Crown Zellerbach

1980 Annual Report

Company Profile

Crown Zellerbach is one of the largest forest products and paper companies in the United States.

The company owns or controls 3.4 million acres of prime commercial timberland in North America, from which it normally harvests up to 400 million cubic feet of logs per year, more than half of its wood fiber requirements. Crown has the capacity to produce more than a billion board feet of lumber and 600 million square feet of plywood annually, and its 14 pulp, paper and containerboard mills in the United States and Canada have a combined capacity of nearly 3 million tons per year. Major paper products are business and converting papers, food service products, grocery bags and sacks, household paper products, institutional tissue and toweling, market pulp, newsprint, packaging papers and printing papers.

The company's Containers and Packaging Group includes 22 corrugated container plants and 8 high-technology facilities producing a wide variety of flexible packaging products. Its Distribution Group operates a national wholesale distribution system supplying thousands of products, principally printing and business papers and office supplies. Crown Zellerbach International, Inc., a wholly-owned subsidiary, is responsible for the Corporation's interests outside the United States, which include manufacturing and marketing operations in Canada, Mexico, Central and South America, and sales organizations in Europe and the Far East.

Crown Zellerbach is an equal opportunity employer, with more than 30,000 employees in 38 states and Canada. Company headquarters is at One Bush Street, San Francisco, California.

Contents

Financial Highlights

	1980	1979
Sales and Earnings		
Net sales	**$3,066,600,000**	**$2,806,100,000**
Income before income taxes	$ 127,800,000	$ 211,100,000
Taxes on income	$ 30,400,000	$ 77,600,000
Net income	**$ 97,400,000**	**$ 133,500,000**
Financial Position		
Working capital	$ 385,900,000	$ 402,200,000
Total assets	$ 2,372,700,000	$ 2,160,600,000
Long-term debt	$ 486,100,000	$ 545,200,000
Preferred stock	$ 125,000,000	$ –
Common stock equity	$ 1,064,000,000	$ 1,030,600,000
Per Share of Common Stock		
Net income	**$ 3.46**	**$ 5.24**
Common dividends declared	$ 2.25	$ 2.05
Common stock equity	$41.58	$40.54
Additional Information		
Internal funds generated	**$ 273,500,000**	**$ 265,700,000**
Dividends declared	$ 66,500,000	$ 52,300,000
Additions to properties	$ 281,600,000	$ 215,500,000
Depreciation, amortization, depletion and cost of timber harvested	$ 116,100,000	$ 110,200,000
Average common shares outstanding	25,505,984	25,412,370
Holders of record of common shares	26,485	27,232
Employees	30,569	31,572

To Our Shareholders, Customers and Employees

1980 was a year of substantially lower earnings for Crown Zellerbach, but in terms of progress toward our long-term goals, it was a year that reinforced our optimism about the balance of the decade.

In the forest products industry, long-range commitments and large capital investments are necessities. In 1977 Crown announced a five-year, $1 billion capital improvement program aimed at improving productivity, earnings and competitive strength. This has since been expanded to $2.1 billion through 1984.

Aided by this program, Crown is improving the ways we utilize our 3.4 million-acre land base. We are increasing our strength in markets that yield the highest returns. We are developing new products for new markets. We are streamlining our mills and plants to produce those products more efficiently. We are withdrawing from markets and closing facilities that provide insufficient return. We are expanding and computerizing our distribution network, and we are expanding our international marketing and production activities.

Our financial position is strong. Current assets are nearly twice current liabilities, and long-term debt is 26 percent of total capitalization. In 1980 the equity base was enlarged by a $125 million convertible preferred stock issue of 2.5 million shares. The capital improvement program continued on schedule with 1980 expenditures of $282 million. We expect to continue financing it mainly from internally generated funds, although external borrowing will also be required. Crown maintained its 1979 level of internally generated funds in 1980, a year in which the recession sent American business generally into a steep decline.

The full force of the recession was felt by our two largest groups – Timber and Wood Products and Pulp and Paper – in the second quarter. Dramatically rising mortgage rates and the highest prime rate in our history drove housing starts down to an annual rate of less than one million by mid-year, the lowest level since the 1975 recession. This reduced Timber and Wood Products earnings by two-thirds and forced sawmill closures in the Pacific Northwest, where five of our ten United States pulp and paper mills are located. That, in turn, pushed the cost of wood residuals used for papermaking up 120 percent, the steepest rise in the modern history of the industry.

At the same time, companywide costs for purchased energy and chemicals, which account for 50 percent of all materials and supplies purchased by the corporation, rose 30 percent and 20 percent, respectively. In addition, Gross National Product, which both the paper and container industries tend to reflect, dropped almost 10 percent in the second quarter, the second deepest quarterly drop since World War II. From then on, the continuing recession made it impossible to recoup our cost increases through prices for our products. Finally, there were sizable start-up costs at our modernized Bogalusa, Louisiana, mill, and write-offs of obsolete and marginal facilities which were closed.

Specialty Packaging and Chemicals performed well, however, and the Distribution Group achieved record sales and earnings.

Crown Zellerbach International's pre-tax earnings also

W. T. Creson *C. R. Dahl*

were down as a result of the economic slowdown overseas, but Crown Zellerbach Canada Limited weathered these conditions fairly well. Strong sales of Canadian newsprint and market pulp did much to offset the decline in lumber and plywood, which directly reflected the slump in the United States housing industry. The International Group wrote off the $32 million book value of its 50-percent equity interest in Van Gelder Papier of The Netherlands, which had only one profitable year in the last five.

Sales and earnings by business groups are reported in the Review of Operations, starting on page 16.

During the year J. R. Fluor, chairman and chief executive officer of the Fluor Corporation, and R. M. Boyle, former executive vice president of Crown, stepped down from the Crown Zellerbach Board of Directors. In October, Maurice F. Granville, retired chairman and chief executive officer of Texaco Inc., was elected to the board. He is one of eight outside directors on the fourteen-member board.

While government anti-inflation efforts may inhibit economic growth and affect Crown's results in the first half of 1981, the second half should bring definite improvement. Housing starts are expected to rise moderately from 1.3 million in 1980 to 1.4 million in 1981. Pulp and paper margins and containers and packaging earnings should improve, while wholesale distribution is expected to continue its steady rise in sales and earnings. Oil and gas earnings also should increase. CZ International sales will be influenced by lagging economic conditions in Japan and Western Europe.

The years beyond 1981 appear to offer Crown Zellerbach outstanding opportunities for growth and return. We are optimistic about the prospects for reduced inflation and for tax reform. We are optimistic about housing starts, pulp and paper demand, packaging and distribution expansion, increased cost-effectiveness in our container business, and widening international opportunities. Most of all, we are optimistic about Crown's ability to capitalize on these through the productivity improvements already in place or due to come on stream in the next few years.

Our optimism for the future is strengthened by the knowledge that the thousands of skilled men and women who work for our company are dedicated to achieving its objectives in the promising decade ahead. For this we express our sincere appreciation.

C R Dahl

C. R. Dahl
Chairman and
Chief Executive Officer

W T Creson

W. T. Creson
President

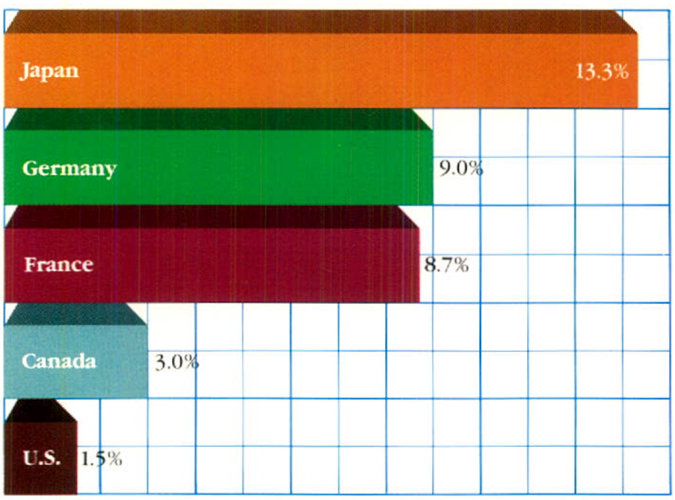
San Francisco, California
March 9, 1981

Increasing Productivity: Mission Of The 1980s

For American industry, the great challenge of the 1980s is to improve productivity. The declining rate of growth in United States productivity over the past decade has relegated our country to last place in this critical economic area among the major industrial nations of the West. Incessant inflation and flagging economic growth are the consequences.

Through its capital investment program, Crown Zellerbach is attacking this problem on many fronts. More sophisticated production equipment in all divisions is enabling fewer employees to produce more and better lumber, paper and packaging, with less waste. New energy systems continue to improve the company's self-generation capabilities. Advanced computer technology is increasing productivity in mills, plants and warehouses, improving materials handling and aiding in cash management, inventory control and communications.

Productivity in Manufacturing
Average Annual Percentage Increase 1960-1979



Source: Bureau of Labor Statistics

The declining rate of United States productivity growth over the past decade has relegated our country to last place in this critical economic area among the major industrial nations of the West.

A key element in the $120 million modernization of Crown's containerboard mill at Bogalusa, Louisiana, is one of North America's largest continuous pulp digesters. With a main vessel nearly 200 feet high and 22 feet in diameter, the computer-directed Kamyr digester is capable of producing 1300 tons of kraft pulp per day.

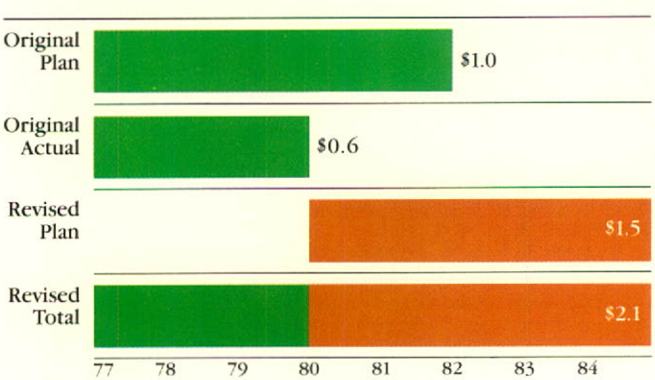
Design For The Future

This program, which will involve capital investments of $2.1 billion through 1984, is a design for the future. The objective is to generate increasing earnings by funding long-term business strategies that will achieve maximum productivity and cost-effectiveness in markets of greatest potential profit. Long-term planning is essential to success because in a mature, capital-intensive business like forest products, planning must cover 10, 20, 30 and up to 60 years and span many economic cycles. Thus Crown's capital spending was approximately $280 million as expected in 1980 even though the economy was unsettled.

New Opportunities

When the program began in 1977, it was projected to total $1 billion through 1981. By late 1979, when $600 million of the originally budgeted $1 billion had been committed, additional profitable investment opportunities became apparent, so the rate of capital spending was stepped up, and the program extended. The new plan calls for $1.5 billion in investments from 1980 through 1984, 50 percent of which is allocated to Pulp and Paper.

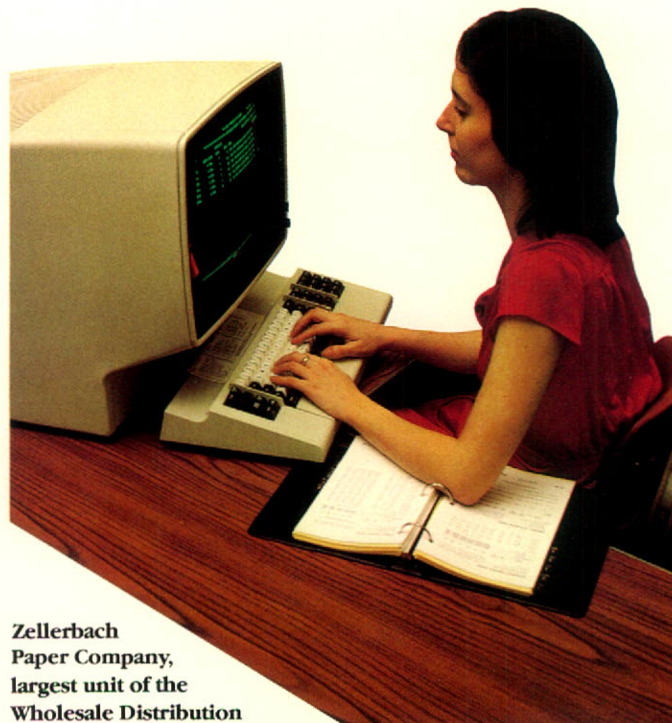
Capital Investment Program
In Billions of Dollars



Crown's original capital investment program projected expenditures of $1 billion from 1977 through 1981. This was expanded at the end of 1979 after total investments had reached $600 million. The revised plan calls for investments of $1.5 billion from 1980 through 1984, bringing total expenditures to $2.1 billion.

