industry there have been 619 deaths; in Britain's North Sea offshore oil installations, 65; and five at commercial nuclear power installations (none from specifically nuclear causes).

The mining and processing of uranium and nuclear fuel carry their own hazards like any other operations of this kind. Deaths per million man-hours are similar in both coal and uranium mining, but much less uranium than coal is needed to fuel a power station of a given size. Therefore, deaths per megawatt-hour of electricity produced

are about 10 times greater for coal than uranium. In the processing field, in my own company and its predecessors, out of a total of some 12,000 radiation workers who have worked with us in the last 25 years or so, there has been no indication that the incidence of cancer, which can be induced by high radiation levels, has exceeded the average to be expected from data for the U.K. population as a whole.

The accident at the Three Mile Island nuclear plant in Pennsylvania harmed no one at the time, and the extent of radioactivity released is estimated as sufficient perhaps to cause one additional cancer during the lifetime of the two million people living in that area of Pennsylvania. This is not to say that any guarantee can be given of absolute safety for nuclear power, any more than for any other activity. But it can be said with confidence that the nuclear industry devotes proportionately more effort and resources to minimising risk than most, if not all, others.

Much is made of the alleged increased risk because of radiation from the nuclear industry, and from the disposal of wastes. Remember that we are all subject to radiation, wherever we are.

More than three-quarters of the total amount of radiation to which the public in Britain is exposed is natural background radiation. A further 20 per cent results from medical uses, mainly from X-rays. Just 0.1 per cent results from the disposal of nuclear wastes from the nuclear power programme.

Some of these nuclear wastes are highly radioactive, remaining so for a long time. By the very nature of radioactivity, the danger does eventually decay away. The same cannot be said of some other dangerous chemical elements, such as arsenic, which are used in industry. In practice, when considered against the hazards of other naturally occurring and man-made materials the hazards become negligible after a few thousand years, and their disposal can be contemplated in terms of an initial period of storage in suitably engineered structures, followed by disposal via one of several routes that exist—into salt domes in the earth or geological formations known to be stable for long periods, or into or

under the bed of the deep oceans.

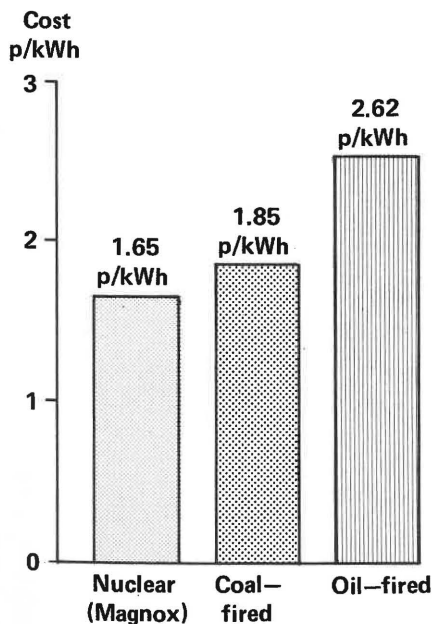
No-one wants nuclear waste, or any other kind, disposed of on his doorstep. But wastes arise, and if we are to enjoy the benefits of the energy, we must accept and deal with them. Up to three per cent of uranium used in nuclear power stations turns up as waste, and because we need so little uranium, relative to coal, to produce the same amount of energy, the quantities of waste are small compared, for example, with the volume of ash from a coal-fired station. By the end of this century the total amount of waste, converted into solid, will require a storage area less than one football pitch. The fly ash resulting from just one year's operation at a large coal-fired power station would fill Wembley Stadium to overflowing.

The nuclear power programme represents a major investment in British industry and will help to maintain jobs in areas of high unemployment. For example, the CEBG estimates that plant contracts placed for the Heysham nuclear power station, near Morecambe, will maintain nearly 5,000 jobs in the North East for three to five years and a further 5,000 jobs could be secured in the factories of the suppliers to the selected contractors.

British Nuclear Fuels Limited is also planning to invest about £3000 m. on its own development programme over the next 10 years, most of which will involve valuable contracts with British manufacturers. Since 1978, Pacific Nuclear Transport Limited, a subsidiary of BNFL, has taken delivery of two specially converted ships and two new purpose-built ships from British shipbuilders. Two further British-built ships have been ordered, for delivery later this year and in mid-1982.

Nuclear energy is a safe and economic alternative to fossil fuels. We all need nuclear power. We also need to explore all additional energy sources and we need to work hard on energy conservation. That way we can look to a future where at least the possibility of improving world living standards can be envisaged. □

Comparative Generation Costs for CEBG Power Stations 1980–81





More Hong Kong Shippers use Well-Located Antwerp

Incoming cargo from Hong Kong at the Belgian port of Antwerp has almost doubled every year since 1975, with the exception of 1978.

In 1981 imports and inward transit cargo amounted to about 20,000 tonnes. Exports and outgoing transit cargo in the same period reached 40,000 tonnes.

The cargo traffic between Antwerp and Hong Kong, however, represents only a small part of Antwerp port's overall traffic that last year reached 80 million tonnes.

But Antwerp has taken note of the growth rate and the high value of the cargo involved.

It wants to see two-way shippers encouraged and the flow to continue to expand by continuing to provide efficient and economic services.

Imports from Hong Kong are mainly leatherware, textiles, machinery and clothing. About 45 per cent is in transit to other parts of Europe.

Exports to Hong Kong from Antwerp are mainly chemicals, iron and steel products, machinery, glassware, fertilisers, foodstuffs and building materials. About 40 per cent is in transit from other parts of Europe.

Twenty-three shipping lines operate on the Antwerp-Hong Kong link, including most of the regular lines that sail between Western Europe and Hong Kong. Some are full container services. Others combine containers and conventional cargo, or offer special services such as reefers.

Why are Hong Kong shippers increasingly using Antwerp? The answer is that it is at the heart of the European Community, Hong Kong's biggest trading partner after the United States. A German study team from Bremerhaven in 1980 developed a new theory to determine which North Sea seaport had the best location for the European consumer market.

They combined the average distances from each of the 13 main ports in the Hamburg/Le Havre range with each city of more than 40,000 inhabitants in France, Belgium, the Netherlands and West Germany and the number of inhabitants of each of these large cities. The result was a classification in which both the distance in kilometers and the importance of these cities as consumption centres were taken into account.

In this classification Antwerp ranked first with an advantage over the next two best ports of 15 and 17 per cent respectively for road and railway transport. When inland navigation distance was taken into account Antwerp ranked third with only four per cent difference to the best listed port.

The overall result, however, when combined with the various inland transport techniques — rail, road and inland navigation — revealed that on the whole Antwerp has a more favourable location in comparison to the other ports. It ranked first with an advantage ranging from seven per cent over Rotterdam to

58% over the last port studied.

Antwerp's geographical advantage has largely contributed to the growth of port traffic which rose to about 80 million tons in 1981. In spite of a general economic recession this was very near the 1980 record of 82 million tons.

The cargo flow is split into 30 million tons of general cargo and 50 million tons of bulk cargo. Compared to neighbouring ports, more high value general cargo is loaded in Antwerp than in any other port of West Europe. One ton of general cargo is three times more important for a port than a ton of bulk cargo and 12 times more than a ton of petroleum.

Thus Antwerp, with its annual general cargo traffic of some 30 million tons, ranks second in Europe after Rotterdam with its enormous oil traffic, but before Hamburg, Bremen, Marseille, London, Le Havre, Dunkirk and Amsterdam. Excluding petroleum, Antwerp handles 17% of the incoming and 26% of the outgoing traffic of all the North Sea ports.

An even larger amount of total cargo flow consists of transit cargo. Last year the share of transit traffic amounted to 40%. The remaining 60% is bound for the immediate hinterland of Antwerp which is the Belgo-Luxemburg Economic Union. More significant is the amount of general cargo in bond. It has become more important than the national B.L.E.U. traffic.

Antwerp's best customer is West Germany followed by France, the Netherlands, Switzerland, Italy and many other European countries. Thus Antwerp is often called the first "French" port for the export of general cargo, since French exporters ship more general cargo via Antwerp than via any French port. The annual West German cargo traffic amounts to 18 million tons.

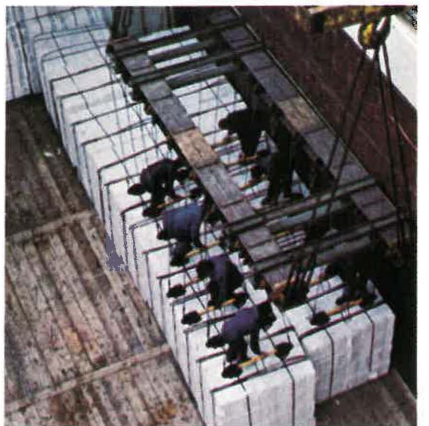
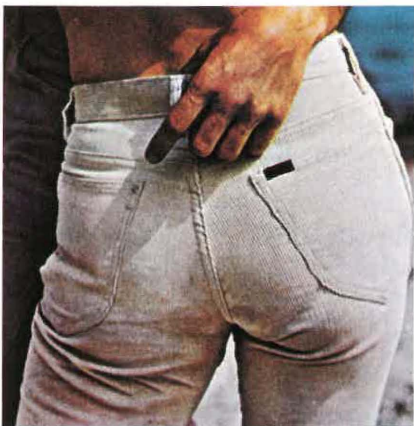
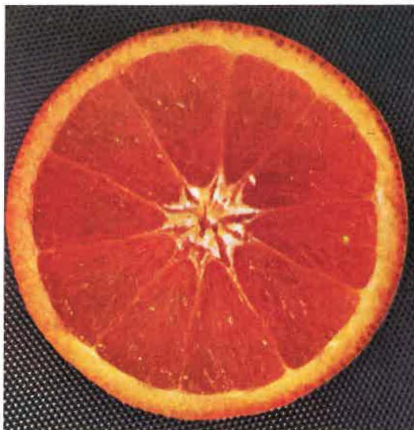
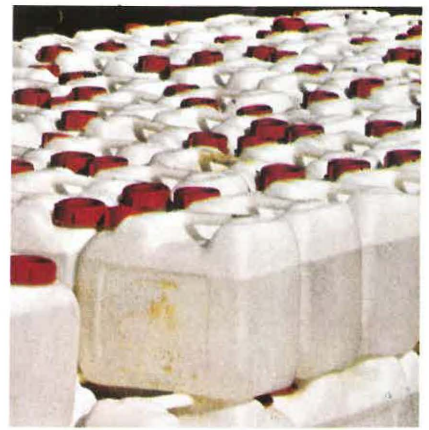
Since the transport of goods to and from the continental hinterland has intensified, Antwerp has made great efforts to improve its maritime access. Through the river Scheldt, which by intensive dredging has been deepened considerably. This means vessels of some 85,000 DWT regularly call at Antwerp fully laden. The port also frequently receives partly loaded bulk carriers of 150,000 DWT or more. Third generation container vessels are a familiar sight.

The introduction of VHF, information bases and radar have greatly improved the safety conditions and traffic-coordination. A recent agreement between the Netherlands and Belgium completes the radar-chain down to the sea.

The port is linked to the European waterway, motorway, and railway networks in all directions. Inland navigation accounts for the largest amount of traffic to and from the port via the new Scheldt-Rhine link. This gives the port immediate access to the European waterway network and almost 65,000 barges and lighters a year find their way along it to the surrounding countries.

At the national level, the Albert Canal is the most important waterway, directly linking the highly industrialised regions of Liege and Charleroi to Antwerp.

Antwerp is also a main European railway port. The city is the terminus for 12 major lines and some 100 goods trains travel every day between Antwerp docks and different European countries. The railway network in the port itself is 835 km long.



Products regularly in the Antwerp cargo traffic flow – not all as suggestive as the jeans but which range from tractors to fruit, chemicals, sulphur, fertiliser and transport equipment, to name but a few.



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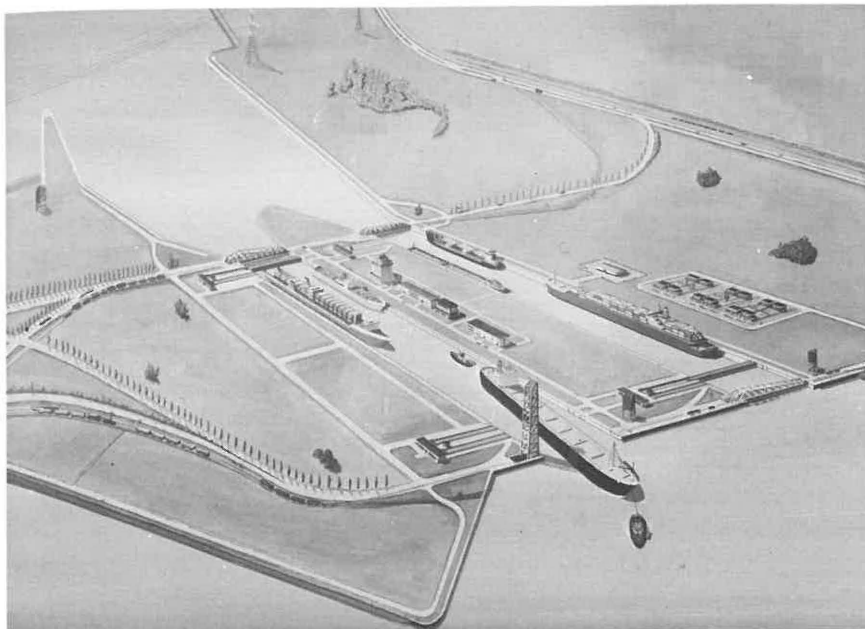


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Construction of Berendrecht Lock, the biggest sealock in the world, began last year.