Examples of the program's emphasis on improving productivity include modernization of an existing machine at Crown's Wauna, Oregon, mill into one of the industry's fastest and most cost-effective producers of register bond business papers. At the West Linn, Oregon, and St. Francisville, Louisiana, mills, equipment has been replaced and modernized to serve the growing market for coated publication papers. And studies of the Camas, Washington, mill, oldest and largest of the company's primary pulp and paper facilities, will determine the feasibility of installing new, larger and more cost-effective equipment, including a new white paper machine.

Another illustration is the $120 million modernization of Crown's containerboard mill at Bogalusa, Louisiana, to make it more cost-effective. Manhours



Zellerbach Paper Company, largest unit of the Wholesale Distribution Group, has achieved significant gains in productivity through selective capital investments, including extensive use of data processing technology for inventory control, order entry and billing. ZPCo has linked all of its major distribution centers with a computer network.

per ton of product will be reduced 35 percent, and the mill will become 70 percent self-sufficient in energy from renewable sources. Bogalusa's production will supply 13 Crown box plants in the East and Southeast.

Increasing Fiber Yield

In the forest products industry, a basic way of improving productivity is by increasing the amount of usable fiber obtained from the wood supply. This is achieved partly through modern forestry to increase the yield per acre of timberland and partly through technological improvements to increase the amount of pulp obtained from wood.

Crown Zellerbach manages its 3.4 million acres of prime commercial forest in North America with the most advanced methods available: genetic improvement through seed selection and grafting to produce larger, faster growing trees; carefully planned thinning, fertilization and fire and disease protection to produce healthier, more productive forests; computer-directed harvesting to meet market demand, and prompt reforestation to maintain long-term balance between growth and harvest. These methods help make Crown more than 50 percent self-sufficient for its fiber needs.

Technology to obtain maximum fiber yield from wood includes one of North America's largest Kamyr digesters, installed as part of the Bogalusa modernization. This digester can produce 12 percent more fiber from a ton of chips than the pulping system it replaced, and refiner groundwood and thermomechanical pulping systems at our facilities in Elk Falls, British Columbia, Port Angeles, Washington, and Wauna also produce more pulp from a given amount of wood than conventional chemical pulping systems do.

Magazines and catalogues printed on Crown Zellerbach papers have a total circulation of 133 million copies a month. In recent years, literally hundreds of special-interest periodicals have joined the familiar news and general interest publications in the magazine market, stimulating demand for publication papers.

Thermomechanical pulping (TMP) units, such as this one at Crown Zellerbach Canada's Elk Falls mill in British Columbia, produce more pulp from a given quantity of wood than conventional pulping systems. To help increase efficiency in converting wood chips to paper products, Crown has installed TMP units at three major primary mills.

Another way of making fiber go further is to make it do double or even triple duty through recycling, which has the added benefit of helping to reduce solid waste. Five of Crown's mills have recycling capability, and three – Antioch, California, Baltimore, Ohio, and Moreau, New York – are major recyclers. The Antioch containerboard mill is the largest such recycling plant in the western United States, with a capacity of 200,000 tons per year.

Distribution Gains Outstanding

While wholesale distribution is a service business, the Distribution Group's principal unit, Zellerbach Paper Company, has also achieved significant gains in productivity through selective capital spending. Already making extensive use of data processing technology to speed, control and record inventories, order entry and billing, Zellerbach Paper Office Products added a new dimension in 1980 with a system that advises customers of quantities available at ZPCo Office Products warehouses, recommends substitute items if the first choice is temporarily out of stock and gives earliest delivery dates. It places the 11,000 to 15,000 items in an average ZPCo Office Products inventory literally at the customer's fingertips.

Freeing Capital

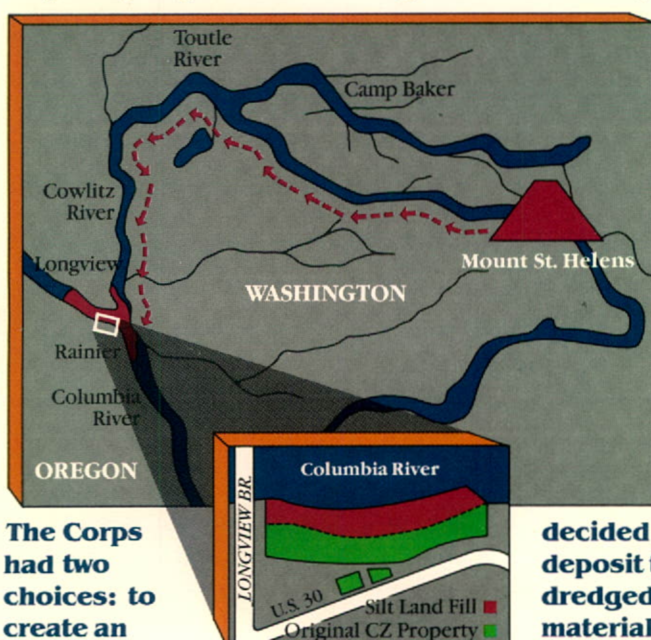
Improving productivity often entails redeployment of existing capital, as well as efficient allocation of new resources. Thus closing uneconomic operations and discontinuing marginal product lines are as important to a comprehensive capital investment program as funding new ones. In 1980 Crown closed a 31-year-old plant in Los Angeles that was the smallest of the company's film products and flexible packaging facilities, small-scale towel and tissue operations at Antioch, pulp and containerboard operations at the small Lebanon, Oregon, mill, and three older paper machines at West Linn. Crown now provides better quality products more cost-effectively from other operations.

Crown Assists In Volcano Cleanup

On May 18, 1980, the top of Washington's stately Mount St. Helens was blown off by a mighty volcanic eruption. The blast ripped away 1400 feet of the mountaintop, hurling an estimated 1.3 billion cubic yards of rock, ash, pumice and mud down the slopes and high into the sky.

Aside from minor disruptions caused by the heavy fallout of volcanic ash over much of Oregon and Washington, Crown Zellerbach suffered no damage or timber loss. But nearly half of the displaced rock and mud was pushed down the Cowlitz River into the Columbia River, nearly opposite Crown Zellerbach's Rainier lumber mill.

Shipping on the Columbia River came to a standstill. Emergency dredging opened a temporary channel almost immediately, but the Army Corps of Engineers was ordered to restore full capacity as quickly as possible.



The Corps had two choices: to create an island with the debris or to deposit it along the south shoreline. An island would have interfered with the ship-turning basin at the Port of Longview, making navigation difficult. It would also have seriously hampered log sorting and storage operations at Rainier.

With the company's agreement, the Corps decided to deposit the dredged material along waterfront properties owned by Crown, the Port of St. Helens and the City of Rainier. According to the Corps, narrowing the river channel at Rainier by depositing the material along the south shore will speed the river flow and make the river self-cleansing between Rainier and the Port of Longview. The fill will create as much as 60 acres of new waterfront property at Crown's present 40-acre Rainier site.

A CZ task force is working with the Corps to insure that there is no unnecessary interruption of operations during the dredging and filling. When it is completed, some existing Rainier equipment will have to be relocated, and new log handling equipment will be needed.

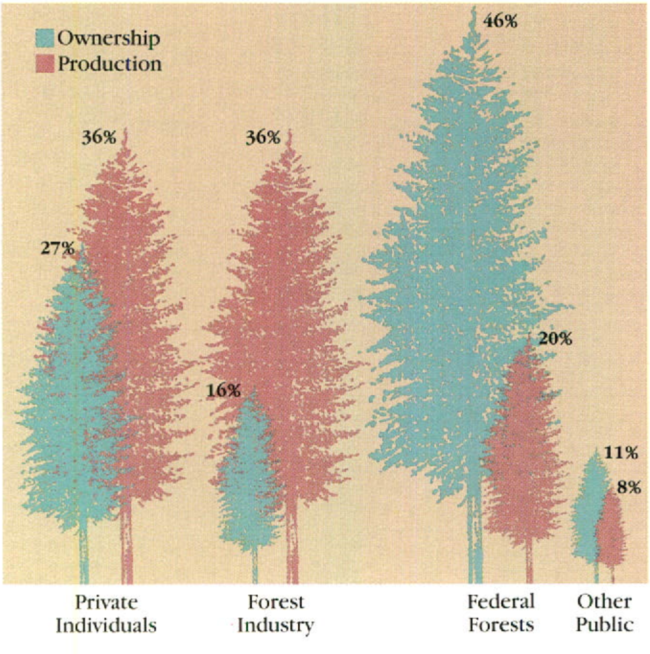
The filled land, when purchased, will provide a prime site of more than 100 acres with a mile of deep water frontage capable of handling the largest ships on the Columbia River. The site is already served by rail and highway and adjacent to a population center.

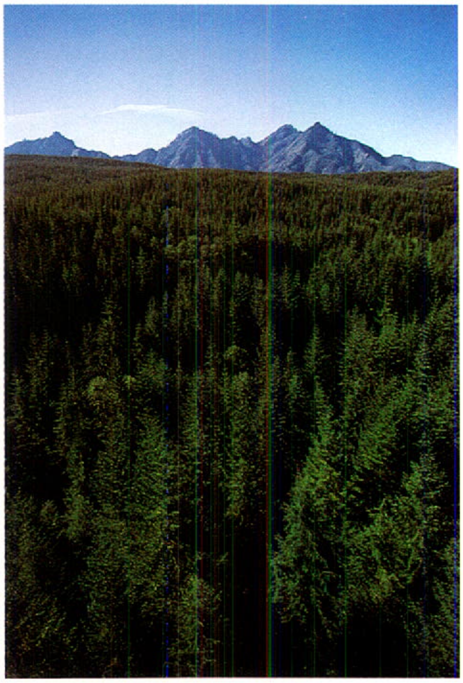
The Forest: A Changing Resource

North America will continue to be the world's leading and lowest-cost supplier of softwood timber for the foreseeable future. Predictions of future wood fiber demand, however, make scientific management and optimum utilization of this renewable resource imperative.

The United States Forest Service has forecast that between 1977 and the year 2030, U.S. demand for wood and paper products will double, and that there will be a growing disparity between that demand and the fiber supply from U.S. forests. Without major improvements in forest productivity and changes in public land management, this means that U.S. forest products will become increasingly expensive – therefore less competitive in both domestic and foreign markets – and that an increasing proportion of our country's fiber requirements will have to be imported, which will enlarge American trade deficits.

Standing Softwood Timber Inventory vs. Fiber Production





Crown manages its timber resources with the most advanced methods available: genetic improvement to produce larger, faster growing trees; carefully planned thinning, fertilization and fire and disease protection to produce healthier, more productive forests; computer-directed harvesting and prompt reforestation to maintain long-term balance between growth and harvest.

Avoiding A Shortage

Fortunately, the U.S. has both the means and the time to avoid this through expert maintenance and prudent use of our timber resource. A study done by Resources for the Future, a research organization based in Washington, D.C., estimated that in 1977 net United States industrial timber growth was almost four times as great as it was 60 years earlier, more than 50 percent greater than 25 years earlier and 18 percent more than it was just five years earlier. The principal reason was improved forest management.

Using modern forest management, the forest products industry far outproduces public and private, non-industrial timberlands. Crown, for example, grows 50 percent more wood fiber per acre than public timberlands produce in similar areas, and in 1980 the company dedicated a new Forestry Research facility at Wilsonville, Oregon, to increase the growth, quality and market value of CZ timber, reduce the cost of growing it, and minimize environmental risks in timber operations. The forest products industry as a whole supplies 36 percent of the country's fiber needs from only 16 percent of the national softwood standing timber inventory. Federal forests produce only 20 percent from 46 percent of the inventory.