The infrastructure includes a special container railway terminal and a terminal for combined road/rail transport such as the piggy-back and kangaroo systems.

A trucker may drive from the port area to most of the main European cities on highways without meeting a single traffic light. Indeed, the port is directly linked to the European motorway network in which Antwerp is a major junction.

Antwerp is also served by two airports, one regional and one international and both within a 50 km range. Pipeline connections provide for the transport of a number of gaseous and liquid products, domestically and abroad.

The considerable amount of transit traffic (40% of the total) has led to the development of Antwerp as an important centre for the storage and distribution of goods. Goods are indeed not always destined for immediate onforwarding. The port has 700 hectares of open-air storage space and 270 hectares of covered storage space. Antwerp easily surpasses the covered storage space of any other European port. Of this, 130 hectares immediately behind the quays, are suitable for physical distribution.

Antwerp's specialisation in warehousing goes hand in hand with modern warehouse administration. Thus, in the specialist firms, physical distribution is mostly operated via data processing so that at the press of a button all the necessary information with regard to stocks and dispatching possibilities can be obtained, which means rapid and flexible operations.

Numerous Belgian and foreign companies such as Dupont de Nemours, Ford, GMC, Monsanto and several German and Japanese groups use Antwerp as a distribution centre for their goods exported to Western Europe, Northern Africa and/or the Near East.

Recently, the People's Republic of China set up a buffer-stock in Antwerp for the distribution of their handicraft and art-pieces.

To distribute goods via a stock-point under customs control in Antwerp, interested companies have a choice of three formulae:

The first consists in employing an Antwerp firm's services, to avoid investments in renting or building and personnel.

The second formula is the leasing of warehouses, also with the help of local firms, whose experience can be most useful to facilitate contacts and formalities.

Thirdly, a company can build a warehouse to its own design in cooperation with an Antwerp firm.

On storage, the efficient functioning of Antwerp is due, to a large extent, to the liberal concept of customs regulations and to the way local customs officials are co-operating with the port users. Goods can be kept under bond for up to, even over, two years without any fiscal charges whatsoever. They can undergo all caretaking, reconditioning, repacking and mixing operations without any customs interference.

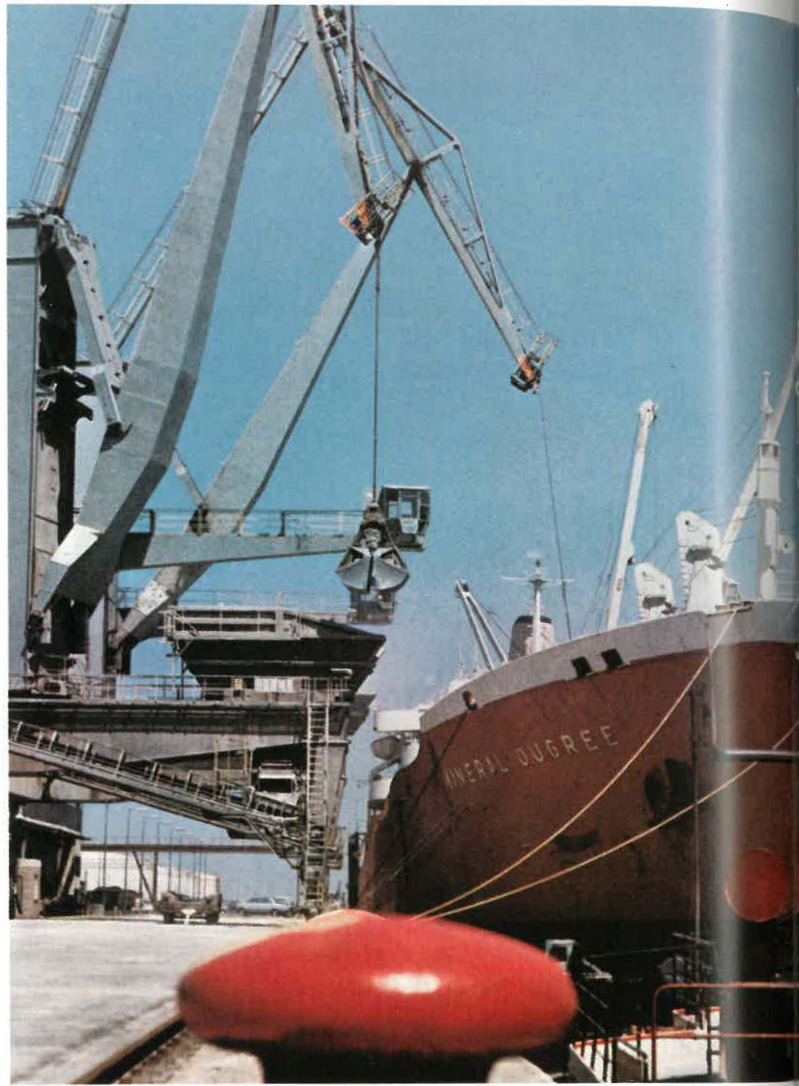
The cost of these handlings does not alter the original customs value in as much as the goods have not been re-sold. For this purpose in Antwerp there is a public bonded warehouse, five subsidiary warehouses, some 120 private warehouses for transit cargoes and some 150 other storehouses and tanks.

In addition, Antwerp port tariffs are conceived in a most flexible way. The Antwerp Port Authorities apply official and published tariffs. Apart from taking into account special cases and applying reduced dues for regular customers, any increased charges are announced well in advance allowing clients to build such increases into their selling rates.

Storage, handling, haulage and most of the other services are done by private enterprise. The major share of expenditure for preshipment or onshipment, transshipment, receiving and distribution of goods, as also ships stevedoring and allied work, is based on contracts concluded with the private sector. ➤



Transshipment of bulk cargoes.



For a number of operations there are no fixed tariffs, prices being determined in consultation with the port user, taking into account the size of the lot, the unit weight, the packing, the destination, etc. This particularly applies to commodities being exported from Europe via Antwerp. Compared to fixed tariffs which lack flexibility, this method is more profitable to customers. For other operations such as the reception of goods, fixed tariffs do exist.

In Antwerp a qualified labour force of 10,000 specialised dockworkers, whose skill and energy are highly appreciated by the port users, are at shippers' disposal 365 days a year, 24 hours a day. A comparative study made by three British official bodies found Antwerp is the fastest of all large West European and British ports in cargo handling. With 28 tons of general cargo loaded and 31 tons of general cargo unloaded per gang/hour Antwerp is ahead of its competitors. Increasingly, shippers not only use Antwerp as a loading or discharging port for their European traffic, but also for their overseas trade with other continents. American grain, bound for Russia, switches ships in Antwerp and Japanese cars are dis-

charged for oncarriage to Scandinavia. Overseas coal and sulphur are shipped to Great Britain via Antwerp.

Transshipping goods via the Belgian port does not involve much waiting time. There are so many sailings in and out that the more efficient transshipments take place within two or three days. Some 14,000 regular sailings are offered per year, covering over 800 foreign ports and places. The sailing frequency to 325 overseas ports is at least once a week; to 50 ports at least once a day.

The municipal port of Antwerp is directly run by the City Council. The city owns the port infrastructure (locks, quays, docks, etc.). It is responsible for the maintenance, modernisation and expansion of the port complex and runs the city-owned port equipment. The major share, however, of port equipment, is privately owned. The total port area covers some 25,000 acres on the right bank of the Scheldt river. The total water surface of the

docks-complex now amounts to over 1,300 hectares.

Of the 99 km of berthing facilities for sea-going ships along quays and jetties, 35 km are suited for deep-draught ships. Almost all quays have very wide quay-aprons behind which ample storage facilities have been created.

At the berths the port authorities and the private sector have together installed more than 500 general cargo quay-cranes and, in addition, have 70 mobile cranes at their disposal. Specialised equipment includes 21 grain elevators (on quay or floating), 18 loading bridges for bulk goods and nine sack loaders.

Apart from the 17 floating cranes with lifting capacities up to 150 tons, the Port Authority last year introduced a new self-propelling floating derrick with a lifting capacity of 800 tons. Eight container gantries have been installed in the six container terminals, while another three gantries are on order and will be delivered by mid-



1982. Adjoining the container installations there are 12 roll-on/roll-off berths.

The Port has a seven-year plan (1979-1985) of investment to safeguard Antwerp's position as a leading European port. This plan includes a new harbour dock, scheduled to be officially opened later this year.

Statistics on commercial transit operations (i.e. pure commercial operations

by which goods are purchased and/or sold abroad) show that Antwerp firms account for 40% of all such operations in the Belgo-Luxemburg Economic Union. In 1980, the total trade value of the commercial transit operations made by Antwerp companies amounted to 9,800 million Belgian francs, compared with 24,300 million francs for the entire Luxemburg-Economic Union. □

The pipeline network in the port has a total length of over 250 km. (far left)

Antwerp has more than 500 general cargo quay cranes, 70 mobile cranes, 21 grain elevators and 18 loading bridges. (centre)

Storage tanks at Antwerp, one of the world's main petro-chemical centres. (left)



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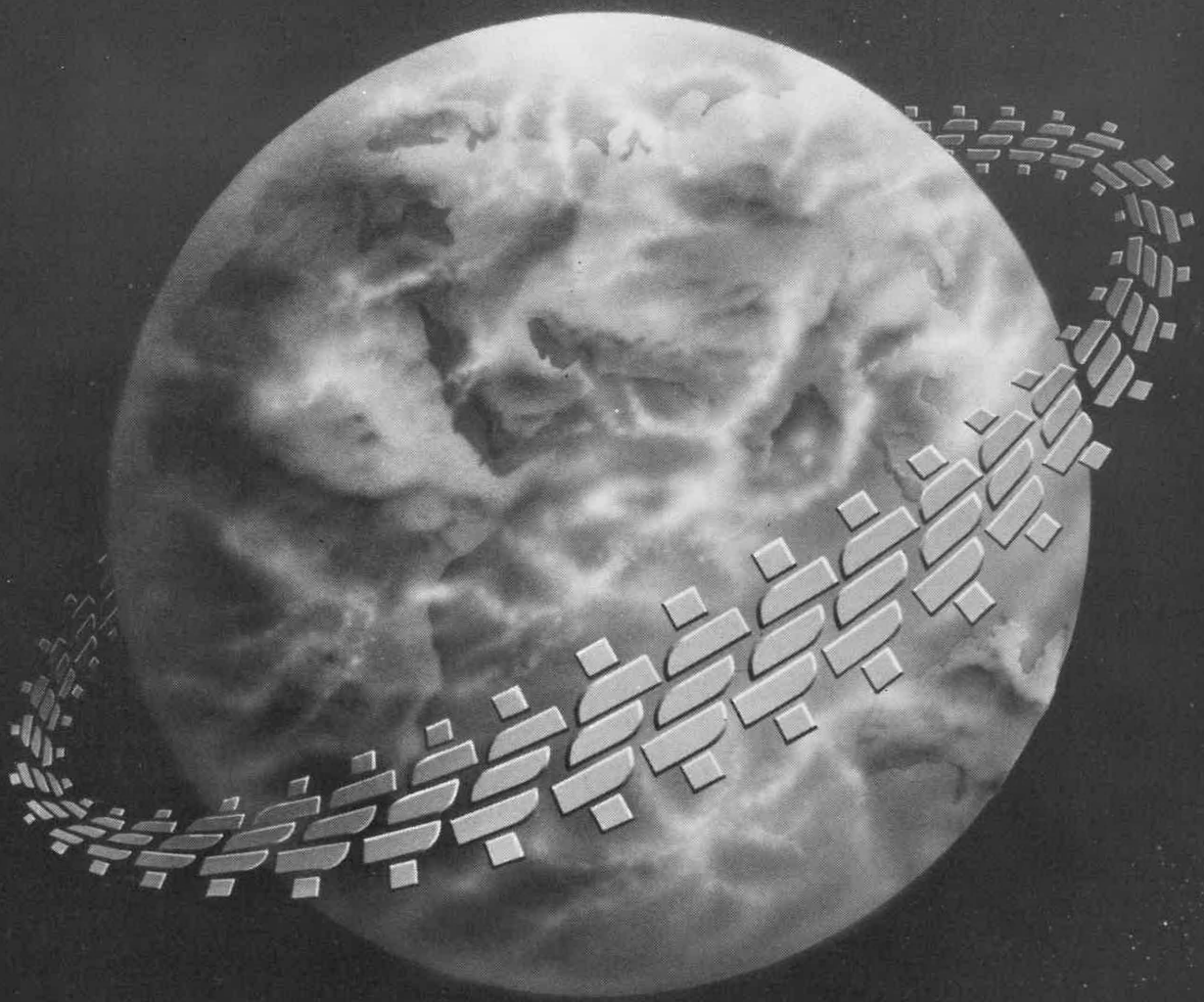


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AFS to start Hong Kong Student Exchange Programme

Students in Hong Kong's secondary schools will be offered an opportunity to spend a school year living with families abroad, starting in 1983, on AFS, the leading international teenage exchange programme. Under a seed money grant from trusts under the administration of the Hongkong Bank Trustee Company, AFS will open a Hong Kong office this Spring and begin working with the schools which have expressed interest in participating and with companies who wish to make this programme available to their employee families.

AFS operates in 55 countries

AFS international/Intercultural Programmes is the largest privately-funded, community-based volunteer organization of its kind in the world. As a non-profit organization without political or religious affiliation, AFS exchanges teenage students through a network of professionally staffed offices and trained volunteers in 55 countries. Since 1947, over 110,000 AFS students have experienced the world beyond their own communities by living with a host family, attending a local secondary school and taking a

full part in the life of their host communities.

In 1981/82, another 8,000 students between the ages of 16-18 are sharing in this experience. AFS volunteers in each participating community work with students, families and schools to provide as much opportunity as possible for growth and learning by everyone involved. Over 100,000 volunteers are active in the AFS network, which extends into some 5,000 communities around the world.

Asia is the fastest growing part of the AFS world. Programmes in Japan, Australia, New Zealand, Indonesia, Malaysia, Sri Lanka and Thailand now involve over 1,700 participants. The Chinese government has chosen AFS to launch their first formal international teenage exchange programme and discussions are in progress with a number of other Asian countries.

Hong Kong programme

AFS will offer the Hong Kong community a two-way programme. Families and schools will have an opportunity to host teenagers from abroad as well as send their own students. Initial exchanges are foreseen between Hong Kong and the United States, the United Kingdom, Canada, Australia and New Zealand. Each student participant would live with a family, attend school at an appropriate level and take a full part in the life of his or her host community. The programme is expected to grow to 50-60 participants over the next few years.

The first Hong Kong student participants will be recruited starting this Fall from among students at the Form 5 level. Those who are admitted to Form 6 will have their places held for their return to Form 6 the following year. For the year they are away, some schools will offer their places to AFS students from abroad. These arrangements will be worked out by AFS with each participating school.

The AFS Hong Kong programme has been developed in consultation with local school principals. They include: Rev. Joyce Bennett, St. Catharine's School for Girls, Kwun Tong; Rev. A. J. Deignan, S.J., Wah Yan College, Kowloon; Father Barrett, Wah Yan College, Hong Kong; Mr. Luke Yip, St. Stephen's College, Stanley, Mr. Paul

Chan, Concordia Lutheran School, North Point and Sister Jeanne Houlihan, Maryknoll Convent School, Kowloon.

A number of Hong Kong firms have expressed interest in offering the AFS programme to children of their employees. A participating firm will publicize the opportunity internally, offer partial or full scholarship support for a designated number of places, and distribute applications to employee families who express interest. Selection will be handled entirely by AFS. Company families will also be encouraged to host AFS students from abroad.

AFS is dedicated to offering this programme to qualified students, regardless of their ability to meet the participation fees. The fees for participants who do not apply through a company will be set well below the HK\$25,000 cost of this experience, depending on need, with companies and other AFS supporters around the world providing the difference through partial scholarships. AFS hopes to secure much of this support from the Hong Kong business community.

The Chamber is offering interested members an opportunity to discuss this programme with Bill Dyal, President of AFS International, and other senior staff members at a business roundtable luncheon on April 2. Here is what two AFS Participants last year think about their experience:

My AFS experience has been very rewarding. I have not only begun to understand and appreciate another culture, but my own and my values as well. Now the world seems so small to me. I've begun to look at the world with an open mind and in a practical way.

— Kenny Boon Teck Kuek
Malaysia

Living in another country has allowed me to understand people and events more. I have been able to see history and world events through another perspective. Meeting other AFS students especially has increased my knowledge and has decreased my prejudices about the rest of the world.

— Kathleen Frances Kent
Australia



AFS students enjoying a musical moment.

The In-tray

New Members

Twenty-six members joined the Chamber in January and February:-

Arral and Partners Ltd.
 Brother's Fai Trading Company
 Connaught Trading Company
 Dimplax International
 Emedil Company Ltd.
 Fanland (HK) Ltd.
 Fu Lim Overseas Trading Company
 Hong Kong Industrial Estates Corporation, The
 International Corporation
 John Allan, Ltd.
 Ka Luen Trading Company

Keystone Enterprises
 Melcosa Far East Ltd.
 Moller & Co. Textiles Ltd.
 Multi-Ownership & Hotels (HK) Ltd.
 Multiwear Int'l Development Ltd.
 Onward Trading Company
 Petersfield Ltd.
 Pyramids International
 Second Image (HK) Ltd.
 Sperry Ltd.
 Steven International Ltd.
 Studio 268 Ltd.
 Telemac (HK) Ltd.
 Tin Wah Gloves Fty. Ltd.
 Tse Yu Hong



Mr. R. Fell, Hong Kong's newly-appointed Commissioner for Securities, addressing the Chamber's monthly roundtable luncheon on January 11.



Mr. Abdullah Dhalan (centre), Director-General of the Jeddah Chamber of Commerce and leader of a three-member delegation from Saudi Arabia, meet members of the Chamber's Arab Committee on January 12. The Chamber committee endorsed the visiting delegation's proposal for a seminar in Hong Kong to promote industrial investment in Saudi Arabia and promised appropriate assistance.

The Chamber's Committee Members Dinner

A solution to the future of Hong Kong must be found, the Governor Sir Murray MacLehose, said at the Chamber's committee members dinner at the Mandarin Hotel on January 21. The Governor added: "There is time and we must keep our nerve." He said it was necessary to "reconcile the understandable position of the Chinese Government on Hong Kong with preservation of what makes Hong Kong's contribution possible as a free port and an industrial, commercial and financial centre."

Sir Murray said Hong Kong's economic performance last year was better than expected. Gross domestic product grew by 10 per cent in real terms.

It was the last time in 8 years Sir Murray was guest of honour at the committee members' annual dinner.

Mr. David Newbigging, Chamber Chairman, told Sir Murray: "During your governorship Hong Kong has perhaps progressed further than in any other decade of its history."

He said the really important point in understanding the "MacLehose years" in terms of Hong Kong's domestic affairs was that both economic and social development had been rapid and had run hand in hand.

A vital factor had been a general harmonious partnership between the government and the community.

"Gone are the days when large commercial organisations took the view that what was good for them was automatically good for Hong Kong," said Mr. Newbigging. "Today it is the other way round.

"Leaders in the private sector take intense interest in the economic, social and political developments affecting Hong Kong. Their efforts to contribute positively to these developments abound across a wide spectrum of activity."

Mr. Newbigging spoke of the specific contribution to the community made by the Chamber and he emphasised two points:



Sir Murray was welcomed to the dinner by Mr. Newbigging and the Chamber's Director, Mr. J.D. McGregor (right).

"First, whether its views coincide with those of the government or not, it is the Chamber's invariable practice to communicate with the government in terms which are both responsible and constructive.

"Secondly, it is sometimes overlooked how much time, effort and good horse sense is provided by the individuals on the Chamber's committees and the organisations they represent."

"I acknowledge all that you have said about the friendly and constructive and wholly satisfactory state of the relationship (of the Chamber) with the government," Sir Murray told Mr. Newbigging in his speech.

"I need not commend the Chamber to my successor because he knows all about it already and is known to many of its members, but I could not wish him a happier relationship with it than I have had," Sir Murray added.



Sir Murray MacLehose ... "Friendly and happy and wholly satisfactory relationship ..."



Mr. David Newbigging ... "harmonious partnership ..."



Sir Murray (left) shares a joke with Mr. Newbigging, Chief Secretary, Sir Philip Haddon-Cave and Sir Y.K. Kan, Chairman of the Trade Development Council.

Trade in Progress

Hong Kong Overall Merchandise Trade (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980	% Change
Imports	125,377	100,375	+25
Domestic Exports	72,641	61,914	+17
Re-Exports	37,840	26,955	+40
Total Exports	110,481	88,869	+24
Total Trade	235,858	189,244	+25
Balance of Trade	-14,896	-11,506	+29

Imports : Major Suppliers (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
Japan	29,073	22,897
China	26,436	19,628
USA	13,257	11,968
Taiwan	9,751	7,058
Singapore	9,616	6,576
UK	5,730	4,961
South Korea	5,009	3,397
Fed. Rep. of Germany	3,059	2,648
Switzerland	2,586	2,591
Australia	1,847	1,559

Imports : Major Groups (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
Raw materials	50,776	42,022
Consumer goods	33,359	26,246
Capital goods	18,394	14,424
Foodstuffs	13,164	10,814
Fuels	9,682	6,868

Domestic Exports : Major Markets (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
USA	26,489	20,744
UK	6,873	6,068
Fed. Rep. of Germany	6,169	6,634
Japan	2,697	2,131
China	2,535	1,373
Australia	2,467	1,795
Canada	2,130	1,596
Singapore	1,583	1,640
Netherlands	1,397	1,408
France	1,323	1,254

Domestic Exports : Major Products (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
Clothing	25,154	20,904
Toys, dolls and games	6,666	5,544
Watches	5,231	4,747
Textiles	4,809	4,074
Radios	3,519	3,562
Electronic components for computer	1,978	1,250
Electric fans	1,200	583
Handbags	1,009	932
Hairdryers, curlers and curling tong heaters	825	725
Footwear	742	556

Re-exports : Major Markets (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
China	7,169	3,965
USA	4,332	2,759
Indonesia	3,861	2,471
Singapore	2,980	2,272
Japan	2,544	2,018
Taiwan	2,215	2,058
South Korea	1,268	813
Macau	1,253	845
Philippines	1,161	823
Nigeria	969	735

Re-exports : Major Products (HK\$M)

	Jan.-Nov. 1981	Jan.-Nov. 1980
Textiles	6,351	3,826
Chemicals and related products	3,252	2,561
Crude materials, inedible except fuels	3,022	2,119
Photographic apparatus, equipment and supplies and optical goods, watches and clocks	3,079	2,527
Electrical machinery, apparatus and appliances and electrical parts	2,809	1,774
Non-metallic mineral manufactures	2,515	2,181
Articles of apparel and clothing accessories	1,994	1,400
Food	1,893	1,253

Values and volume - monthly progress (all values in HK\$M)

	Imports		Domestic Exports		Re-exports		Total Trade
	Value	Quantum Index (1973:100)	Value	Quantum Index (1973:100)	Value	Quantum Index (1973:100)	
1978	60,056	152	40,711	150	13,197	145	116,964
1979	85,837	176	55,912	175	20,022	184	161,771
1980	111,651	209	68,171	195	30,072	253	209,894
<u>Monthly Average</u>							
1980	9,304		5,681		2,506		17,491
Jan. 1981	10,685	231	6,346	211	3,328	320	20,359
Feb.	9,091	192	3,938	130	2,878	275	15,907
Mar.	11,326	238	5,784	191	3,326	318	20,436
Apr.	11,398	237	5,844	190	3,328	315	20,570
May	11,737	242	6,880	221	3,422	326	22,039
June	11,441	232	6,830	216	3,266	309	21,537
July	12,314	249	7,362	228	3,282	317	23,058
Aug.	11,262	223	7,487	227	3,464	323	22,213
Sept.	11,710	228	7,659	229	3,836	350	23,205
Oct.	12,073	232	7,534	225	3,691	329	23,298
Nov.	12,497		7,037		3,947		23,481

Area Comparison (HK\$M)

	Imports Jan.-Nov. 1981	Domestic Exports Jan.-Nov. 1981	Re-exports Jan.-Nov. 1981
South and East Asia (excluding China)	60,274	8,271	17,632
China	26,436	2,534	7,168
Europe	18,055	21,068	2,992
(EEC)	(14,454)	(17,512)	(2,372)
North America	14,055	28,618	4,601
Australia	1,847	2,467	592
Africa	1,365	3,429	1,890
Middle East	1,251	2,965	1,766
South America	615	1,237	331
Rest of world	1,479	2,052	868

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本會動態

本文內容乃摘錄自執行董事向理事會及其他工作委員會發表之每月報告。

財政

本會一九八一年度之草擬帳目顯示收入略比支出為多，盈餘約為七萬三千港元。美國訪問團的開支費用原不包括在本會八一年度財政預算之下，不過現時卻可以納入開支帳項而無出超之虞。收入之中包括數十萬意外之財，來自兌換存款所賺取的外匯。

會員

一月底的會員總數為2,689。自印發一九八二年度的徵收會費通知以來，共有五十九間會員機構退出，二千二百九十八間會員機構已繳費（是一九八一年度會員數目的85.5%），收入達四百一十三萬六千四百港元。迄今尚有三百三十三間會員機構未付會費，不過在二月底限期屆滿之前會員將陸續交費。

委員會晚宴

本會一九八二年的委員會晚宴於一月廿一日假文華酒店舉行。本會主席紐壁堅於席上首先致詞，讚揚港督麥理浩爵士十年來的政績，而港督亦就香港現今與將來的經濟與社會發展情況，發表了詳盡而令人鼓舞的演詞，並特別提到總商會、各委員會與會員為香港發展所作出的貢獻，又指出政府與總商會之間一向保持良好關係。

紡織業委員會

各會員於一月十三日開會，特別討論新近簽署的多種纖維貿易協定草案擬所可能產生的影響。其後本人曾就委員會的意見以書面向工商署長提出。該意見書副本業經印發予其他對此問題感興趣的團體，日後可能在其他地方刊出。

船務委員會

此委員會於一月十四日開會，成立了一個關稅常務附屬委員會，由李國賢先生出任主席。此附屬委員會將研審有關領港費、櫃口理貨員與碼頭裝卸工人工資、帶解纜費等問題，並向船務委員會提供意見。

西歐貿易區委會

此區委會在一月十九日與香港貿易發展局及英國航空公司聯合接待來自英國的八人貿易團。招待會上討論了多項該團感興趣的話題，特別是中國的最新發展。

阿拉伯貿易區委會

一月十二日，此區委會接待了來自沙地阿拉伯的三人代表團。該團由吉達商會的常務董事率領，希望在香港舉辦一個研討會，促進港人在沙地阿拉伯的工業投資。本會答應提供適當的協助。

尼日利亞貿易團

由本會貿易部高級經理陳煥榮先生率領的貿易團，於一月九日離港赴尼日利亞，為期兩週。此行相當成功，在四日的產品展覽會上，逾二千五百名商人參加，簽署訂單價值九千二百萬港元。