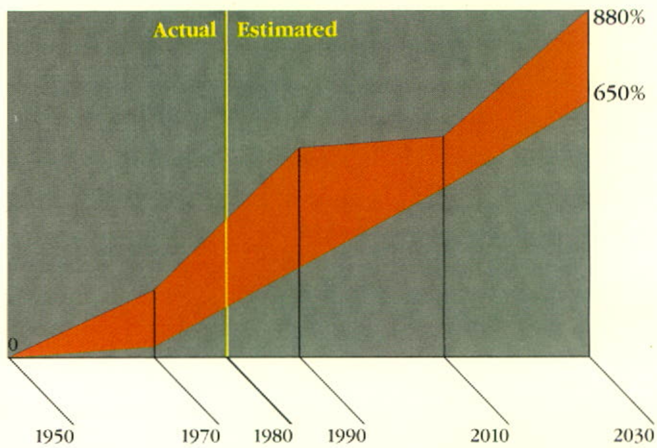
The key to avoiding a shortfall in domestic fiber supply obviously lies in more intensive management of both public and private, non-industrial lands, which together comprise 86 percent of the nation's commercial timberland. For that reason, Crown and other forest products companies have strongly advocated improved management and better utilization of timber assets on these lands. Some progress was made in 1980 when Congress approved an investment tax credit to encourage accelerated tree planting on small private woodland holdings, but additional incentives will be needed.

Fiber Costs

Forest asset values have been steadily increasing because the amount of land on which to grow timber is finite and also is subject to the risk of periodic withdrawals of federal acreage from use for commercial forestry. Adjusted for inflation, average prices for standing timber increased 9.6 percent per year in the 1970s compared with the 1960s in the Pacific Northwest and 6 percent per year in the South. Crown is well positioned in this respect, with a large, low-cost and regionally diverse timber base.

Therefore, a key objective of the company's capital program is to add value to this resource by converting

Projected Stumpage Prices–Adjusted for Inflation



In the 80-year period from 1950 to 2030, even when adjustment is made for past and anticipated future inflation, prices for timber in various regions in which Crown has major holdings are predicted by the U.S. Forest Service to have increased between 650 percent and 880 percent.

CZ Drivers Conserve Fuel

An important part of Crown's energy conservation program is increasing the productivity of the company's 1100-vehicle truck fleet. During 1980 these trucks traveled more than 30 million miles hauling logs and wood chips, delivering products to customers and backhauling waste product to CZ recycling mills.

A fuel conservation team representing all Crown groups that operate trucks carefully monitors this fleet's performance. Results are measured in two ways: miles per gallon and gallons of fuel consumed per unit of shipment. The goal is to improve these two measurements by 15 percent over the next three years.

For 1980 the fleet showed a miles per gallon improvement of 3.1 percent over the fourth-quarter 1979 base period.

While close attention is paid to equipment maintenance and modification, Crown's drivers obviously play the key role in saving fuel. By scrupulously observing the 55 mph speed limit, using the correct operating gears, shutting off engines when parked and other conservation techniques, these skilled employees are saving well over 150,000 gallons of fuel per *year*.

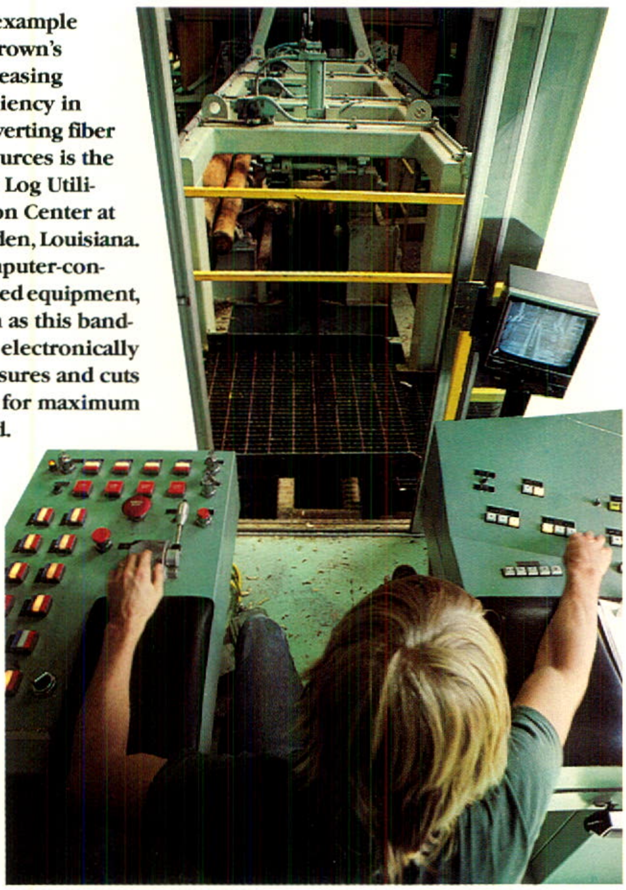
it – to lumber, plywood, pulp, paper products, containers and packaging – at lower cost and with improved efficiency.

Changing Resource

The fiber resource itself changes in character over time. Relatively small-diameter logs now account for more of the total timber supply, and facilities and equipment must be modified or replaced to respond to this evolution in the timber stock.

Crown recently opened an $11.5 million Log Utilization Center at Holden, Louisiana, which produces dimension lumber from small-diameter trees. Located in the company's 172,000-acre Tickfaw Managed Forest, the center converts timber from second-growth pine timberland. This timber is harvested in full tree lengths and cut by computer-controlled measuring and sawing equipment into segments that will yield the highest value end-products, principally standard-dimension "studs" and boards. The residuals – wood chips, sawdust and bark – are pulped for papermaking or used to fire boilers at the Bogalusa and St. Francisville paper mills.

Holden is the first mill in its area specifically designed to process small-diameter timber.



An example of Crown's increasing efficiency in converting fiber resources is the new Log Utilization Center at Holden, Louisiana. Computer-controlled equipment, such as this band-saw, electronically measures and cuts logs for maximum yield.

With 3.4 million acres of prime commercial forest in North America, Crown is more than 50 percent self-sufficient for the fiber it needs to produce paper and wood products.

In Canada, where the proportion of small-diameter logs flowing into the converting process has also been increasing, Crown Zellerbach Canada Limited's wood products mills at Elk Falls and Fraser Mills, British Columbia, are being similarly modernized for optimum utilization of the timber resource.

Leadership In High Technology

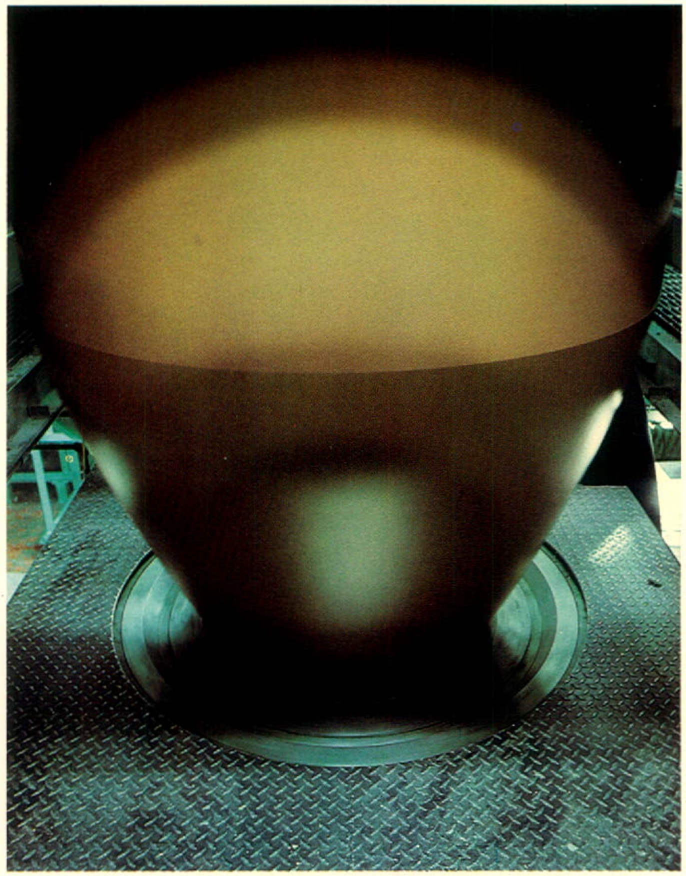
The markets that Crown Zellerbach serves are constantly changing. So is the technology for serving them. This is especially true in the food packaging field, where CZ has been a major supplier for years. When bakers turned from wrapping bread in waxed paper to packaging it in plastic bags in the late 1950s, Crown took the lead in developing suitable films and adapting packaging machines to use it. From that and other experience have emerged a highly-skilled product research and development team and a steady stream of innovation.

In early 1980 the Packaging Group's product line had become so diverse and the technology of its markets so fast-growing that further specialization of its marketing effort was necessary, and the group was reorganized into a Flexible Packaging Division and a Film Products Division.

Film Facility Expansions

By mid-1981 the Film Products Division will complete a $20 million expansion of high-technology facilities making both cast and blown films. Blown film is formed as a long, cylindrical bubble, which is cooled, flattened and then cut into sheets. Cast film is so called because the sheet is formed flat and cast onto a metal cylinder to cool. Although both serve many of the same end uses, each has particular characteristics that make it superior for certain applications. Both can provide oxygen, moisture and grease barriers in food packaging, but cast film is clearer, softer and prints better than blown. It is typically used for such products as bread bags, snack food packages, cheese and frozen food over-wraps. Industrial applications include pool covers, greenhouses and automotive parts molding. Blown film is stiffer and is most often used to package foods inside a paper box, such as cereals, snack foods and cake mixes.

High technology to serve specialized markets has made Crown film operations a major factor in packaging for foods and related products. The rapidly changing convenience food business generates constant demand for new constructions of film, paper and foil with special properties to seal out air and moisture and seal in freshness.


A bubble of packaging film takes shape at Crown's Greensburg, Indiana, plant. When it has been blown to full size, the bubble will be cut, flattened and sliced into sheets for use in such familiar packaging applications as breakfast cereal box liners.

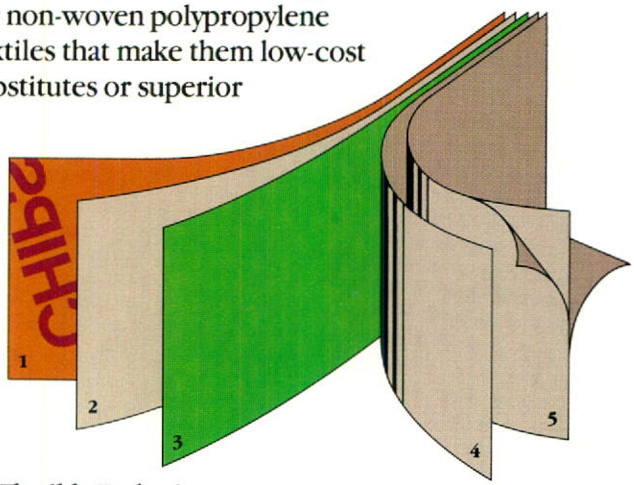
Crown Zellerbach was also the first to apply co-extruded film to food packaging and today is recognized as the leader in this technology, much of it proprietary. Co-extrusion involves forming several dissimilar resins into a single sheet of film to provide a superior low-cost product. Films with a thickness of 1/1000 of an inch may have as many as seven distinct layers.

The expansion will add 20 million pounds of additional capacity to the Greensburg, Indiana, blown film facility, the world's largest co-extruded blown film plant. Greensburg entered this field in 1976 with a co-extrusion capacity of 4.5 million pounds per year. The current expansion will increase that more than ten-fold. The company's Orange, Texas, cast film plant, also the industry's largest, will add 35 million pounds of annual co-extrusion capacity.

The company has also developed a number of unique paper grades and combinations of paper, film and foil to serve highly specialized markets, such as moisture-resistant wrapping for business machine papers.

Non-woven Fabrics

Another important area of Crown technological expertise is the manufacture of non-woven materials. Crown has perfected new applications for non-woven polypropylene textiles that make them low-cost substitutes or superior



CZ Flexible Packaging

1. **Polyester exterior layer provides package strength and stiffness and surface gloss.**
2. **Polyethylene bonds polyester to foil.**
3. **Foil enhances appearance, provides a barrier against moisture, air and product ingredients.**
4. **Polyethylene bonds foil to polypropylene.**
5. **Three-layer polypropylene co-extrusion permits heat sealing of finished package, provides additional ingredient barrier.**

replacements for many uses traditionally filled by special cloth products. These textiles are continuous, interlaced threads or filaments bonded together by heat. As examples of newly evolving end uses, the company's *Fibretex* geotextiles are being used as underlays and moisture barriers in road construction, soil stabilization, railroad maintenance and in pond building.