澳洲貿易團三月啓程

本會於一月廿二日為參與澳洲貿易團的會員舉行集會，簡介是次行程的程序。該團將訪問布里斯班、墨爾本與雪梨。

中國

本會現正安排中國國務院國家經濟委員會秘書長來港參觀香港的工廠，目的是實地考察香港的電子、紡織與金屬工業。

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圓桌午餐例會

證券監理專員霍禮義先生一月十一日在本會圓桌午餐例會上致詞。由於表示有興趣參加者眾，午餐例會的地點改在富麗華酒店舉行。下次的舉辦日期在二月。

春節聯歡晚會

本會二月五日舉行的春節聯歡晚會十分成功，逾六百名會員與嘉賓參加，濟濟一堂，熱鬧喧天。本港著名歌星陳潔靈登台表演，唱出多首動聽的新舊名歌。深受歡迎的抽獎節目送出多份名貴獎品，得獎幸運兒無不笑逐顏開。

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廢料還原再用——港人迴避的工業

香港現正為工業初步引進廢料還原再用的方法——就是把廢物渣滓轉化成可再次運用的原料。現時香港把大部份可供再利用的廢物輸送出口，不過把廢料還原再用既是最終能保持環境清潔的方法之一，又是綜合生產的一部份，若其利潤與出口競爭能力受到環境保護法例、能源成本與所有公共事業更大的影響，則其經濟方面的可行性勢將更受垂注。

與此同時香港的大量牲畜糞便問題亦可能得以部份解決，因為有關當局將利用一種蚯蚓每日排出相等於其體重的排洩物，成功地加以轉化為一種需求極殷的肥料。

香港現有的廢料還原再用方法及其發展與改進的可能性，目前正由環境保護處進行研究。

該處將於一九八二年向廢物管理政策委員會提交報告；該委員會設立的目的，是就一九八〇年通過的廢物處理條例，向港府建議有關廢物處理及再次利用的可能性。

該條例為全香港提供一個法定的廢物處理計劃，而有關廢料還原再用的報告以及未來動向，是目前籌備這項計劃所要研究的九個課題之一。

此外，港府更僱用不少顧問參與上述計劃。其中一項顧問研究工作，是採用電腦協助進行操作、籌劃與控制廢物的收集與處理。另一項顧問研究工作是化驗有毒及難於處理的廢物，並為處理廢物的設施作出建議。

該項條例，一如其他已經通過或正在籌備階段的保護香港環境法例，一般來說是沒有追溯效力的。因此，受到法律管制的主要都是新投資或遷移廠址的工業。

該條例的條款並有明確規定盛載飲料及液體的容器容量、設計、用料構造。政府可要求製造商採用一種用後會自行化解的容器，以代替膠質或鋁質者。

同時，政府最終會把工業廢料所佔香港處理廢物的費用，直接移交工業界承付，而不是如目前由社會大眾分擔。

政府施行的方法之一是為工廠設立地點適中的廢物轉送站，工廠須向政府繳納使用費，而此項收費較諸目前工廠僱用專車把廢物運送至垃圾池的運費為便宜。

現時香港政府每日處理的六千噸廢物之中，工商業的廢物就佔去幾近半數。

其他國家的經驗足可引發香港現有的工業重新考慮採納廢料還原再用的方法，不過目前工業界尚未作出有系統的意見。預料廢料還原再用的計劃，僅會止於一項環境保護政策，而不會受到工業界的支持與鼓勵。

一個主要原因是當工業界考慮廢料還原再用的經濟可行性時，不期然便會提出疑問：為什麼要製造廢物呢？

保持環境清潔的概念便由此萌生，

而香港會從外國轉移技術，至少可以部份提高本地的環境清潔技術。

採用廢物還原再用方法所冒的經濟風險，是須要花費更多能源與器材，甚至運輸費用，才可以把廢物加以還原再用，可能比諸取擷原庄原料更不化算。為此工業界人士須打從一開始便設計整套系統，使廢料易於轉化成新的原料。

整個系統的作用還不只此，它以生物化學的研究及適當的穀物種植為始，供應可資重新運用的原料；以綜合生產為終，使一種工業的廢料成為另一種工業的原料。

香港在綜合生產方面的驕人例子，是最近在青山新建中的燃煤發電廠毗鄰，興建中國水泥公司的水坭廠。該水坭廠將採用青山燃煤發電廠的燃料研末灰燼為原料。

不過此一綜合生產方法尚不能完全解決香港的研末灰燼問題，因為到一九九〇年時，青山燃煤發電廠及香港電燈公司在南丫島的燃煤發電廠，每年將製造七十五萬噸研末灰燼及廿四萬噸爐底灰燼。

香港電燈公司燃煤發電廠的一部份灰燼將用作水坭助劑，而一部份則用作填海。不過水坭需求量的波動，足以左右青山方面充份利用煤油灰燼為原料。

至於以垃圾填海，則仍然符合香港未來的整套廢料還原再用系統，因為此舉為缺乏土地及幾乎毫無天然資源的香港製造新土地。

過去傾倒垃圾以填海製造了不少衛生問題，例如早期的官塘便是在垃圾堆上填建而成的，不過現時研究廢料處理問題的專家表示，他們採用的方法是不會危及市民健康的。

所以在今日的香港而言，傾倒垃圾以填海是廢料還原再用的一種經濟形式，甚至可能是沼氣的一種來源。

木材一般於使用後便給堆填在受管制的垃圾池，其實這樣做對能源是一大浪費，因為這些木材是具有高度生熱效能的。堅尼地城焚化爐卻利用焚化家庭廢物的熱力為毗鄰的政府屠場提供電力。

這些木材廢料來自建築地盤，本應可用作焚化爐的燃料，不過卻一如其他工業固體廢料那樣，被送到垃圾池堆填。

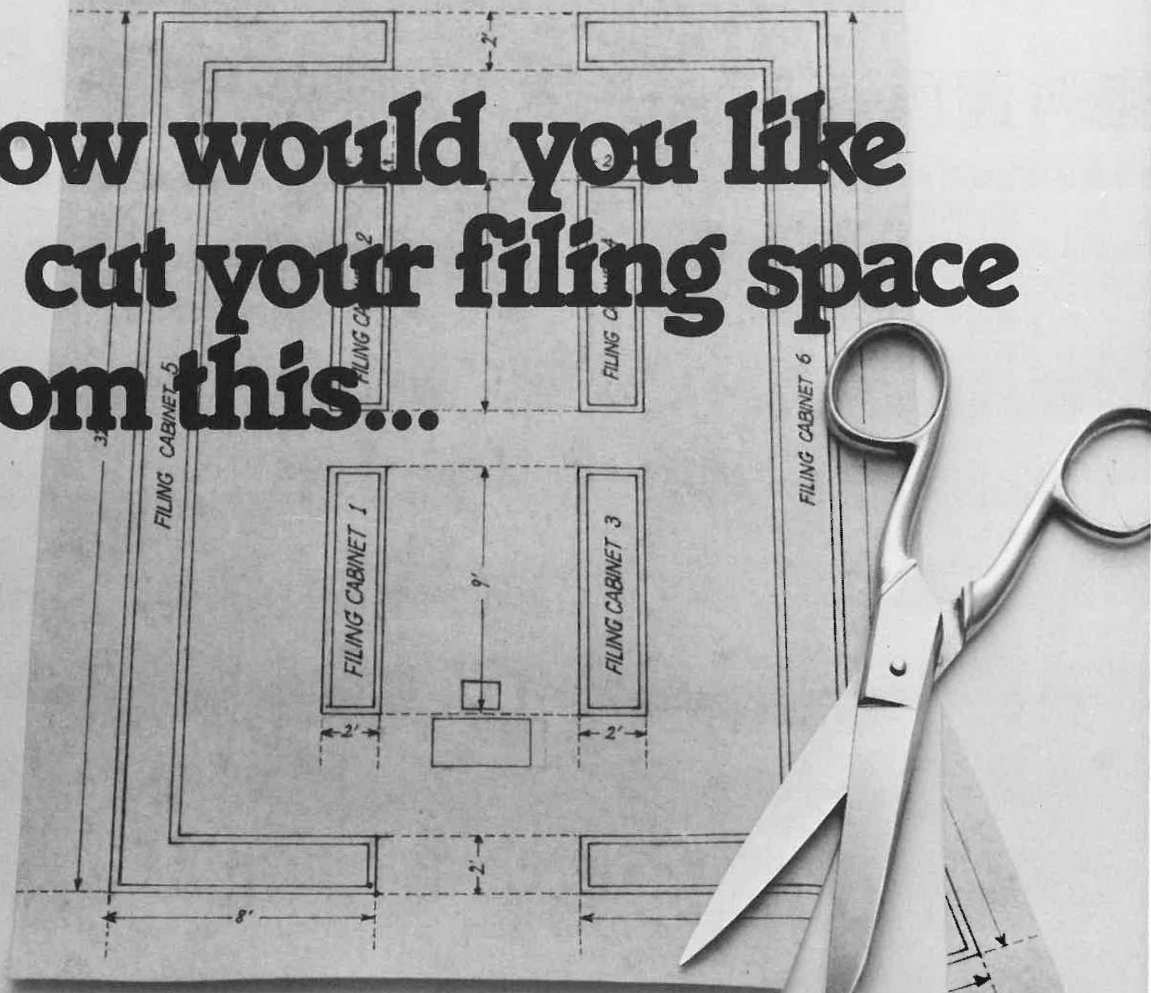
在香港，類似上述的廢料不能受到充份經濟利用的原因有很多。其中之一可能是本港工業的支離零碎，四萬五千個廠商之中，大多是小本經營，可作投資的資金有限；另一原因可能是工業的範圍相對來說甚為淺窄。

香港生產力促進中心已設立一個環境管制服務小組，根據個別情況，為廠



香港的木材廢料給堆填在受管制的垃圾池，其生熱效能不獲重視。

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從香港出口的紙板廢料。

商提供處理廢料或予以還原再用的經濟可行性方法。

如果政府規定工商行加強處理其廢料，則大多數公司會選擇費用不致太高的處理廢物方法，而不會採用資本密集的廢料還原再用方法。

況且，以上述木材廢料的例子來說，建築地盤的勞工工資高昂，還往往要依據合約期限完工，因此無論經營成本與時間均不容許建造商再次利用木材廢料。

當然這也不是一概而論的，並非所有木材都不經再次利用。不過一般人都抱着「何必多此一舉」的態度而不加理會。珠寶行業可說是例外，因為在首飾製造的過程中，每顆微細的金粒都會再經使用。

另一個妨礙廢料還原再用方法在香港普遍施行的原因，是由於廠商往往須要轉移陣地，才可達致廢料還原再用的最高效率。如此一來，資本成本可能非常高。

傳統酸枝傢俬的雕刻工業便是一個好例子。

傢俬雕刻耗剩的廢料約為所用木材的三份之一。其實這些廢料可以集中在一地點加以還原成紙板再用，不過傢俬雕刻業並不能籌措到興建這樣一個廠房所需的資本，卻要求政府提供廉價工業用地，等於建議政府改變其不干預政策。

另外一個還須解決的問題，是要有第三方面認為紙板的生產在經濟上是可行的。現時有一間商行正審核這個提議。

其中須要評估的一項風險，是酸枝傢俬製造業會否受較便宜的傢俬製作所淘汰。

另一個須要尋覓廉價土地、集中處理污水還原再用的工業是印染業。有些較大廠商寧可準備再投資於較優良的印染技術，更可同時節省用水，不過若干較小廠戶則有不同看法。

這些小廠戶覺得把印染所用的熱水加以還原再用可節省能源成本，因此在多層工廠大廈設有淨化熱水以供再用的設備。

至於節省用水方面，對於這些廠戶來說，只不過是他們採取還原再用方法的一個次要因素，除非水費加價，則他們會加以重視。

香港的水費計算法，早已採納了用水多付錢亦多的原則，不過水費仍屬低廉，以致這個原則的效力不大。

香港平均每個家庭的用水量超過水費高的國家。如果提高水費，會使香港的經濟氣候更有助於推行環境清潔科技、製作綜合產品及採用廢料還原再用方法。不過工業家肯定不會希望現行的水費制度會有所改變，以免減低他們的出口競爭力。

他們也許會指出香港工業由於範圍狹窄，一般來說比家庭用水量還要低。除了印染業與電鍍業外，耗水量多的重工業如化學品業、採礦業、煉鋼業、一般工程業、機械製造業、汽車製造業、製紙業等，在香港並不多見。

把廢料盡量轉化成原料再用，當然可以減少香港的原料入口，不過這樣做須審慎考慮到現時香港的垃圾工人及廢物回收經銷商在出口市場所賺的利潤。這是一個勞工密集、大部份為非技術人員的行業，不過效用卻相當大。

在香港，工廠及一般家庭的垃圾在未運往垃圾池之前，大部份都經由垃圾工人檢起可供還原再用的廢物。如果沒有廢料運往外地，則這批工人須另覓工作。

截至一九八一年九月三十日的年度內，廢物回收經銷商與垃圾工人、甚至工業界本身所出口的廢料達六億五百六十二萬元，比前年同期多賺一億元。

主要的出口廢料類目有黑色及有色金屬、紙品、貴金屬、基底金屬、以及人造纖維與紗綫。這些廢料差不多運往

世界各地，主要的入口國家有日本、台灣、印尼、菲律賓、南韓、新加坡與泰國。

日本輸入香港大部份鋁罐，加以還原再用。舉例說，一個可口可樂罐約值港幣八毫。日本方面不以其鋁質含量決定其價值，而是視乎在還原再用的過程中所需的能源成本，足證在決定廢料還原再用的可行性時，能源是一個重要因素。據知從鐵礬土提煉鋁所需的能源，較諸把鋁從廢料還原後再用多出九倍。

香港的玻璃樽經人手依顏色分揀後，便壓成玻璃碎，主要售給新界的小型玻璃廠，再熔成新的玻璃器皿，供出口之用，至於汽水玻璃樽則交回製造商予以再用。

香港另一個自給自足的廢料還原再用工業，是把將軍澳拆船所得的黑色金屬，用作土木建築工程的加固鐵枝。以前該處有一間利用廢鐵製造紙板的工廠遭火焚燒後，尚未有復業的消息。

臺灣的舊汽車壓鐵廠把大部份廢鐵運往日本、台灣與南韓。運輸處與該廠訂有合約，每月運送一千二百六十部棄置的舊車予該廠。如果實施每年檢查舊車的計劃，舊車壓成廢鐵的數目可能會更為提高。

該廠並接收經銷商交來的汽車，又從香港上海滙豐銀行總行拆卸所得的鋼料加以壓縮，作出口之用。

每年從香港出口的廢料總重量約為八億千克，相信為所收廢物百份之九十五左右，至於另外的百份之五在本港作何種用途，則沒有這方面的數字資料。

工業界可以再做些什麼呢？這要視乎環境保護處調查目前廢料的處理方法，加以分析後才可以有答案。此外並須研究可供還原再用廢料在本地的市場，以及訂出一個適當的可行計劃。

初步行動可能是設立一個廢料交易所，因為現時各不同工業之間可能互不知道對方產生甚麼廢料，也不知道各自產生的廢料經還原後，可能成為對方所需的原料。

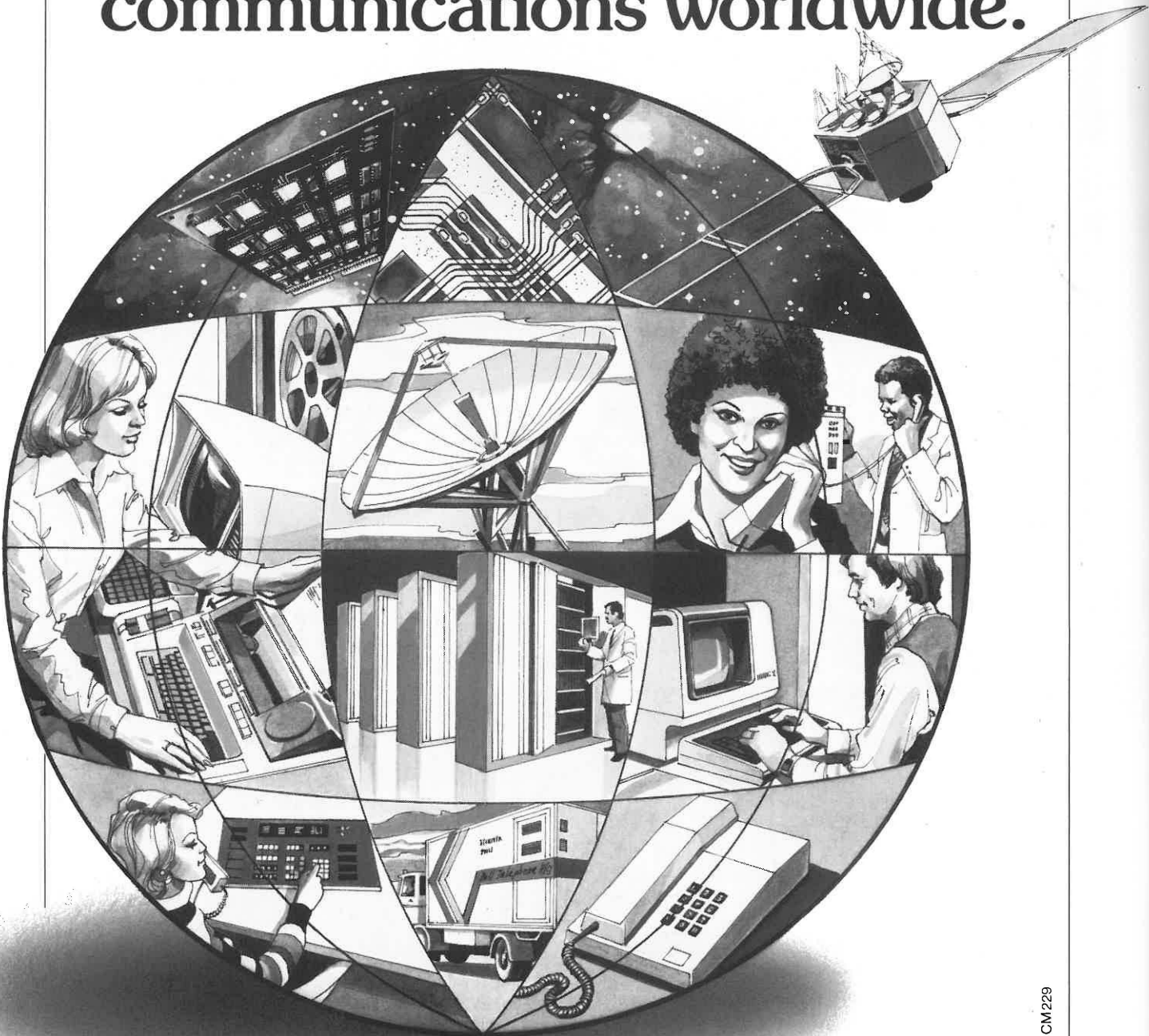
如果能有一個交易所，可使各不同工業之間有所接觸，最後這交易所便可功成身退，英國就曾設立了這樣的一個交易系統。

一個較為完整的工業社會須了解到利用廢物的經濟價值。此外還須知道世界各地科學的發展，以及新科技的作用。

任何廠家均可以借助生產力促進中心的顧問服務。其環境管制服務組的職責是令到客戶公司明白環境法例，以及如何在遵照這些法例下，獲得最大的經營成效。

目前政府正忙於處理調查工作，以制定基本的環境法例，所以不大可能會

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立例推行廢料還原再用方法。如此一來自是大大不利於廢料還原再用方法發展成一種控制污染方式。除了個別情況，如不需要太多資本而可以簡單處理固體或液體廢料，同時在經濟上有利益的情形下，才會採用廢料還原方法。

有關方面尚須確定每類工業究竟有多少潛力可以進行經濟的廢料還原再用方法。生產力促進中心的环境管制服務組與政府的环境保護處合作下，會首先着手研究廢料處理方法，然後探討廢料還原再用的可行性。

廢料還原再用在廣義來說亦涉及任何經濟社會的金融業。金錢是一種貨品，過去十年西方國家就曾大力鼓吹把輸出石油所賺得的游資，用於開發新資源。

不久前一位香港銀行家亦提出建議，認為地產業在過去數年所賺得的可觀利潤，應該加以運用於香港工業的投資，而不應用作換購美元與投資海外。如此一來當可促進本港採用清潔的工業科技、促進綜合生產、以及施行廢料還原再用方法。

現時政府本身比工業界更明白到香港對於廢料處理與還原再用的需要。工務局在這十年間將花費三十億元，在香港多處指定水域興建四十個污水處理廠。

第一個管理區域將是吐露港，該海港差不多四面皆為陸地，最近由於農耕及新市鎮的發展，使海水污染程度惡化。如果污染能受到控制，環境保護處會監察該處的海水，以免再受污染。

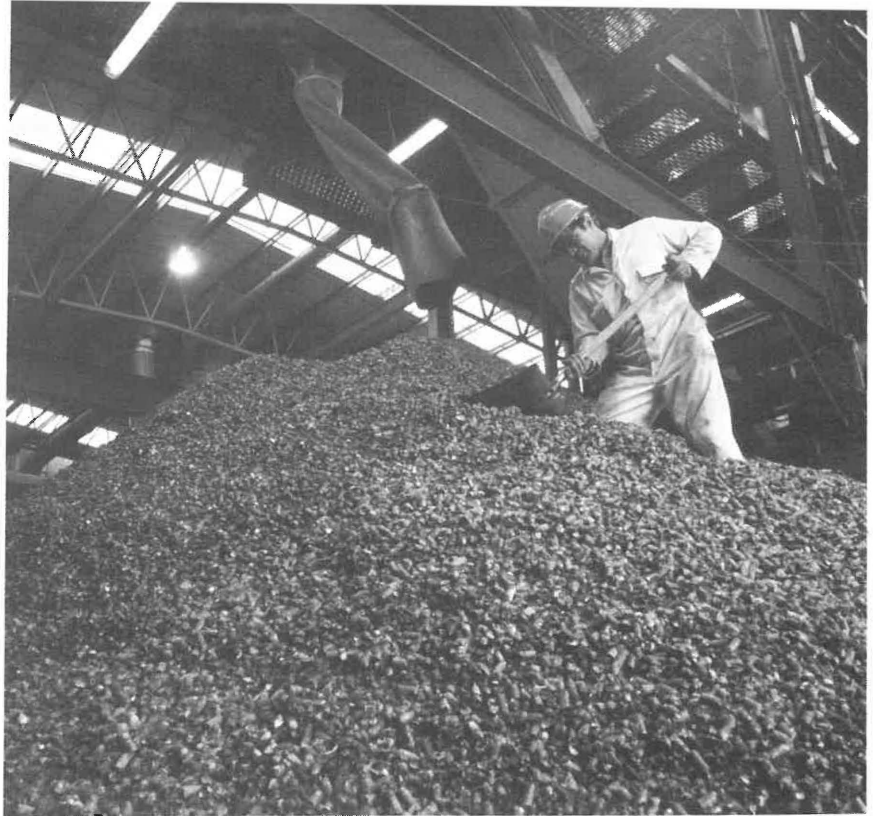
在香港，廢物由市政處收集，但工務局才是處理廢物的法定部門。工務局除了在港九多處設有幫助製造新土地的垃圾堆填地之外，並在堅尼地城、荔枝角與葵涌負責焚化爐的操作。

未來的焚化爐，如果是代替垃圾堆填地以興建的話，將把廢物轉化成能源，為工業提供蒸汽、為電燈與水泵站提供電力、以及為冷氣系統提供發動馬力用的冷水。

上述措施可以作為香港廢物處理整體政策的一部份，屆時焚化爐將轉作焚化高熱能廢料之用，而不是像目前這樣，焚化一般家庭的垃圾。廢物經焚化後的灰燼比未經處理的廢物沉固得更快，又不致製造很多健康問題，所以是較理想的填海物質。

漁農處於一九八〇年設立了農業廢物管制科，透過這個部門從事廢物處理與還原再用，主要在新界地區施行，以處理動物糞便。這些糞便由於經過農民用水沖走，所以大多呈漿狀。

每日主要從豬隻與飛禽所得的一千七百噸糞便中，仍有一千三百噸直接或間接流入香港各種水道。其餘的四百噸——差不多全屬鴿糞，有三成是雞糞——



這座山丘般高的壓縮工業燃料粒，是英國頓卡斯達廢料還原廠從廢料製造而成的。這些燃料粒的生熱效能約為煤的百份之六十六，而頓卡斯達廠每年一萬噸燃料粒產量所提供的熱能，等於六千五百噸煤的熱能。

一主要由私營承包商收集，加以轉化成適合菜田與魚塘用的肥料。豬糞轉化成肥料的數量則很少。

新界市政處在洪水橋與打鼓嶺均設有糞肥收集服務，每日並在小冷水傾倒十噸糞肥。另外，漁農處設於八鄉的糞肥處理服務處亦將於三月全面投入操作，處理一萬五千頭豬的糞便，減輕吐露港的污染情況。

漁農處把糞便收集後加以轉化成肥料，並在雞公嶺覓地進行上述過程，每日把十七噸糞便轉化成十至十五噸肥料。現時香港對有機肥料需求漸殷，不但在農業方面，亦用於綠化新界新市鎮及新建公路。此外，若把有機肥料以堆肥形式輸往中國，亦屬大有可為的出口事業。

漁農處又計劃在上水的大龍實驗農場興建沼氣化糞設施，以處理四千頭豬的糞便。

沼氣可用作發電，甚至發動拖拉機，不過香港從未加以嘗試；在農場興建沼氣化糞設施，把漿狀糞便轉化成肥料則較為可行。在中國與印度多處地方已經有成千上萬的小型沼氣化糞廠。

漁農處在八鄉及西貢的化糞設施為農民提供乾質的飛禽糞肥，農民輪候的名單甚至有長達一年者。

問題是由於油價急升，製造乾質糞肥的成本亦變得高昂。漁農處現仍尋求另一種能源，試驗採用沼氣或來自鋸木廠的木屑。現時每日有二百噸木屑棄置於垃圾堆填地上。

很久以來，少量木屑已經被用於煲煮豆奶，以製造一種豆腐乾。木屑亦用作混和賽馬會馬房九百匹馬的糞肥，最終的肥料製成品給售予綠化環境承包商、菜農、甚至在超級市場也有出售，供一般家庭園藝者施肥之用。

不過上述提到的所有試驗及已施行的糞便處理設施，均不能減輕香港整體的動物糞便問題。最終的解決方法，可能是利用一種環節動物，把有機糞便轉化成肥料再用。

亞里士多德早已說過，蚯蚓是土地的腸臟，而香港的動物糞便問題，亦可能借助蚯蚓得以部份解決，特別是一種名為「紅子孓」的蚯蚓。

這種蚯蚓的天然棲息地是腐爛的植物質、紙張、葉子與動物糞便，甚至非分解性塑膠質。在合適的環境下，牠每日不只進食其本身重量的食量，更排出相等於其體重的排洩物，這些排洩物本身就是一種能使泥土濃沃的上佳肥料。