In addition, the company has developed a growing business in specialty industrial chemicals used in the manufacture of plastics and resins, pharmaceuticals, pesticides and building materials. Crown also produces ink for the highly specialized needs of the flexible packaging industry. These products, based on proprietary technologies, serve internal corporate needs and are marketed to high-growth market segments.

Computerization

Computers and other by-products of the explosion in electronics have an important part in improving productivity. All of CZ's advanced film co-extruders employ electronic controls, and the role of computers

New applications for non-woven polypropylene textiles perfected by CZ include its *Fibretex* geotextiles. *Fibretex* has a broad range of construction applications, generally as an underlay and moisture barrier for roads, aircraft runways, railroad tracks, storage yards and parking lots, as lining for storage ponds and for erosion control and drainage.

is growing rapidly in the pulp and paper mills. At Bogalusa a process computer controls all operations of two continuous pulping digesters – including one of the largest yet built in North America. The precision of computer control significantly improves pulp quality, increases yield and reduces energy consumption. At the Camas mill advanced computer controls have been applied for the first time to a lime kiln, making it probably the most energy-efficient unit of its kind in the industry.

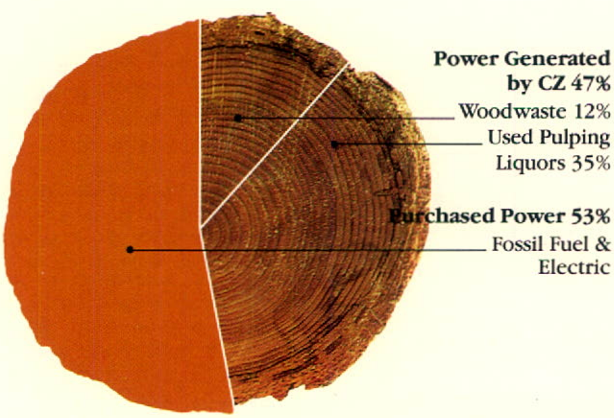
At Elk Falls Crown Zellerbach Canada is installing a new newsprint machine that will be controlled by a computer, and computers are being used in CZ sawmills to profile logs and set high-speed saws to obtain the maximum use of each one.

Energy: Fueling The Future

With fossil fuels – oil, natural gas and coal – becoming increasingly costly for industrial users, energy management has become a key element of productivity and profitability. This is of particular importance in the pulp and paper business because it is highly energy-intensive. Producing a ton of paper requires as much energy as producing a ton of steel. Crown's actual cost for purchased energy in 1980 was $190 million, including about $10 million for purchased wood waste and waste oil used as fuel.

Crown Zellerbach recognized the potential for a national energy shortage early and in the 1970s initiated a program to conserve energy, to ensure adequate supplies and competitive costs and to generate more energy from renewable sources. The results are most evident in pulp and paper and containerboard operations, which account for 95 percent of Crown's total energy consumption. Using renewable fuels – used chemicals from the wood pulping process, wood

Pulp and Paper Energy Usage
BTU's

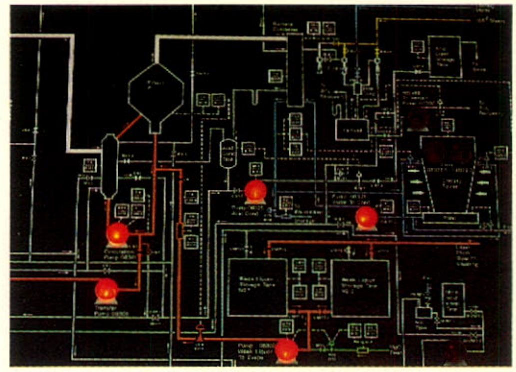


residuals from sawmills and plywood plants, and company-operated hydroelectric facilities – Crown replaces the equivalent of 8 million barrels of oil a year, half of its total energy requirements.

Higher Level Sought

As part of the capital improvement plan, Crown intends to increase substantially its level of energy use from renewable sources. Power-generating boilers capable of burning renewable fuels are operating at 14 manufacturing and converting facilities, and planned modernizations further emphasize the use of renewable energy sources and co-generation – using steam employed in the manufacturing process to generate electricity.

In addition, the company is pioneering the development of "high yield" flexible packaging films for foods and other products. These films have two important advantages over conventional products in terms of energy-efficiency. They require less petroleum-based resin per square foot of packaging material because



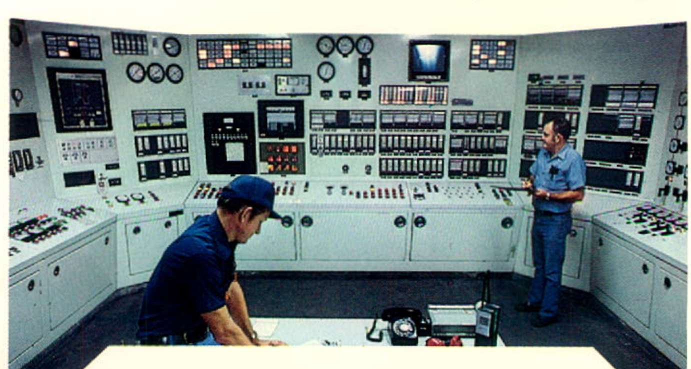
Sophisticated electronics control a chemical recovery boiler at Crown's Camas, Washington, paper mill. A recovery boiler has a three-fold cost-cutting function. Fueled by the liquors that are left over from making paper pulp, the boiler makes process steam for return to the pulp digester. Before the steam is returned, it powers an electricity-generating turbine. And, finally, ash from the boiler contains chemicals that can be treated and recycled in the digester.

they are thinner and lighter, yet stronger, and they also require less energy to manufacture.

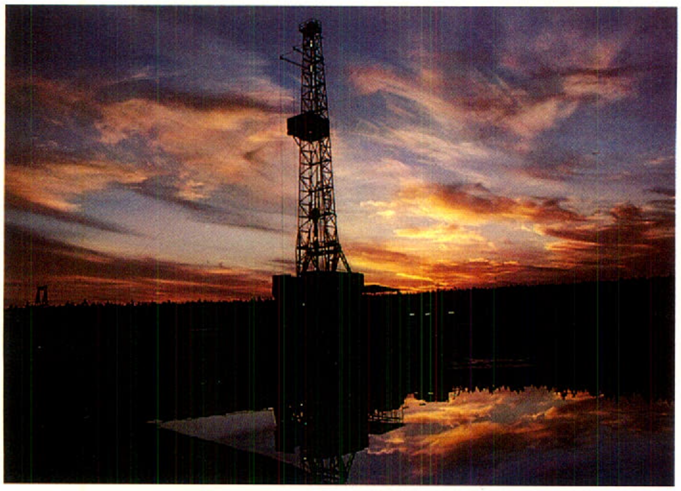
Oil and Gas Exploration

Crown is a producer, as well as a consumer, of fossil fuels. In 1980 total oil and natural gas equivalents, including Crown's share of the production of leaseholds, reached 760,000 barrels, compared with 650,000 the previous year.

The company controls the mineral rights on approximately 640,000 acres in Louisiana and Mississippi. Beneath much of this land, deep geological formations are being explored for natural gas and oil. Currently about 312,000 acres are under lease for exploration by such companies as Amoco, Atlantic Richfield, Chevron, Exxon, Getty, Hunt, Louisiana Land and Exploration, Pennzoil, Shell and Texaco. Crown has granted exploration leases on forest lands in Washington and Oregon,



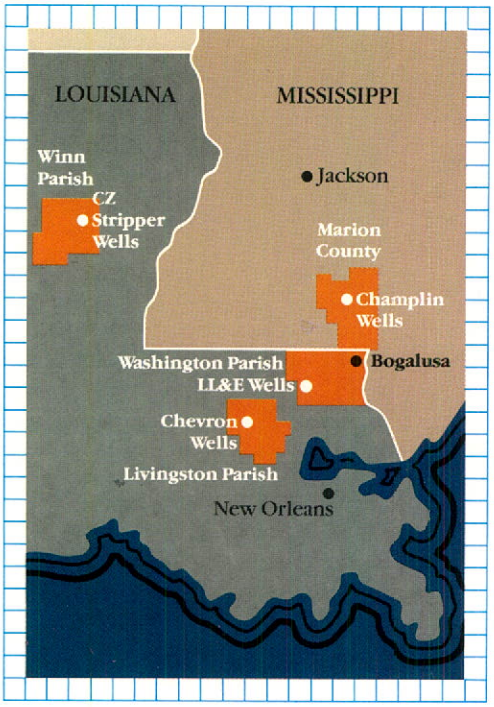
CZ workers direct the operation of a new, $21 million wood waste-burning boiler that helps to power the Bogalusa, Louisiana, containerboard mill. Power boilers capable of burning renewable fuels are now operating at 14 of Crown's manufacturing and converting facilities.



About 312,000 of the 640,000 acres on which Crown owns mineral rights in Louisiana and Mississippi are under lease for oil and natural gas exploration. Lessees include Amoco, Atlantic Richfield, Chevron, Exxon, Getty, Hunt, Louisiana Land and Exploration, Pennzoil, Shell and Texaco.

as well. Lessees bear the cost and risk of exploration. Crown retains a royalty interest, which in some cases is as much as a 25 percent interest in production. In many leases the company has the option of becoming a direct participant in exploration and development.

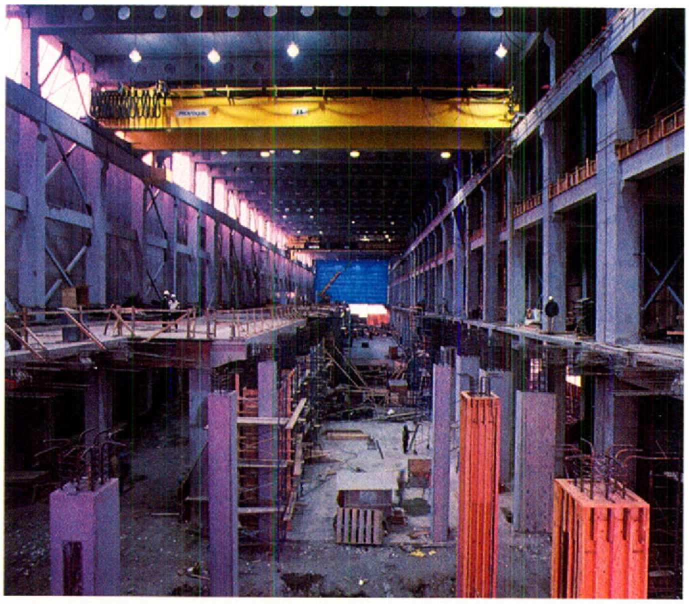
Crown also operates nearly 400 small, shallow wells in a company-owned oil field in Winn Parish, Louisiana. These are low-cost wells, and more are being drilled.



Oil and gas drilling activity on Crown Zellerbach land in 1980 was concentrated in the areas shown. While major drilling is by lessees, Crown, itself, produces oil from more than 400 shallow, so-called "stripper" wells in Winn Parish, Louisiana.

Widening International Horizons

One of America's urgent needs in the 1980s is aggressive competition in international markets to help offset foreign trade imbalances created by the cost of imported oil. Crown Zellerbach has been active in foreign markets, particularly Latin America, Europe and the Far East, for many years, both by exporting wood, pulp and paper products and by selectively investing in carefully targeted, high-potential opportunities through Crown Zellerbach International, Inc.



A building twice the length of a football field rises at Crown Canada's Elk Falls, British Columbia, mill to house a new newsprint machine. Part of a $150 million expansion at Elk Falls, the new machine will increase the mill's newsprint capacity by 180,000 metric tons a year.

In 1980 Crown Zellerbach Canada Limited, largest of CZI's investments, moved ahead rapidly with the largest modernization and expansion project in its history. The International Group also expanded its Latin American operations into Mexico and extended its marketing activities to include mainland China.