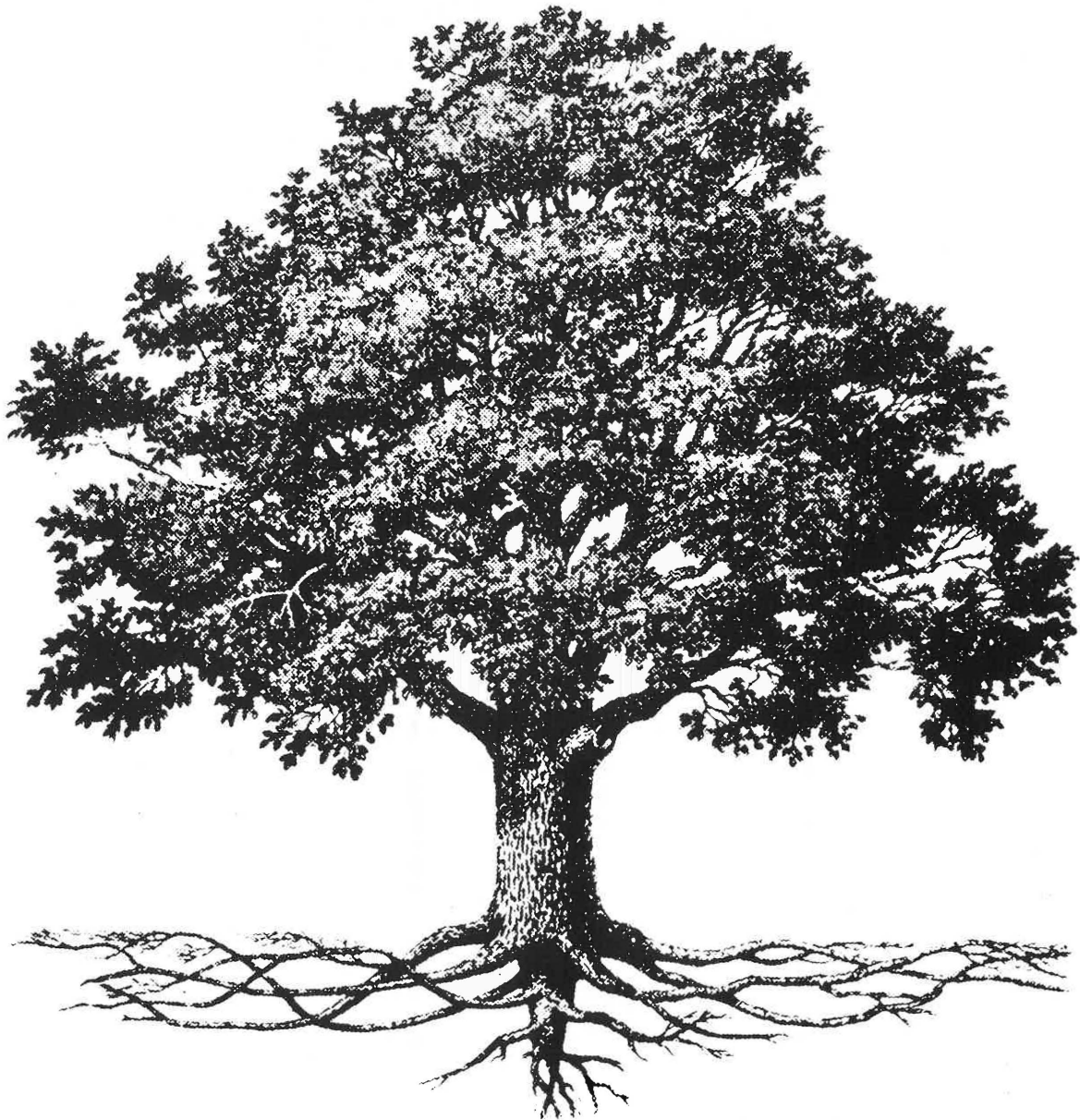
除了具有驚人胃口外，「紅子孓」每年自我繁殖一千次，每一條的壽命達三年。

菲律賓、澳洲、日本、加拿大與美國均有採用這種蚯蚓。如果能夠在香港成功施行，可以成為一種賺錢工業，所得的肥料可以運出口，同時又可令本地的農場、花園、花盆的泥土肥沃，蚯蚓本身又可作魚餌出售。

漁農處鑑於「紅子孓」的自我繁殖力強，正開始從菲律賓購入數磅這類蚯蚓的卵子，在香港予以繁殖。 □

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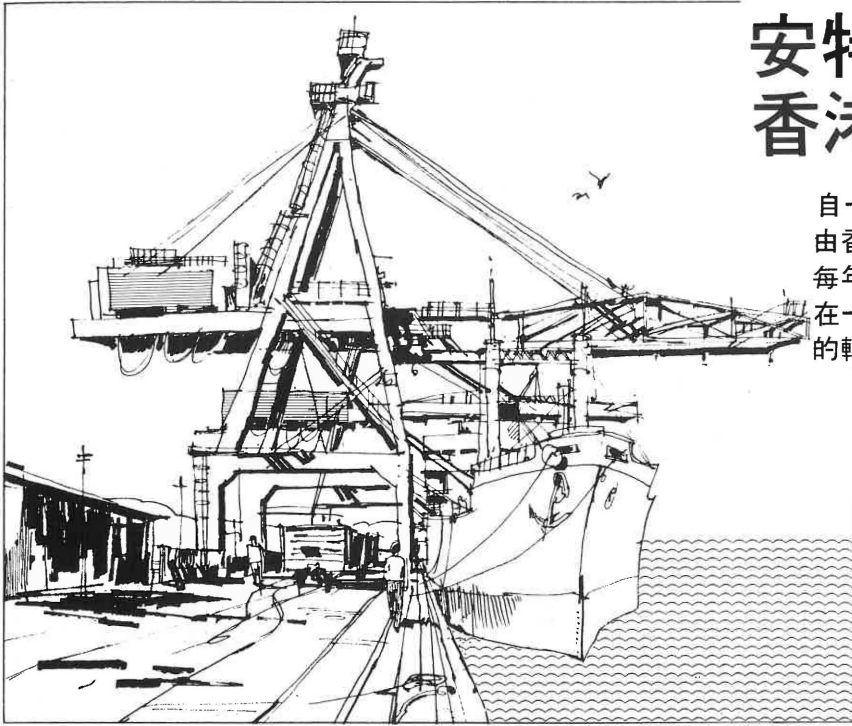
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安特衛普地點適中 香港船隻漸多使用

自一九七五年開始，除了一九七八年外，由香港運至比利時港市安特衛普的貨物，每年均增加近一倍。

在一九八一年內，該港市的進口貨及輸入的轉口貨數量高達二萬噸。同期的出口貨及輸出的轉口貨則達四萬噸。

安特衛普與香港之間的貨運，只是安特衛普港口全部貨運的一小部份，去年其港口的總貨運量達八千萬噸。安特衛普方面已留意到貨船使用其港口的增長率，以及所運貨物以高價貨居多，因此繼續提供高效率而經濟的服務，希望與其他港口的雙邊貿易往來得到有關方面的鼓勵，且續有拓展。



來自香港的進口貨主要有皮革製品、紡織品、機械與衣物。此中約有百份之四十五轉運至歐洲其他地方。

由安特衛普運至香港的出口貨主要有化學品、鋼鐵產品、機械、玻璃器皿、肥料、食品與建築材料。此中約有百份之四十轉運自歐洲其他地方。

安特衛普與香港之間的輪船航綫共有廿三條，包括大多數來往西歐與香港之間的定期航綫。其中有完全是貨櫃船的服務，另一些則兼具貨櫃船與傳統貨輪的服務性質，或提供特別的服務如冷藏船之類。

為什麼香港商船使用安特衛普的次數愈來愈多呢？這是因為安特衛普位處歐洲共同體的中心，而歐洲共同體是香港第二大貿易夥伴，僅次於美國。

一九八〇年時，一個德國研究小組進行研究北海哪個港口是歐洲消費者市場的最佳地點。

該組人員集合了漢堡、勒阿弗爾等十三個大港跟法國、比利時、荷蘭與西德國內超過四萬人口的城市之間平均距離，以及上述大城市的居民人數，然後把距離的長短與這些城市作為消費中心的重要性計算出來，加以分類。

在這個分類下，安特衛普在陸路與鐵路運輸方面名列榜首，比最佳的兩個港口分別勝出百份之十五及十七之多。若論內陸航運，安特衛普則排名第三，跟最佳港口只是百份之四的差別。

整體結果，即集合了各項內陸運輸方法如鐵路、陸路與內陸航運等統計，安特衛普仍高踞首位，比鹿特丹勝出百份之七，而比調查結果位居榜末的港口

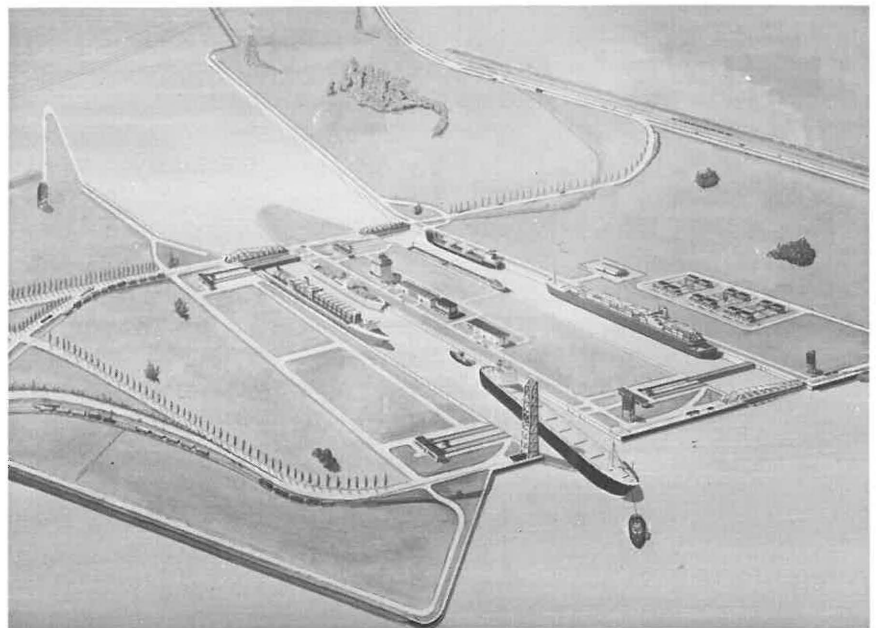
勝出百份之五十八。

安特衛普的地理優勢，大大有助於其港口貿易的增長，一九八一年其港口貿易數量已躍升至八千萬噸。雖然去年一般來說經濟不景，但上述貿易數量與一九八〇年的八千二百萬噸紀錄十分接近，有此成績已相當不俗。

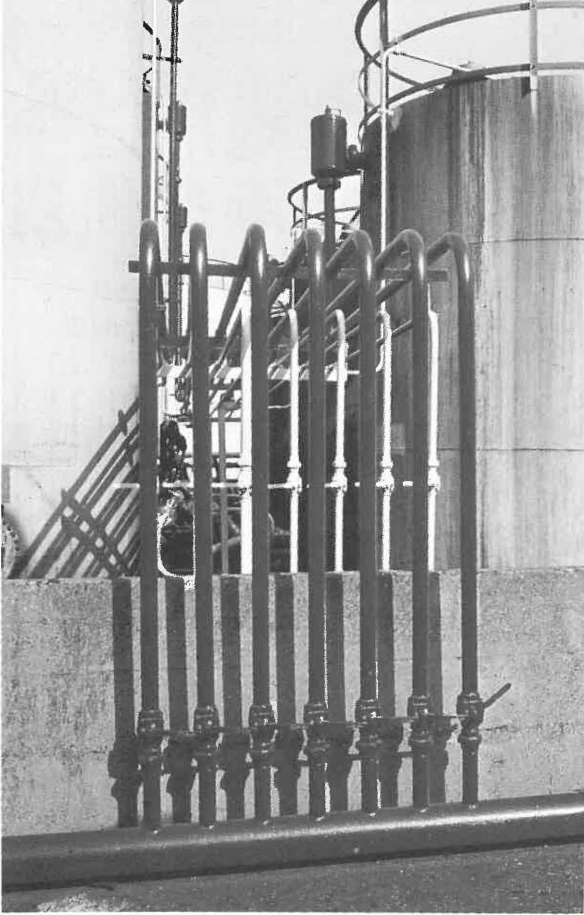
貨物的流通量分為一般貨物三千萬噸、散裝貨物五千萬噸。跟鄰近港口相比，在安特衛普裝卸的一般高價貨物較西歐其他港口為多。對一個港口而言，一噸一般貨物比一噸散裝貨物的重要性多出三倍，比一噸石油的重要性則多出十二倍。

所以，一年約有三千萬噸一般貨物運輸量的安特衛普，在歐洲名列第二，僅次於從事巨額石油運輸的鹿特丹，卻凌駕於漢堡、不來梅、馬賽、倫敦、勒阿弗爾、敦刻爾克與阿姆斯特丹之上。除了石油之外，安特衛普肩負所有北海港口百份之十七的進口貨運及百份之廿六的出口貨運。

貨物總流通量之中，有更大數額屬於轉口貨品。去年其轉口貨物運輸量佔百份之四十，其餘百份之六十則由安特衛普的腹地，亦即比利時與盧森堡經濟聯盟地區負責。更重要的是，以關棧中交貨條件交易的一般貨物，其數量之多



全世界最大船閘的建造工程於去年開始施工。



港口的喉管共超過二百五十千米長。

比國立的比利時與盧森堡經濟聯盟的貨運量更形重要。

安特衛普的最大主顧是西德，其次是法國、荷蘭、瑞士、意大利及其他歐洲國家。法國出口商經由安特衛普輸出的一般貨物較任何法國商港為多，因此安特衛普有法國第一商港之稱。至於西德經由安特衛普進行的貨運每年達一千八百萬噸。

由於來往內陸腹地的貨物運輸有所增加，安特衛普已致力疏浚挖深舒特河，使經由該河進入安特衛普港口的水道得以容納更大船隻，如裝滿貨物的八萬五千重量噸船舶、部份裝貨的十五萬重量噸或以上的散裝貨船，還有第三代的貨櫃船等。

安特衛普並採用了超短波信息與雷達系統，使港口的安全措施與交通控制方面大為改善。

這個港口又與歐洲的水路、高速公路與鐵路網互相連接。每年有六萬五千艘駁船利用新築成的舒特與萊茵河連接系統，通過安特衛普到達鄰近國家。

阿爾彌運河是比利時最重要的水道，因為它把高度工業化的地區與安特衛普直接連在一起。

安特衛普亦是歐洲一個主要的鐵路港。該市是十二條主要鐵路幹線的終點站，每日有一百列貨運火車來往安特衛普船塢與歐洲各國之間。單是該商港本



安特衛普有超過五百部一般貨物碼頭起重機、七十部流動起重機、廿一部穀物起卸機、以及十八部橋式裝貨機。

身的鐵路網便長達八百三十五千米。

其基礎建設包括一個特別的貨櫃火車總站，以及一個兼為陸路與鐵路運輸而設的總站。

貨車由港口地帶駛向大多數的歐洲城市時，在沿途的高速公路可以通行無阻。事實上，安特衛普是歐洲高速公路網的一個主要交叉點，與歐洲高速公路網直接連成一體。

安特衛普並擁有兩個機場，一個是地區性，而另一個屬國際性。市內又鋪設有喉管，輸送本地或外國的氣體與液體產品。

由於安特衛普肩負的轉口貨運數量相當多（佔其貨運總額的百分之四十），因此該港市已發展成為存放與分發貨物的重要中心，有露天存貨地方七百公頃及有蓋存貨地方二百七十公頃。安特衛普的有蓋存貨地方比任何歐洲商港為多。其中有一百三十公頃是設在碼頭後面，適合採用人手分發貨物的方法。

安特衛普在貯存貨物方面的專門技術跟現代化的貨倉管理相輔相成。因此在專業的公司內，人手分發貨物大多以數據處理進行，一按鈕即可獲得所需有關貨物與運送方法的資料，快速而具靈活性。

不少比利時本土及外國公司都利用安特衛普作為發貨中心，把貨物輸往西歐、北非及近東地區。

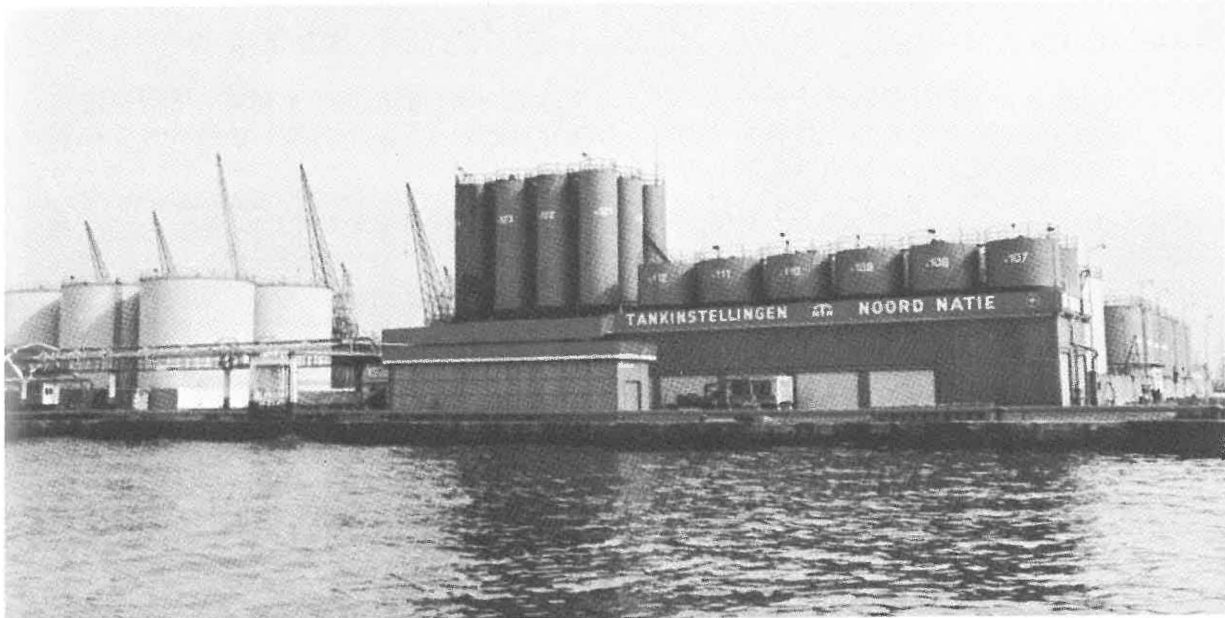
最近，中國也利用安特衛普分發其手工藝品與藝術品。

以安特衛普作為分發貨物的基地，可選擇以下三種方法之一：

其一是僱用安特衛普商行的服務。此舉可避免花費在租金、建設或職員方面的投資。

第二個方法是租用貨倉，此舉亦須借助當地商行的經驗，以便在聯絡及辦理手續方面較為順利。

第三，外國公司可在當地公司合作下，自行興建貨倉。



安特衛普的液體倉庫；安特衛普是世界主要石油化學品中心之一。

在存貨方面，安特衛普能夠有效率地操作，有很大部份原因是基於海關條例寬鬆，而當地的海關人員與商港使用者均十分合作。貨物可以存在保稅倉庫達兩年甚或以上而不須繳付任何費用。一切管倉、修理、重新包裝等操作都不會受到海關方面的阻撓。

只要貨物未經再售，上述的操作行動均不會改變原來的關稅。安特衛普有一所公共保稅倉庫、五間附屬倉庫、一百二十間私營倉庫及一百五十座其他倉庫與液體倉。

此外，安特衛普港口當局只徵收官方公佈的關稅，不會額外多收。除了視乎特別情形，減收經常使用港口的顧客的關稅外，若須增加收費，則會及早公佈，俾顧客有機會調整貨物售價，以抵銷增收關稅方面的開支。

貯存、裝卸、拖運貨物等工作均由私營企業辦理。預備裝貨、轉船運載、接收與分發貨物、以及船隻裝卸與有關工作等，是基於與私營公司所簽署的合約而進行。

有很多操作都沒有固定的關稅，在與商港使用者磋商後才釐定價格，這要考慮到該批貨物的大小、單位重量、包裝、目的地等。此項措施特別適用於經安特衛普運往其他地方的歐洲出口貨。跟欠缺靈活性的固定稅則相比，上述辦法使顧客受惠更大。至於其他的操作，如接收貨物等，則仍然採用固定關稅。

在安特衛普，有一萬名專業碼頭工人，他們的工作深受商港使用者的讚許。貨主一年三百六十五日，每日廿四小時都可以隨時僱用到碼頭工人。

由三個英國官方團體進行的比較研

究，發覺安特衛普在貨物裝卸方面，是西歐與英國所有大商港之最快者，每組碼頭工人一小時可裝貨廿八噸及卸貨卅一噸，使安特衛普比其他港口更勝一籌。

貨主不但以安特衛普作為裝卸歐洲貨的港口，更逐漸利用該港市跟其他大洲進行海外貿易。運往蘇聯的美國穀物在安特衛普轉船，日本車在此轉運至北歐。從外國輸往英國的煤與硫磺亦經安特衛普以船運抵目的地。

利用這個比利時商港轉船運貨不須要耽擱太多時間。以每日來往的船隻那麼多，較有效率的轉船運貨只須二至三日。每年約有一萬四千艘船定期開行，所到的外國商港與地方超過八百個。船隻開行的頻率，是每星期開往三百廿五個海外商港至少一次，每日開往五十個商港至少一次。

安特衛普是由該市市政局直接管轄的市立港口。安特衛普市擁有該港口的基本建設（船閘、碼頭、船塢等），負責港口的維修、現代化與拓展工程，以及管理隸屬該市的港口設備等。不過有一大部份港口設備都是屬於私營企業的。

整個港口區在舒特河的右岸佔地二萬五千英畝。船塢所佔的水面總面積現時超過一千三百公頃。

為遠洋輪而設的九十九千米長的碼頭船位之中，有卅五千米適合深水船。所有碼頭背後都有很大的地方，建有足夠的貯貨設施。

在船位之上，港口當局與私營企業共建有五百部一般貨物的碼頭起重機，另有七十部流動起重機備用。特別設備包括有廿一部穀物起卸機（設於碼頭或浮在水面上）、為散裝貨而設的十八部

橋式裝貨機、以及九部麻包裝貨機。

除了浮在水面的十七部起重機可吊起貨物達一百五十噸之外，去年港口當局更採用了一部可起重八百噸貨物的新型自動推進式浮動吊杆。在其六個貨櫃碼頭內安裝有八部架式起重機，尚訂有三部，將於一九八二年年中交貨。

安特衛普訂有一項七年投資計劃（一九七九年至一九八五年），確保能維持其著名歐洲港口的地位。該計劃包括興建一個新的海港船塢，定於今年稍後正式揭幕。

有關在外地買賣貨物的統計顯示，比利時盧森堡經濟聯盟所進行的上述貿易中，安特衛普商行佔百份之四十。一九八〇年，這些商行進行上述貿易的總值達九十八億比利時法郎，而整個比盧經濟聯盟的貿易總值為二百四十三億法郎。



散裝貨之轉船情形。

有關核能的爭論

社會大眾、傳播界以及政界人士對於採用核子能作為人類未來能源的一種大部份仍不表贊同。他們提出有關環境受到影響、安全及經濟狀態等問題，其實這些問題全都有肯定而令人信服的答案。本文作者艾華利博士討論其中較重要的問題，並為採取積極態度而據理力爭。

能源價格是所有工業家所關心者，因為這影響到我們在其他國家的競爭能力，又阻擋了其他能以較低價格使用能源的國家把貨品輸入本國，同時對於本國經濟活動的水平亦有深厚影響。

在短期來說，供應工業用的能源價格決定於政府的釐定價格政策與各種經濟因素，不過長期來說，經濟狀態一定會支配能源價格的水平。五〇至六〇年代的「低廉能源」年代肯定會一去不復返，而工業界會盡量節約能源。不過節約並不能完全解決問題。在英國，正如世界各地一樣，我們需要經濟的能源資源，以確保我們未來的工業活動不受影響。

核子能便是這樣的一種資源，現時英國的十五間核電站為全國供應百份之十三的電力。英政府並計劃由一九八二年開始，每年增建一核電站，屆二〇〇〇年時，這些核電站便會供應全英國近百份之三十的電力。

目前英國的能源可以自給自足，不過只屬暫時性質。最近公佈的能源部門計劃顯示，縱然在節約使用能源的情況下，縮減了百份之二十需求量，不過到本世紀末，預料英國本身的煤產供求之間會有三千五百萬至一億二千萬噸的差距。

類似的預測是變化不定的。能源短缺的程度與日期，視乎我們可獲致的經濟增長，不過即使經濟增長率是零，現存的發電廠、礦坑也要以新取舊，國內的石油與氣體不會用之不竭。除非我們任由能源短缺支配經濟衰退，否則一定要找尋另一些資源。可是要開採礦物燃料的費用愈來愈高昂，而利用太陽能、浪潮力或風力產生大量能源的可能性，尚要經過一段漫長日子才可實現。

我們不可以把英國的能源短缺問題予以孤立處理。全球的情況明顯不過，單是人口膨脹的壓力，便可知道在本世紀末，若要維持目前世界的生活水平，所需能源勢將增加兩倍。

因此，無論在英國或國際上來說，我們須利用所有找得著的能源資源。如果英國放棄在將來採用核能，則煤產的需求量會比現時多出百份之五十至七十五。如果全世界都放棄採用核能，則會嚴重加劇各國爭相開採日益減少的礦物燃料，更加速了面對能源短缺危機的日子。

英國中央發電局的墨諾斯核電站比

燃煤或燃油的電力站提供更便宜的電力。自六〇年代初期，這些核電站令中央發電局省回大量不能更新再用的燃料：七千萬噸油或一億三千萬噸煤。此外，與燃煤電力廠相比，核電廠可減少生電成本達一億英鎊。

中央發電局的數字顯示，在利用核能、煤與石油生電的成本中，以核能為最便宜——無論在以往、現在或將來都是一樣。目前興建中的電力廠日後的生電成本將會如下：核電廠每千瓦小時二點五八至二點七七便士；燃煤廠每千瓦小時三點八四便士；燃油廠每千瓦小時八點四八至八點九七便士。

核能尚有一項額外優點是其他能源所不能比擬的。快速的反應器以鈾作為燃料，同時又可將回收的鈾轉化為更多的鈾作燃料之用，是以核能是一種自給自足、可更新再用的能源。

在各種能源之中，核能所引起的爭論最大。反對者堅持說使用核能太過危險。

其實社會早已接受其他能源工業也有危險的事實。英國的統計數字顯示自一九七〇年以來，燃煤工業有六百一十九人死亡；在北海鑽油台的死亡人數為六十五；而在商營的核電廠只有五人死亡（全部死因均與核能無關）。

開採及處理鈾與核子燃料的過程，就像其他類似的操作行動一般帶有危險性。在採煤與採鈾業，每一百萬個工作小時當中的死亡人數相若，不過同一規模發電廠所需的燃料，鈾就比煤少得多。因此，每生產一小時兆瓦的電力所可能製造的死亡事件，煤比鈾要高出十倍。在能源處理方面，筆者的公司在過去廿五年共僱有一萬二千名輻射組員工，他們之中患癌症的數字並不比英國一般人為高。