Canadian Modernization

Centerpiece of the $250 million CZ Canada program is a third newsprint machine and support facilities being installed at Elk Falls on Vancouver Island at a cost of $150 million. Scheduled for startup in early 1982, the new machine will be among the most modern in the world, with a capacity of 180,000 metric tons per year. This will increase Elk Falls' ability to serve the strong newsprint markets of the western United States, Canada and the Pacific Rim countries by about 75 percent to 420,000 metric tons per year.

Crown mills in the United States and Canada supply newsprint to hundreds of newspapers. Global demand for newsprint is projected to expand faster than the general world economy for years to come.

The expansion project also includes a three-story concrete building 670 feet long to house the new machine, an additional 640-ton-per-day thermomechanical pulp mill, a three-acre warehouse for storing the added production and improved waterfront facilities.

Power will be supplied by the provincial power company, B. C. Hydro, which is installing additional power lines to Vancouver Island and has guaranteed an adequate supply by 1983. To provide additional power between the scheduled startup of the machine and the availability of full power from B. C. Hydro, a new 25-megawatt turbogenerator is being installed that could supply enough electricity to serve a small city.

Pulp will be supplied from wood residuals. In addition to the 240,000 metric tons of newsprint, 195,000 metric tons of pulp and 80,000 metric tons of kraft paper and containerboard that Elk Falls currently produces per year, it also produces 100 million board feet of lumber.

Construction will also begin in 1981 on the second of a two-stage project to replace an 88-year-old sawmill-planer facility at Fraser Mills, in British Columbia. The first stage of the project, a high-speed planer, went into operation in 1979. The second is a modern, computer-controlled sawmill, due to come on line in early 1983 and capable of producing about 140 million board feet of lumber per year when it reaches full capacity.

Interests Extended

Crown Zellerbach International has long been active in Latin America, with participatory interests in paper goods and packaging operations in Chile and Central America and sales in virtually every country. In 1980 the group extended its interests to the fast-growing markets of Mexico with investments in a tissue paper machine and a pole and piling facility.

Another promising signal of growing world demand for wood fiber products was the participation of mainland China in the United States pulp and paper market for the first time with purchases of pulp and containerboard from Crown and other U.S. companies. While the initial purchases were not large in Crown's case, they signal the opening of a new market with great potential. These opportunities are pursued through the International Group's sales organization in the Far East. The group's marketing efforts also extend to Southeast Asia and Australia, the inter-Americas, Europe, Africa and the Mediterranean area.

Custom-built to carry rolls of newsprint, a ship of Crown Zellerbach International's Norsk Pacific line passes beneath the Golden Gate Bridge on its way to a berth in San Francisco Bay. This is one of the largest members of a Crown fleet that includes tugboats, chip barges and "boom" boats for moving logs.

Review of Operations[1]

Overview

After a reasonably good first quarter, operating earnings declined on a quarter-to-quarter basis compared to 1979. This was due principally to the world-wide recession, especially the slump in United States housing construction and a decline in demand for containers and some paper products. Other adverse factors were sharply rising costs for wood fiber and energy and non-recurring expenses associated with Crown Zellerbach's $1.5 billion modernization program.

Markets were relatively strong for newsprint, coated publication papers, tissue and toweling, distribution and specialty packaging – all major company products – but gains in these areas were insufficient to offset fully the earnings declines in others.

Net income was $97 million, or $3.46 per share, from sales of $3.1 billion. This includes a fourth-quarter involuntary conversion gain of $10.8 million, or 42 cents per share. 1979 net income was $134 million, or $5.24 per share, from sales of $2.8 billion.

The involuntary conversion gain resulted from the insured loss of a chemical recovery boiler in a fire at the Bogalusa, Louisiana, containerboard mill.

Financial results for Crown Zellerbach International are consolidated in the reports on the Corporation's principal business groups, which follow. These reports include comparative summaries of each group's operating performance in 1980, 1979 and 1978.

Timber and Wood Products

(In millions of dollars)

	1980	1979	1978
Sales	$600	$682	$596
Operating Earnings	$ 39	$117	$106
% of Total Operating Earnings	21	38	48

Timber and Wood Products was the first of Crown's businesses to feel the full impact of the recession. Earnings fell sharply as rising interest rates and decreasing mortgage availability reduced home construction activity. The rate of housing starts for 1980 was 1.3 million, substantially below the 1979 rate of 1.7 million. Foreign housing construction markets also were depressed, particularly in Japan, which resulted in a 20 percent decline in log exports, another important market for Crown Zellerbach. Many Crown Zellerbach and other lumber companies' operations were temporarily suspended or curtailed during the year, resulting in an operating rate for Crown of 68 percent.

During 1980 the Timber and Wood Products Group opened its newest facility, an $11.5 million, state-of-the-art Log Utilization Center at Holden, Louisiana.

Reflecting the effects of the recession on the United States housing market, Crown's 1980 timber harvest was 360 million cubic feet, 10 percent less than in 1979. Lumber production was 770 million board feet, 27 percent less than in 1979, and plywood production was 561 million square feet, 9 percent below the prior year's output.

Pulp and Paper

(In millions of dollars)

	1980	1979	1978
Sales	$1,239	$1,013	$885
Operating Earnings	$ 105	$ 142	$ 85
% of Total Operating Earnings	56	47	38

The Pulp and Paper Group reported lower earnings due to sharp increases in raw material costs, combined with declining demand in some markets. Overall demand was approximately the same as in 1979, with stronger products being newsprint, coated publication papers and tissue and toweling.

The slowdown in the lumber and wood products industry reduced the supply of sawmill and plywood residuals for papermaking. Consequently, by the second half of 1980 prices in the Northwest for sawdust and wood chips, principal forms of pulping fiber, had increased 120 percent over 1979. By year end, residual prices had eased only slightly, and total costs continued to exert severe pressure on margins. Corporation-wide, the cost for purchased energy also rose 30 percent and for pulping chemicals 20 percent. As a result, operating margin was reduced 39 percent.

Earnings were also affected by non-recurring expenses of $3.7 million associated with closing small-scale towel and tissue operations.

A five-year union contract – first of its kind in the

(1) Includes "Management's Discussion and Analysis of Financial Condition and Results of Operations."

West Coast pulp and paper industry – was signed at the company's Wauna, Oregon, mill, and a three-year contract was negotiated at the St. Francisville, Louisiana, mill.

Major modernization has been completed or is in progress at the mills at St. Francisville, Wauna, and West Linn, Oregon, and a feasibility study for such purposes at the Camas, Washington, mill is nearing completion. These modernizations are intended to increase the cost-competitiveness of our mills.

Containers and Packaging

(In millions of dollars)

	1980	1979	1978
Sales	$562	$487	$458
Operating Earnings	$ (6)	$ 9	$ 2
% of Total Operating Earnings	(3)	3	1

Corrugated container and specialty packaging sales increased 15 percent over 1979. Results reflect the high operating cost of old equipment at the Bogalusa mill during the first half of 1980 and approximately $16 million in startup costs related to the $120 million modernization program there during the second half. Also contributing to the loss was the write-off of $3.3 million for the closure of the Lebanon, Oregon, container-board mill.

The market for corrugated containers was adversely impacted by the recession. Volume was essentially flat, compared to an industry-wide decline of 3 percent. Prices for corrugated containers improved. However, the improvement was negated by escalating energy, material and labor costs.

The recession was felt keenly in the Midwest and Northeast, where the difficulties of the auto industry and other major customers held back container sales. Because the concentration of Crown's container operations is in the comparatively prosperous Sun Belt and the West, however, our decrease in volume was less severe than that of the industry as a whole.

An October fire destroyed the main chemical recovery boiler at Bogalusa. The mill resumed operation soon after the fire, using alternative methods of reprocessing used pulping chemicals. Reconstruction of the boiler is underway, with completion expected in early 1982.

In contrast to containers, markets for flexible packaging remained fairly strong throughout the year, with margins relatively stable. These products, principally serving the food business, are less sensitive to economic downturns than many others.

Results reflected the $3.4 million cost of closing a 31-year-old film products plant in Los Angeles, smallest of the company's film products facilities.

Distribution

(In millions of dollars)

	1980	1979	1978
Sales	$954	$849	$719
Operating Earnings	$ 31	$ 25	$ 20
% of Total Operating Earnings	16	8	9

Distribution Group earnings were 24 percent ahead of 1979, on a 12 percent increase in sales to $954 million. Margins held firm in 1980, despite competitive pressures and a change in product mix. During the past five years, earnings have increased steadily at a compounded annual growth rate of 12 percent. Distribution is a solid, stable growth business which should exceed a billion dollars in 1981 and which gives important balance to cyclical parts of the Corporation's portfolio.

The Distribution Group is composed of Zellerbach Paper Company (ZPCo), Stationers Distributing Company and Virginia Paper Company in the United States and Crown Zellerbach Paper Company Limited in Canada. ZPCo services the western United States, predominantly with printing papers, industrial papers and office supplies. Stationers distributes office products from warehouses in the Southeast. Virginia Paper, with locations on the eastern seaboard from Washington, D.C., to Miami, deals in printing papers. Growth potential is suggested from the current addition of congressional seats in 11 of the 22 states in which the group's facilities are located. In Canada, Crown Zellerbach Paper Company Limited serves the five growing western provinces.

Physical expansion in 1980 included two new office products facilities of Stationers Distributing: a 73,000-square-foot center in Dallas and a 56,000-square-foot location in San Antonio. Zellerbach Paper also added its full office products line to its Phoenix inventory.

Energy

(In millions of dollars)	1980	1979	1978
Sales	$23	$13	$ 8
Operating Earnings	$18	$12	$10
% of Total Operating Earnings	10	4	4

The Corporation's operating earnings from its properties in Louisiana and Mississippi have grown to the point where Energy operations qualify as a reportable segment of the business. These activities were formerly contained in the Timber and Wood Products business segment. While a portion of the earnings growth results from increases in the volumes of oil and gas produced, the bulk of it comes from increases in the prices of petroleum products.

Energy activity has centered in Louisiana and Mississippi, where Crown Zellerbach owns or controls approximately 1.2 million acres, with mineral rights on approximately 640,000 acres.

In 1980 the principal source of Energy earnings was oil production from nearly 400 wells in a shallow formation known as the Colgrade Field in north-central Louisiana. Estimated CZ reserves are nearly 4 million barrels of oil and 4 billion cubic feet of natural gas.

In exploration and development of mineral potential elsewhere on its properties, Crown grants leases on a selective basis to well-established and experienced companies for bonuses and royalties, while reserving the option of participating later as a working partner in successful ventures. Currently, there are 312,000 acres under lease in Louisiana and Mississippi.

Other

Other income, miscellaneous, net decreased from $22 million in 1979 to $14.2 million in 1980. Although interest income increased by $2.6 million, property abandonments and disposals, primarily resulting from the shutdown of three obsolete producing facilities, increased by $14.3 million.

Unusual items in 1980 included a $35 million gain from the sale of assets of Elk River Timber Company, a Vancouver Island logging operation, an affiliate of Crown Zellerbach Canada. The Corporation wrote off as an unusual item the $31.9 million book value of its 50 percent equity interest in Van Gelder Papier of The Netherlands. Crown Zellerbach no longer reflects Van Gelder income or losses in its results. In addition, an involuntary conversion gain resulted from the recovery boiler fire at Bogalusa which amounted to $10.8 million after provision for income taxes.

The effective tax rate was 23.8 percent in 1980 and 36.8 percent in 1979. Higher investment, energy and foreign tax credits resulted in the significantly lower effective tax rate.

Financial Review

Working capital decreased by $16 million during 1980. Receivables and inventories were up by a total of $78 million, but cash and short-term investments declined by $34 million, and current liabilities increased by $58 million. The current ratio declined from 2.0 at the end of 1979 to 1.8 at year-end 1980.

(In millions of dollars)

December 31,	1980	1979	% Change
Current assets:			
Cash and short-term investments	$ 58	$ 92	−37
Accounts receivable	322	281	+15
Inventories	434	396	+10
Prepaid expenses	44	47	−6
	858	816	+5
Less current liabilities	472	414	+14
Working capital	$386	$402	−4

Capital expenditures totaled $282 million, compared to $215 million in 1979, and are expected to be $300 million in 1981. The expenditures will continue the Corporation's five-year, $1.5 billion modernization program and will come from internally generated funds, supplemented by external financing. In 1980 the Corporation capitalized $12 million in interest on projects in progress as required by the Financial Accounting Standards Board.

(In millions of dollars)

December 31,	1980	1979	% Change
Improvements to existing facilities	$101	$ 76	+33
New plant capacity and cost reduction	167	132	+27
Land and timberlands	14	7	+100
Capital expenditures	$282	$215	+31

During the year the Corporation strengthened its equity base by selling $125 million in $4.625 convertible preferred stock. Total capitalization reached $1,880 million, up $150 million from 1979. The Swiss franc debt was retired for $56 million, including related costs.

Long-term debt at year-end was 26 percent of total capitalization, the lowest ratio since 1969. Existing loan agreements permit further long-term borrowing of up to $700 million. In addition, the Corporation has arranged $300 million of bank credit lines, including $100 million long-term. At year end, $102 million of these facilities were in use, including $84 million used for commercial paper backup.

(In millions of dollars)

December 31,	1980	1979	% Change
Long-term debt	$ 486	$ 545	−11
Deferred income taxes	161	119	+35
Minority interest	44	35	+26
Convertible preferred stock	125	–	–
Common stock equity	1,064	1,031	+3
Total capitalization	$1,880	$1,730	+9

There were 165,918 shares issued under the stock option plan, and at year-end 25,588,710 common shares were outstanding, held by 26,485 shareholders.

1979 Compared to 1978

Consolidated sales totaled $2.8 billion, a 14 percent increase over the $2.5 billion level of 1978. Net income increased 19 percent to $134 million, or $5.24 per share, compared with $112 million and $4.39 per share in 1978.

Markets were generally strong throughout the year, although demand for lumber and plywood eased in the fourth quarter. Demand for publication papers was especially strong, but production was hampered by strikes at West Coast mills during the first quarter and at the St. Francisville mill in the fourth quarter.

Timber and Wood Products produced record results, with operating earnings increasing 10 percent on a sales increase of 15 percent. These results were achieved despite a deceleration in homebuilding in the United States resulting from inflation and high mortgage interest rates. While the decline in housing starts was 23 percent for the year, it was gradual during the first three quarters. Sales were 21 percent and operating earnings 32 percent higher than in 1978 for that period.

The decline in housing starts worsened in the fourth quarter to an annual rate of 1.6 million from 1978's 2 million, causing some production cutbacks and price reductions. Log exports remained strong during the year. A 5 percent decline in sales volume was more than offset by improved prices.

Markets were healthy for most paper products, and net sales were up 14 percent over 1978. Demand exceeded supply for several grades, including newsprint, coated groundwood publication papers, white papers and tissue. Price levels were up an average of 12 percent, and operating income increased by 67 percent over 1978, which was unusually depressed by a lengthy strike. This improvement occurred despite the effects of strikes in the first and fourth quarters and rising fiber and energy costs toward year-end. Total production for the group was almost 1.7 million tons, or approximately 85 percent of capacity. Mill supervisors and salaried personnel operated more than half of the struck facilities at efficiencies equal to or higher than standard. Fiber cost increases, to a large extent, were due to industry-wide reduction of lumber production, which reduced the supply of residual fibers.

The corrugated container market was strong through most of 1979, with record industry shipments exceeding 1978 by approximately 3 percent and box prices increasing 14 percent over 1978. However, operating results were unsatisfactory, reflecting primarily high operating costs at the Bogalusa containerboard mill.

Packaging sales rose 4 percent as food packagers continued to substitute the Corporation's specialty flexible packaging materials for more traditional products. Earnings, however, were essentially flat because of a 1978 strike in West Coast plants that continued into early 1979.

Distribution sales and earnings increased 18 percent and 22 percent, respectively, in 1979, spurred by strong demand, primarily for printing and writing papers and office supplies, and by improvements in operating efficiency and productivity. Zellerbach Paper Company opened a new office products facility in Denver, and Stationers Distributing opened a similar facility in Atlanta. In addition, four major existing facilities were enlarged.

Energy's operating earnings increased 31 percent on a sales increase of 59 percent. Total production of oil and gas, including the Corporation's share of the production of others, was 645,000 barrels in 1979, compared to 634,000 barrels in 1978.

The Corporation's 50 percent owned affiliate, Van Gelder Papier, incurred substantial operating losses for the year, due mainly to pulp and production cost increases which could not be fully offset by price increases and to startup costs of a new newsprint mill. 1978 results were favorably affected by non-recurring tax refunds and adjustments.

Effects of Changing Prices

In the financial statements, the cost of raw materials, supplies and equipment is based on prices when originally acquired. During the time span between purchase and consumption, their prices have increased dramatically, particularly in recent years. The two contributors to this upward trend are a rise in the general price level (or a decline in the dollar's purchasing power), commonly known as inflation, and changes in the relative prices of specific goods and services used by the company, which may occur to a greater or lesser degree, or in a different direction, than inflation.

In the following schedule we have calculated the Corporation's net income for 1980 as it would appear if its cost of goods sold and depreciation, amortization, depletion and cost of timber harvested had been adjusted to reflect the effects of, first, inflation, and then, changes in specific prices.

For some costs, the adjustments are not significant because of their frequent turnover. For others, for example our pulp mill installations, inflation and changing prices cause a many-fold increase in depreciation expense.

The provision for income taxes, $30 million, is unchanged from the historical income statement because the additional depreciation and cost of goods sold are not deductible for tax purposes.

Net Income from Continuing Operations

(In millions of average 1980 dollars)		
Net income as reported		$ 97
Adjustments to restate costs for the effect of general inflation:		
Cost of goods sold	$(50)	
Depreciation, amortization, depletion and cost of timber harvested	(83)	(133)
Net loss from continuing operations adjusted for general inflation ($1.74 per share)		(36)
Adjustments to reflect the difference between general inflation and changes in specific prices (current cost):		
Cost of goods sold	(17)	
Depreciation, amortization, depletion and cost of timber harvested	(20)	(37)
Net loss from continuing operations adjusted for changes in specific prices ($3.21 per share)		$(73)

Purchasing Power Gain on Net Monetary Items

Because of the rise in the general price level, the equivalent purchasing power required to repay net monetary obligations incurred in prior years is reduced. The net gain resulting from the reduction of this outflow of purchasing power was $85 million in 1980 and $89 million in 1979.

Adjustments for General Inflation

Net income from continuing operations adjusted for general inflation in 1979 was $36 million or $1.39 per share.

Net assets adjusted for general inflation are $2,063 million at December 31, 1980, and $1,966 million at December 31, 1979.

The adjustments for general inflation were accomplished by indexing historical costs of inventories and properties for the change in the average Consumer Price Index between the dates they were originally incurred and 1980. The related cost of goods sold and depreciation, amortization, depletion and cost of timber harvested were similarly adjusted.

Adjustments for Specific Price Changes

Net assets adjusted for changes in specific prices are $2,126 million at December 31, 1980. Current cost of inventories is $453 million, and current cost of properties, including timberlands and oil and gas properties, net of accumulated depreciation, amortization, depletion and cost of timber harvested, is $2,319 million.

The net change in the current cost amounts was a $316 million increase from general inflation and a $17 million decrease from changes in specific prices net of general inflation.

The adjustments for changes in the relative prices of specific goods and services were calculated using the methods described below.

Growing Timber

Growing timber and the cost of timber harvested were adjusted by the change in the Consumer Price Index between the dates the timber was acquired or planted and 1980.

Oil and Gas Properties

For oil and gas properties, capitalized property acquisition, exploration and development expenditures were adjusted by indexing for the change in the Gross National Product Implicit Price Deflator for gasoline and oil between the dates they were made and 1980, and by adjusting historical cost depletion expense in the relationship that the aggregate of indexed costs bore to historical costs.

Other Assets

Current cost of inventories represents the December 31, 1980, purchase price or manufacturing cost of the items included in inventories. Current cost of goods sold represents the purchase price or manufacturing cost at the date of sale.

For land, current cost was determined by appraising major parcels.

For all other properties, commercially available insurance valuation indexes were used to update costs from the dates incurred to 1980. If this process produced an amount in excess of recoverable value, the amount was written down to recoverable value.

Energy

Presented below is information about the quantities and values of the Corporation's oil and gas reserves, developed by independent petroleum engineers. The information relates only to proved reserves, which are defined as the estimated quantities of oil and gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reserves under existing economic and operating conditions. The presumption of the continuance of existing economic conditions is also inherent in estimating future revenues and future operating and development costs, which are assumed to remain at current levels.

Estimated quantities of proved reserves at December 31, 1980, all of which are located in the United States, and changes in the reserves during 1980 are as follows:

(Oil in thousands of barrels, gas in millions of cubic feet)	Oil	Gas
Balances, December 31	3,750	3,709
Discoveries and other additions	259	628
Production	576	1,130

At December 31, 1980, estimated future net revenues from proved reserves less estimated future expenditures for development and production are as follows:

	(In millions of dollars)
Year ending December 31,	
1981	$ 16.8
1982	16.1
1983	14.2
Remainder	71.3
	$118.4

The present values of estimated future net revenues at December 31, 1980, and changes during 1980, using an annual discount rate of 10 percent, are:

	(In millions of dollars)
Balance, December 31	$76.9
Additions	$10.0
Less related estimated future development and production costs	1.6
Net additions	$ 8.4
Sales of oil and gas, net of production costs of $1.1 and severance and windfall profits taxes of $4.5	$17.7

The independent petroleum engineers did not make an estimate of reserves, or of future revenues, at January 1, 1980.

The following summary for 1980 sets forth the results of the Corporation's oil and gas producing activities on the basis of reserve recognition accounting (RRA). Under RRA, income is recognized in the year proved reserves are discovered rather than at the time oil or gas is sold. All costs associated with proved reserves are accrued and expensed in the year of discovery.

	(In millions of dollars)
Present value of revenues from additions to estimated proved oil and gas reserves, gross	$10.0
Interest factor	7.8
	17.8
Acquisition, exploration, development and production costs of evaluated properties:	
Costs incurred, including impairments	2.9
Present value of estimated future development and production costs	1.6
	4.5
Additions to proved reserves over costs of evaluated properties	13.3
Provision for income taxes	6.5
Results of oil and gas producing activities on the basis of RRA	$ 6.8
Results of oil and gas producing activities on the basis of generally accepted accounting principles	$ 8.7

Statement of Management Responsibility

The consolidated financial statements and other financial information of Crown Zellerbach and Subsidiaries contained in this annual report to shareholders have been prepared, using generally accepted accounting principles, under the direction of management, which is responsible for the quality of the data and the evaluations and judgments required.

Management is responsible for the maintenance of the systems of internal accounting control and the review of their effectiveness. These internal control systems are designed to provide assurance that transactions are executed in accordance with management's authorizations and recorded properly to permit the preparation of financial statements in accordance with generally accepted accounting principles, and that assets are safeguarded. Although there are inherent limitations in any system of internal control, management believes that its systems provide effective controls consistent with reasonable cost.

Through written communication of policies and procedures, careful selection and training of personnel, organizational arrangements that provide division of responsibility, and a program of monitoring compliance by internal audits and follow-up, management augments the systems of internal control.

The Audit Committee of the Board of Directors is composed of outside (non-employee) directors. It is responsible for recommending, annually, the firm of accountants to be engaged as independent auditors, subject to the approval of the shareholders. The committee also reviews the annual financial statements of the Corporation and the report of the independent auditors thereon, and considers matters relating to internal controls and auditing procedures. The Audit Committee meets with the independent auditors and the Corporation's internal auditors to discuss these matters. Both the independent auditors and the internal auditors have free and independent access to the Audit Committee.

Statements of Income

(In millions of dollars, except per share data)

Years ended December 31,	1980	1979	1978
Income			
Net sales	$3,066.6	$2,806.1	$2,457.7
Other income:			
From operations, net	3.2	5.8	9.8
Miscellaneous, net	14.2	22.0	15.0
	3,084.0	2,833.9	2,482.5
Expenses			
Cost of goods sold	2,615.0	2,287.1	2,039.4
Selling and administrative costs	327.2	279.2	250.2
Interest on debt	37.1	46.5	43.8
	2,979.3	2,612.8	2,333.4
Income before unusual items and income taxes	104.7	221.1	149.1
Unusual items			
Gain on disposal of investment	35.0	–	–
Share of operating earnings (losses) and writedown of investment in 50 percent owned affiliate	(31.9)	(10.0)	12.1
Gain on involuntary conversion	20.0	–	–
	23.1	(10.0)	12.1
Income before income taxes	127.8	211.1	161.2
Federal, state and foreign income taxes	30.4	77.6	49.1
Net income	$ 97.4	$ 133.5	$ 112.1
Net income per share of common stock	$ 3.46	$ 5.24	$ 4.39

The accompanying notes are an integral part of these financial statements.