在賓夕凡尼亞州三哩島核子廠發生的意外並沒有任何人受到損害，而散發的放射性原素，據估計只足以導致該區二百萬人其中之一患上癌症。當然，像其他能源一樣，核能並非絕對安全，不過筆者可以充滿信心的說，核能在盡量減少危險方面所付出的人力物力，較大多數能源工業為多。

核能工業之所以被說成危險性甚高，是由於在生產核能及處理核能廢料的過程當中所散發出的輻射。其實我們無論身在何方都可能受到輻射的侵襲。

英國市民經受輻射影響的總人數，

有四份三是天然環境的輻射。另有百份之二十由於接受醫療所引起，主要是X光照射所致。只有百份之零點一源於在發展核能計劃下而須要處理核能廢料。

核能廢物之中有些具有高度放射性，歷久不衰，不過最終都會喪失放射效力。某些其他用於工業的化學原素則不一樣。理論上，天然及人造物質的危險性經過數千年後便會消失，只須在初期處理這些物質廢料的時候，仔細考慮以特別構造的設施把廢料貯藏一段時間，然後加以處理。現時處理的途徑有多種：可以把廢料埋藏於地上的鹽丘或地質堅固的土地結構，或傾進深海的海牀下。

沒有人會希望核能或其他廢料在他的居處附近處理，不過廢料一定會有，而我們如果想享用能源的好處，就得接受廢料的存在及予以處理。核電廠採用的鈾之中，最多只有百份之三會成為廢料；又煤與鈾比較，兩者在製造同等份量的能源時，所需的鈾比煤少得多，因此，與燃煤發電站所產生的灰燼數量相較，核能的廢料並不算多。至本世紀末，核能廢料的總量轉化成固體後，所需的貯藏面積比一個足球場還要小。可是在一間大型燃煤發電站操作一年所產生的灰燼，即使整個球場也容納不下。

核能計劃代表了英國工業的一項主要投資，而且可以在失業率高的地區提供就業機會。舉例說，興建希琛核能發電站的工程，將為英國東北區提供近五千個就業機會達三至五年之久，另外又為供應興建工程材料的工廠提供多五千個就業機會。

英國核子燃料有限公司現正計劃投資約三十億英鎊於公司本身未來十年的發展計劃，其中與英國廠商簽署的合約將為數不少。其附屬公司——太平洋核能運輸有限公司——自一九七八年開始，已從英國船廠購入兩艘特別改裝的船舶及兩艘專為運載核能而設的新船。另又訂購了兩艘英國製船隻，將分別於今年年底及一九八二年中交船。

核能是取代礦物燃料的一種安全而經濟的能源。我們都需要核能。同時我們必須探討另外所有能源資源，而且要致力節約能源。這樣提高未來世界生活水平的理想方指日可待。 □

本文譯自一九八一年九月號之「董事雜誌」(The Director)，作者艾華利博士乃英國核子燃料有限公司的助理執行董事。

AFS 籌辦香港學生交換計劃

由一九八三年開始，香港的中學生在國際知名的AFS青年交換計劃下，將有機會負笈外國，並與當地家庭生活一年。AFS利用滙豐銀行信託公司轄下信託基金撥出的一項種子基金，將於今年初在香港開設一個辦事處，與有興趣參加是項計劃的學校及商行合作交換學生事宜。

AFS 計劃遍及五十五個國家

AFS國際文化交流計劃是世界上同類志願組織之中私人資助及社會人士參與最多者。作為一個沒有政治或宗教背境的不牟利機構，AFS在全球五十五個國家設有辦事處，透過旗下的專業職員與受過訓練的志願工作者，安排青年學生交換計劃。自一九四七年以來，逾十一萬AFS學生離開本土，負笈外地的中學，與當地家庭共同生活，並參

與當地的社會生活，從而增進他們對世界的認識。

在一九八一至八二年度，另外有八千名年齡在十六至十八歲的學生可以分享這種體驗。每一個AFS地區的志願工作者與學生、家庭及學校合作，為參與該計劃的每位人士盡量提供有助成長及學習的機會。AFS擁有十萬名積極的志願工作者，他們的服務惠及全球五千多個社區。

亞洲是AFS計劃增長最快的地區。在日本、澳洲、紐西蘭、印尼、馬來西亞、斯里蘭卡與泰國等地的參與人數超過一千七百名。中國政府亦與AFS合作，開辦第一個正式的國際青年交換計劃。此外，AFS又與其他亞洲國家商討實行此項計劃的事宜。

香港區的計劃

AFS為香港提供一個雙方交換計劃。本港的家庭與學校可以有機會作東

道，接待外國學生；同時香港也可以遣送學生到外國去。最初的交換計劃可能與美國、英國、加拿大、澳洲與紐西蘭之間舉行。該計劃預計在未來數年間的參加人數會增至五十至六十名。

AFS將於今年秋季招收首批參與交換計劃的中五香港學生。獲准升讀中六者的學位將可保留至第二年他們返港後。至於在他們離港的這一年內，若干學校將把他們的學位供來港的AFS外國學生之用。上述各項安排將由AFS與每間參與學校負責。

AFS香港區計劃的發展，有賴該計劃負責人與本港多間學校校長磋商，他們包括觀塘的聖傑靈女子中學校長；九龍華仁書院校長；香港華仁書院校長；赤柱聖士提反中學校長；路德會北角協同英文中學校長，以及瑪利諾修院學校校長。

還有若干香港商行表示有興趣為僱員子女提供AFS計劃。參加的商行會向僱員公佈該計劃，為指定數額的學位提供部份或全部獎學金資助，並派發申請表格予表示感興趣的僱員。甄選學生的工作由AFS全權負責。AFS並會鼓勵這些公司僱員為外國的AFS學生作東道。

AFS計劃是為符合資格的學生而設，並不計較他們是否有足夠能力支付參加的費用。非經商行代為申請的學生所需支付的費用將少於二萬五千港元，餘額由世界各地參與AFS計劃的商行與贊助人以部份獎學金形式資助。AFS希望能夠獲得香港商界的 support。

本會將於四月二日的業務圓桌午餐例會席上，安排有興趣參與上述計劃的會員機構與AFS國際組織的總裁及其他高級職員會晤。

以下是去年參與AFS計劃的兩名學生抒發他們的感受：

我參加AFS的體驗使我獲益良多。我不但開始了解及欣賞另一種文化，對自我及自己的價值觀亦有更深了解。現在世界對我來說似乎是那麼細小。我開始以開明的頭腦與踏實的態度放眼世界。

——馬來西亞一學生

在另一個國家居住容許我了解更多的人與事。我能夠從另一個角度認識歷史與世界事物。跟其他AFS學生接觸更增進我的知識，減少我對世界其他地方的偏見。

——澳洲一學生



正在享受音樂的AFS學生。

簡報滙編

歡迎新會員

本刊歡迎二十六間公司於一九八二年一月份加入本會，成為香港總商會會員。（新會員名單詳列今期英文版）。



新任香港證券監理專員的霍禮義先生，一月十一日在本會每月舉行的圓桌午餐例會上致詞。



吉達商會常務董事達倫先生（中），率領來自沙地阿拉伯的三人代表團，於一月十二日會晤本會阿拉伯地區貿易委員會會員。委員會同意該訪問團在香港舉辦研討會，以促進港人在沙地阿拉伯從事工業投資的建議，並答應提供適當的協助。

本會週年晚宴

港督麥理浩爵士在本會舉行的週年晚宴席上致詞時，表示必須為香港的前途找尋解決方法。

港督並補充說：「來日方長，我們不必急躁。」

他認為香港人須「安於中國政府對香港之可以了解之立場，更要保留自由港、工商財經中心之條件，以可對其作出貢獻」。

港督表示香港去年的出口表現比預期為佳，本地生產總值有百份之十的實質增長。

這是八年來港督最後一次蒞臨本會委員會週年晚宴作為主賓。

本會主席紐璧堅先生向港督表示：「在督憲閣下治理下，香港這十年間的進展比以往任何時期為快。」

他指出，在麥理浩爵士任內，香港在經濟與社會發展方面均十分快速，兩



港督在紐璧堅先生與本會執行董事麥理覺先生（右）迎送下出席晚宴。



港督麥理浩爵士表示：「友好、愉快及完全滿意之關係……」



紐璧堅先生表示：「諸協的合作關係……」



港督（左）與紐璧堅先生、布政司夏鼎基爵士及貿易發展局主席簡悅強爵士談笑風生。

方面且並肩前進。能夠獲致以上成就，政府與社會大眾之間的諧協關係是一項重要因素。

紐氏說：「以往大商行認為對他們有利的，自然便等於對香港有利，這種情形在今日剛好相反。」

「工商界領袖對於影響香港的經濟、社會與政治發展深感興趣。他們從事多種活動，致力為這些發展作出積極貢獻。」

紐氏特別提及本會為社會作出的貢獻，並強調兩點：

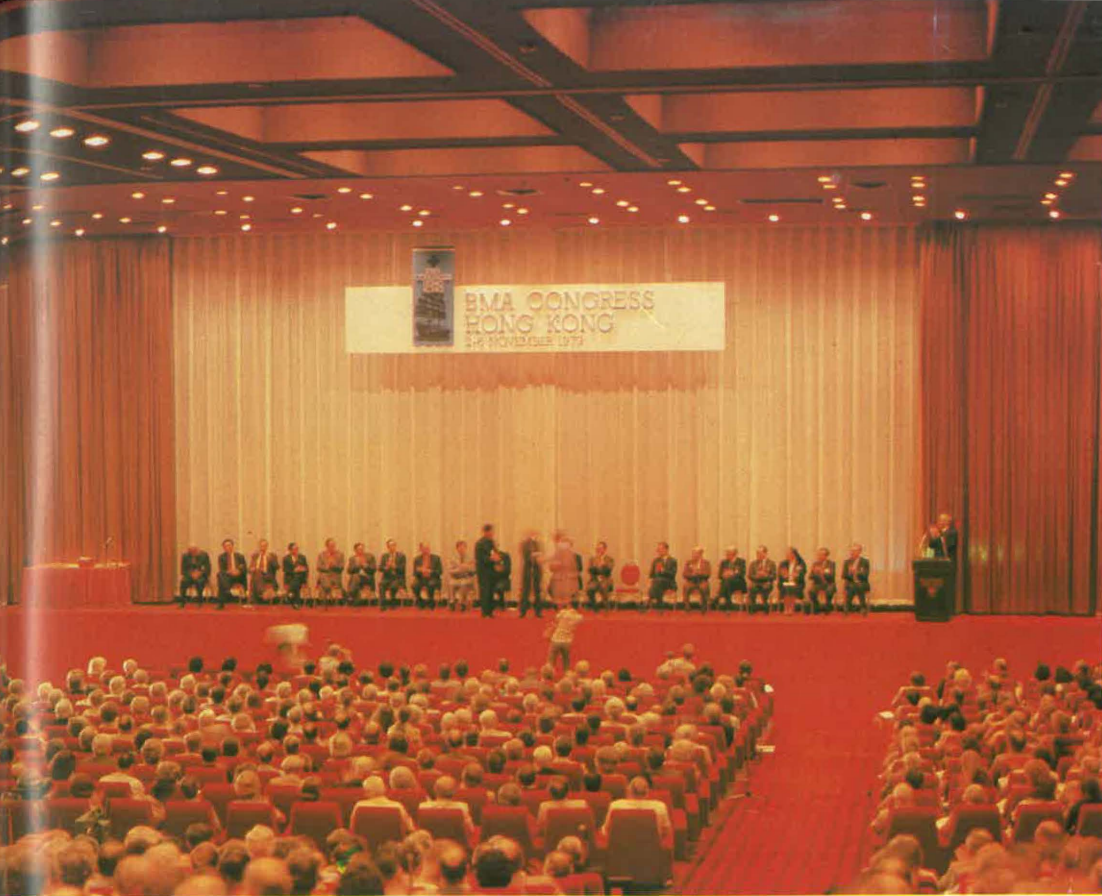
「首先，無論總商會與政府的觀點符合與否，總商會一直都有向政府提出

負責任而具建設性的意見，與政府保持溝通。

「其次，加入為本會委員會的會員及他們所代表的機構，經常為委員會的事務花費不少時間與精力，可謂勞苦功高。」

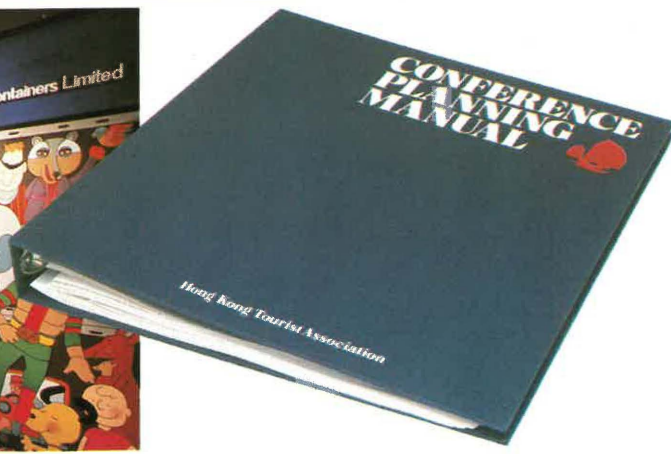
港督在答詞時向紐璧堅先生表示：「本人同意閣下所說（總商會）與政府之友好、建設性及完全滿意之關係。」

「本人不用再向本人之繼任人讚賞總商會，因為他對貴會已十分清楚，而總商會許多成員亦已認識他，不過，本人謹祝他亦像本人一樣與總商會關係愉快。」



香港

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