Balance Sheets

(In millions of dollars)

December 31,	1980	1979
Assets		
Current Assets		
Cash	$ 3.6	$ 9.7
Short-term investments, at cost (approximates market)	54.4	82.3
Trade accounts receivable, net of allowances for losses (1980: $6.8; 1979: $5.5)	270.9	248.1
Other receivables	51.1	32.8
Inventories	433.7	396.6
Prepaid expenses	44.5	46.8
Total current assets	858.2	816.3
Properties, at cost		
Buildings, machinery and equipment	2,076.1	1,881.1
Less allowances for depreciation	902.5	855.6
	1,173.6	1,025.5
Land, timberlands and logging facilities, net of amortization and cost of timber harvested	256.2	230.6
Oil and gas properties (on successful efforts basis), net of depletion and amortization	8.8	8.5
Total properties	1,438.6	1,264.6
Other Assets		
Investments in 50 percent owned affiliates	14.7	53.0
Other investments (at cost) and receivables	38.3	5.3
Deferred charges	22.9	21.4
Total other assets	75.9	79.7
	$2,372.7	$2,160.6

Liabilities and Shareholders' Equity		
Current Liabilities		
Commercial paper notes payable	$ 84.0	$ 39.9
Notes payable, banks	17.6	–
Notes payable, other	10.9	2.4
Accounts payable, trade	148.4	137.6
Accounts payable, other	38.9	36.5
Accrued federal, state and foreign income taxes	2.6	50.7
Accrued payrolls	70.1	63.9
Other accrued liabilities	66.7	58.1
Long-term debt, installments due within one year	33.1	25.0
Total current liabilities	472.3	414.1
Other Liabilities		
Long-term debt	486.1	545.2
Deferred income taxes	161.1	118.8
Other	20.2	16.7
Total other liabilities	667.4	680.7
Minority Interest in Canadian Subsidiary	44.0	35.2
Shareholders' Equity		
$4.625 Cumulative convertible preferred stock	125.0	–
Common stock, outstanding 1980: 25,588,710 shares; 1979: 25,422,792 shares	127.9	127.1
Other capital	67.4	65.7
Income retained in the business	868.7	837.8
Total shareholders' equity	1,189.0	1,030.6
	$2,372.7	$2,160.6

The accompanying notes are an integral part of these financial statements.

Statements of Changes in Financial Position

(In millions of dollars)

Years ended December 31,	1980	1979	1978
Cash and short-term investments, January 1	$ 92.0	$162.7	$ 90.9
Financial resources were provided by			
Net income	97.4	133.5	112.1
Charges (credits) to income not affecting cash:			
Depreciation, amortization, depletion and cost of timber harvested	116.1	110.2	104.9
Share in losses (earnings) and writedown of investment in 50 percent owned affiliate	31.9	10.0	(12.1)
Net loss (gain) on disposal of properties	5.8	(10.0)	2.0
Gain on involuntary conversion	(20.0)	–	–
Provision for deferred income taxes	42.3	22.0	14.7
Internal funds generated	273.5	265.7	221.6
Issuance of preferred stock (net of expenses)	121.0	–	–
Increase in long-term debt	42.6	20.6	102.3
Proceeds from disposition of properties	5.9	15.8	15.1
Decrease in long-term receivables and other investments	1.6	.9	39.7
Decrease in inventories	–	–	9.0
Decrease in prepaid expenses	2.3	–	–
Increase in notes payable	70.2	38.3	–
Increase in accounts payable	13.2	35.9	12.3
Increase in accrued income taxes	–	14.5	5.0
Increase in other accrued liabilities	14.8	15.7	7.6
	545.1	407.4	412.6
Financial resources were used for			
Additions to properties	281.6	215.5	232.6
Long-term debt paid	93.6	33.9	38.8
Dividends declared:			
On common stock	57.4	52.1	48.3
On preferred stock	9.1	.2	.5
Investments in 50 percent owned affiliates	2.4	–	6.6
Retirement of preferred stock	–	13.3	.2
Increase in accounts receivable	41.1	50.5	7.2
Increase in inventories	37.1	91.0	–
Increase in prepaid expenses	–	16.4	4.3
Decrease in accrued income taxes	48.1	–	–
Miscellaneous, net	8.7	5.2	2.3
	579.1	478.1	340.8
Net (decrease) increase in cash and short-term investments	(34.0)	(70.7)	71.8
Cash and short-term investments, December 31	$ 58.0	$ 92.0	$162.7

The accompanying notes are an integral part of these financial statements.

Statement of Shareholders' Equity

(In millions of dollars, except per share data)

	Preferred stock	Common stock	Other capital	Income retained in the business
Balances, January 1, 1978	$ 13.3	$127.0	$65.7	$693.3
Proceeds from sale of 7,700 shares under option plans	–	–	.2	–
Issuance of common shares by a subsidiary	–	–	(.2)	–
Retirement of 2,390 shares of $4.20 cumulative preferred stock	(.3)	–	.1	–
Net income	–	–	–	112.1
Cash dividends declared:				
On $4.20 cumulative preferred stock	–	–	–	(.5)
On common stock, $1.90 per share	–	–	–	(48.3)
Balances, December 31, 1978	13.0	127.0	65.8	756.6
Proceeds from sale of 14,800 shares under option plan	–	.1	.4	–
Issuance of common shares by a subsidiary	–	–	(.2)	–
Retirement of 130,214 shares of $4.20 cumulative preferred stock	(13.0)	–	(.3)	–
Net income	–	–	–	133.5
Cash dividends declared:				
On $4.20 cumulative preferred stock, $2.46 per share	–	–	–	(.2)
On common stock, $2.05 per share	–	–	–	(52.1)
Balances, December 31, 1979	–	127.1	65.7	837.8
Proceeds from sale of $4.625 cumulative convertible preferred stock	125.0	–	(4.0)	–
Proceeds from sale of 165,918 shares under option plan	–	.8	5.0	–
Issuance of common shares by a subsidiary	–	–	(.5)	–
Net income	–	–	–	97.4
Cash dividends declared:				
On $4.625 cumulative convertible preferred stock, $3.65 per share	–	–	–	(9.1)
On common stock, $2.25 per share	–	–	–	(57.4)
Other	–	–	1.2	–
Balances, December 31, 1980	$125.0	$127.9	$67.4	$868.7

The accompanying notes are an integral part of this financial statement.

Notes to Financial Statements

Summary of Significant Accounting Policies

Consolidation

The consolidated financial statements include the accounts of Crown Zellerbach Corporation and subsidiaries.

Inventories

Inventories are valued at the lower of cost or market. Cost elements included in inventory are materials, transportation, direct labor and manufacturing overhead. Cost is generally determined by standard cost, which approximates a moving average cost, for all items except the cost of domestic distribution inventories, which is determined by the last-in, first-out method.

Properties

Depreciation is reported for financial statement purposes on a straight-line or units-of-production basis over the useful lives of depreciable assets. Timberland reforestation costs are capitalized. Timberland carrying costs are charged against income. Cost of timber harvested is based generally on the book value of specific tracts from which the timber is removed. Amortization of logging facilities costs is based on the estimated recoverable timber to be removed over the facilities.

Oil and Gas Activities

Property acquisition, exploration and development expenditures are capitalized when incurred. Costs related to unsuccessful exploratory wells are charged to income when the well is determined to be dry. Amortization and depletion of costs related to proved reserves is based on the estimated units of oil or gas to be produced.

Taxes

Investment and energy tax credits are reflected in income by the flow-through method.

Pension Plans

Pension plan costs include amortization of prior service costs under the Corporation's pension plans over periods ranging from 15 to 30 years. The Corporation's policy is to fund pension costs accrued.

Net Income Per Share of Common Stock

Net income per share is calculated by dividing net income attributable to common stock (net income after deducting dividends on preferred stock) by the weighted average number of shares of common stock outstanding during the period.

Disposal of Investment

Elk River Timber Company, Ltd., a Canadian corporation in which the Corporation's 85 percent owned Canadian subsidiary held a one-third stock interest, sold its principal assets in the second quarter of 1980. The portion of the gain on sale attributable on distribution to the Corporation's subsidiary, $35.0 million, has been recorded with no provision for income taxes since such distribution is a nontaxable dividend for Canadian income tax purposes. The gain has been reported net of minority interest of $4.2 million.

Gain on Involuntary Conversion

In October, 1980, a chemical recovery boiler at the Corporation's Bogalusa, Louisiana, containerboard mill was destroyed by fire. The boiler was insured for its replacement cost, which is estimated to be $20.0 million in excess of its carrying value.

Foreign Currency Translation

Translation losses of $5.0 million in 1980, $1.2 million in 1979 and $1.7 million 1978, are included in other income, miscellaneous, net.

Inventories

Inventories are as follows:

(In millions of dollars)

December 31,	1980	1979
Finished products	$235.5	$228.3
In process	25.7	26.7
Raw materials	132.8	103.6
Supplies	39.7	38.0
	$433.7	$396.6

The current cost of inventories accounted for by the last-in, first-out method exceeds carrying value by $27.9 million and $24.3 million at December 31, 1980 and 1979, respectively.

Properties

The major classes of property, plant and equipment are as follows:

(In millions of dollars)

December 31,	1980	1979
Buildings, machinery and equipment:		
Buildings, improvements, docks and wharves	$ 409.1	$ 382.1
Machinery and equipment	1,529.0	1,384.6
Construction in progress	138.0	114.4
	$2,076.1	$1,881.1
Other properties, net of allowances for amortization and cost of timber harvested:		
Land	$ 24.9	$ 21.8
Timberlands and cutting rights	201.5	181.7
Logging facilities	25.6	26.7
Other	4.2	.4
	$ 256.2	$ 230.6
Oil and gas properties, net of allowances for amortization and depletion	$ 8.8	$ 8.5

During 1980, the Corporation adopted the units-of-production method of depreciation for certain manufacturing facilities, in order to match more accurately the charge for depreciation with the use of the facilities. Neither the cumulative effect of the change at January 1, 1980, nor its effect on income in 1980 was material.

Effective January 1, 1980, the Corporation adopted Statement of Financial Accounting Standards No. 34, which requires capitalizing interest cost as part of the historical cost of acquiring certain properties (excepting timberlands) which require a period of time to prepare them for their intended use. This change increased net income $6.5 million or $.26 per share. Interest expense for 1980 was net of $12.1 million capitalized on projects in progress.

Lease Commitments

Premises and equipment are leased under agreements which provide in some instances for renewal privileges at reduced annual rentals or for purchase at option prices established in the lease agreements. Certain of these agreements are capital leases, as defined by Statement of Financial Accounting Standards No. 13.

The composition of capital leases included in properties is:

(In millions of dollars)

December 31,	1980	1979
Buildings, improvements, docks and wharves	$47.9	$47.9
Machinery and equipment	22.1	23.8
	70.0	71.7
Less allowances for amortization	47.4	45.0
	$22.6	$26.7

Future minimum rentals under leases in effect at December 31, 1980, are:

(In millions of dollars)

	Capital leases	Operating leases
1981	$ 9.8	$16.1
1982	8.0	12.5
1983	5.9	10.3
1984	3.0	9.9
1985	2.6	9.2
Later periods	11.7	32.9
Total minimum payments required	41.0	$90.9
Less executory expenses included above	.4	
	40.6	
Less amount representing interest	9.1	
Present value of net minimum capital lease payments	31.5	
Long-term debt, installments due within one year	6.5	
	$25.0	

Rental expense under operating leases was $16.2 million in 1980, $10.5 million in 1979 and $9.4 million in 1978.

In addition to the above leases, pollution control and industrial revenue bonds are issued by political subdivisions in which the Corporation operates and the proceeds used to construct facilities and equipment, which are leased or sold to the Corporation. Included as long-term debt in the accompanying balance sheet in addition to the above amounts is $29.3 million in capital leases which underlie revenue bond issues.

Oil and Gas Activities

Capitalized costs related to oil and gas properties at December 31, 1980, are as follows:

(In millions of dollars)

Machinery and equipment	$ 6.4
Less allowance for depreciation	1.9
	4.5
Oil and gas properties:	
Proved	5.5
Unproved	3.3
	8.8
	$13.3

Revenues from production of oil and gas, net of production costs, were $22.2 million in 1980.

Costs incurred in oil and gas activities in 1980 were:

(In millions of dollars)

Exploration	$ .3
Development	2.6
Production	5.6
	$8.5
Depreciation, amortization and depletion	$1.2

Income Taxes

The components of income before income taxes were as follows:

(In millions of dollars)

	1980	1979	1978
United States	$ 77.4	$156.2	$105.1
Foreign	50.4	54.9	56.1
	$127.8	$211.1	$161.2

The provision for income taxes and the deferred taxes related to specific timing differences consisted of:

(In millions of dollars)	1980	1979	1978
Current:			
U.S. federal	$(22.6)	$27.1	$16.2
State	.9	5.6	5.0
Foreign	10.1	22.9	13.2
Total current	(11.6)	55.6	34.4
Deferred:			
U.S. federal –			
Depreciation	18.1	9.9	6.9
Foreign exchange	6.3	(.3)	–
Interest capitalized	5.6	–	–
Log inventories	(3.9)	–	(.6)
Other, net	(.9)	(1.2)	(.8)
Total U.S. federal	25.2	8.4	5.5
Foreign –			
Depreciation	15.2	11.8	9.5
Other, net	1.6	1.8	(.3)
Total foreign	16.8	13.6	9.2
Total deferred	42.0	22.0	14.7
	$ 30.4	$77.6	$49.1

Investment and energy tax credits included in the current U.S. federal provision were $19.8 million in 1980, $16.7 million in 1979 and $12.6 million in 1978.

A reconciliation between the federal statutory tax rate and the effective tax rate follows:

	1980	1979	1978
Statutory tax rate	46.0%	46.0%	48.0%
Earnings taxed at the capital gains rate	–	(4.7)	(4.6)
Provision for state income taxes	.4	1.4	1.6
Investment and energy tax credits	(15.5)	(7.9)	(7.8)
Foreign income taxes	(12.0)	(2.0)	(4.0)
Loss (income) of 50 percent owned affiliates recorded net of income taxes	9.6	2.5	(3.9)
All other, net	(4.7)	1.5	1.2
Effective tax rate	23.8%	36.8%	30.5%

Due to reinvestment policies and available tax credits, no additional tax liability is considered necessary on approximately $208 million of undistributed earnings of 50 percent owned affiliates and foreign subsidiaries at December 31, 1980.

Investments in Affiliates

The Corporation holds 50 percent equity in the following companies:

Crown Simpson Corporation
Crown Simpson Pulp Company (a partnership)
Laja Crown S.A. Papeles Especiales
Papierfabrieken Van Gelder Zonen N.V. (Van Gelder)

The investments are reflected in the Corporation's balance sheet at December 31, 1980, as follows:

	(In millions of dollars)
Equity investments	$11.6
Undistributed earnings	3.1
	$14.7

During the second quarter of 1980, after a review of the competitive cost and productivity prospects for Van Gelder, the Corporation concluded that the likelihood of future economic return was such that its investment in Van Gelder had become permanently impaired. To reflect this impairment, the Corporation charged to income $31.9 million, representing its total equity investment at December 31, 1979. The writedown, and the Corporation's share in the earnings or losses of Van Gelder, are shown as unusual items and include a foreign exchange translation gain of $2.6 million in 1980 and foreign exchange translation losses of $3.8 million in 1979 and $3.7 million in 1978. No income tax benefit was recognized.

Deductions for income accruing to the minority interest in a subsidiary consolidated included in other income, miscellaneous, net were $4.5 million in 1980, $6.3 million in 1979 and $3.9 million in 1978.

The Corporation and its coventurer in Crown Simpson Corporation have severally agreed that in the event Crown Simpson Corporation is involved in bankruptcy or similar proceedings, they will each purchase a 50 percent interest in its plant and equipment for a price approximating 50 percent of its book value, which price would have been approximately $18 million at December 31, 1980.

Credit Agreements

The Corporation has short-term credit lines with domestic and foreign banks aggregating approximately $200 million at December 31, 1980. In addition, the Corporation has negotiated long-term bank credit facilities totaling $100 million which expire in 1982 and 1983.

The majority of these agreements requires commitment fees or compensating balances in accordance with standard banking practice.

Long-Term Debt

Long-term debt due after one year at December 31, 1980, consists of:

	(In millions of dollars)
Sinking fund debentures – 8⅞%, payable $5.0 annually through 1999, balance at maturity in 2000	$ 95.0
Sinking fund debentures – 9¼%, payable $3.4 annually from 1984-2004, balance at maturity in 2005	75.0
Unsecured notes – 8⅛%, payable $6.5 annually from 1984-1994, $9.5 from 1995-1997	100.0
Unsecured notes – 4.8%, payable $6.0 annually through 1989, balance at maturity in 1990	52.0
Mortgage bonds – 8⅛%, payable annually in varying amounts through 1994	33.0
Unsecured notes – 8¼%, payable annually in varying amounts from 1982-1984	20.0
Mortgage bonds – 5%, payable $2.2 annually through 1983	4.4
Mortgage note – 9¼%, payable $.5 annually through 1989	3.5
Pollution control and industrial development revenue bonds – payable annually in varying amounts through 2009	55.1
Capitalized lease obligations	25.0
Other	23.1
	$486.1

Pollution control and industrial development revenue bonds comprise 32 separate issues of local governmental units with interest rates ranging from 4 percent to 8.3 percent.

Annual maturities of long-term debt during the next five years are as follows:

	(In millions of dollars)
1981	$33.1
1982	37.0
1983	34.2
1984	34.8
1985	29.6

Dividends which can be declared from income retained in the business are restricted by agreements related to long-term debt. There is $353 million of income retained in the business available for dividends at December 31, 1980.

Dividends cannot be paid on the ordinary shares representing the Corporation's interest in its 85 percent owned consolidated subsidiary, Crown Zellerbach Canada Limited, until dividends of 25 cents per share (Canadian) have been paid on the class "A" shares representing the minority interest. At December 31, 1980, cumulative dividends per share on the class "A" and ordinary shares were equal.

Properties of the Corporation with a book value of $106 million are collateral for the mortgage bonds and notes.

Capital Stock

The authorized capital stock of the Corporation consists of 10 million shares of preferred stock and 60 million shares of common stock. In March, 1980, the Corporation issued 2.5 million shares of $4.625 cumulative preferred stock, convertible into common stock at $47.25 per share. There are 2,645,500 shares of common stock reserved for its conversion.

Stock Option Plan

Under the Corporation's Nonqualified Stock Option Plan, options are granted for periods not exceeding ten years. They become fully exercisable after a two-year waiting period, are exercisable only while the optionee is an employee and terminate when the optionee ceases to be an employee, except in cases of death and certain retirements. At December 31, 1980, there are 1,019,782 shares of authorized and unissued common stock reserved for options of which 888,807 shares are outstanding.

Common shares under option at December 31, 1980, and activity for the year then ended were as follows:

	Dec. 31, 1979	Granted	Exercised	Dec. 31, 1980	Price per share
May 24, 1973	77,500		10,600	66,900	$28.00
October 25, 1973	6,100			6,100	41.88
February 1, 1974	2,000			2,000	34.75
June 3, 1974	3,500			3,500	31.88
July 25, 1974	36,925		7,350	29,575	29.50
November 20, 1975	159,200		15,500	143,700	36.38
October 28, 1976	12,000			12,000	43.13
June 9, 1977	334,200		105,168	229,032	36.00
October 12, 1977	37,000		15,000	22,000	32.38
February 9, 1978	2,200		300	1,900	30.38
June 8, 1978	2,000			2,000	33.00
November 9, 1978	3,600			3,600	30.88
January 11, 1979	500			500	32.00
June 14, 1979	161,500		4,000	157,500	35.88
June 12, 1980	–	216,500	8,000	208,500	44.75
	838,225	216,500	165,918	888,807	

At their meeting on May 8, 1980, the Corporation's shareholders authorized the issuance of stock appreciation rights (SARs) with respect to the Plan. When granted, such rights, after a six-month waiting period, offer the grantee the alternative of receiving an amount equivalent to the difference between the option price and the market value of the shares at the date of exercise, instead of exercising the option. This amount may be paid in cash or in shares at the discretion of the Corporation.

At December 31, 1980, SARs with respect to options for 100,500 shares at prices ranging from $28.00 to $41.88, which were granted on June 12, 1980, were fully exercisable.

Pension Plans

The Corporation contributed to several pension plans, including joint trusteed plans, covering substantially all of its eligible employees, including certain employees in foreign countries. Annual pension expenses, including amortization of prior service costs, were $46.5 million in 1980, $61.2 million in 1979 and $60.6 million in 1978.

The fair value of the Corporation's plans' net assets available for benefits at December 31, 1980, is approximately $511 million. The actuarial present value of vested plan benefits is $426 million, and the actuarial present value of nonvested plan benefits is $43 million, both discounted at an assumed rate of return of principally 8½ percent. The normal funding provisions of the plans are designed to amortize these liabilities.

In 1980 the Corporation adopted certain changes in the calculation of the liability for its U.S. plan, chiefly an increase in the assumed rate of return on plan investments.

Business Segment Information

The Corporation's business segments are: Timber and Wood Products, Pulp and Paper, Containers and Packaging, Distribution, and Energy. A summary by business segments of sales, operating earnings, identifiable assets, depreciation, amortization, depletion and cost of timber harvested, and capital expenditures for 1980, 1979 and 1978 follows. Sales and transfers to other segments of the business are made both at cost and at an approximate market price.

(In millions of dollars)

	Timber and Wood Products	Pulp and Paper	Containers and Packaging	Distribution	Energy	Eliminations and Other	Total
1980							
Sales and transfers							
To unaffiliated customers	$522.7	$1,047.8	$522.8	$950.0	$23.3	$ –	$3,066.6
To other segments	77.1	191.1	38.7	3.9	–	(310.8)	–
	$599.8	$1,238.9	$561.5	$953.9	$23.3	$(310.8)	$3,066.6
Operating earnings	$ 39.4	$ 104.8	$ (6.3)	$ 30.6	$17.8	$ (81.6)	$ 104.7
Assets	$557.2	$ 927.0	$461.0	$235.4	$15.0	$ 177.1	$2,372.7
Depreciation, amortization, depletion and cost of timber harvested	$ 45.8	$ 42.0	$ 20.8	$ 3.0	$ 1.2	$ 3.3	$ 116.1
Capital expenditures	$ 57.3	$ 127.0	$ 78.1	$ 8.8	$ 3.2	$ 7.2	$ 281.6
1979							
Sales and transfers							
To unaffiliated customers	$643.8	$ 849.1	$454.7	$845.6	$12.9	$ –	$2,806.1
To other segments	38.4	164.1	31.8	3.9	–	(238.2)	–
	$682.2	$1,013.2	$486.5	$849.5	$12.9	$(238.2)	$2,806.1
Operating earnings	$117.1	$ 141.6	$ 9.4	$ 24.6	$12.4	$ (84.0)	$ 221.1
Assets	$521.2	$ 797.2	$395.0	$203.9	$12.6	$ 230.7	$2,160.6
Depreciation, amortization, depletion and cost of timber harvested	$ 46.0	$ 39.1	$ 18.4	$ 2.4	$ 1.4	$ 2.9	$ 110.2
Capital expenditures	$ 57.6	$ 84.7	$ 63.9	$ 6.5	$ 1.0	$ 1.8	$ 215.5
1978							
Sales and transfers							
To unaffiliated customers	$562.6	$ 745.6	$425.1	$716.3	$ 8.1	$ –	$2,457.7
To other segments	33.1	139.0	33.1	2.8	–	(208.0)	–
	$595.7	$ 884.6	$458.2	$719.1	$ 8.1	$(208.0)	$2,457.7
Operating earnings	$106.0	$ 85.0	$ 1.8	$ 20.2	$ 9.5	$ (73.4)	$ 149.1
Assets	$502.2	$ 664.4	$337.1	$179.3	$12.6	$ 268.1	$1,963.7
Depreciation, amortization, depletion and cost of timber harvested	$ 45.7	$ 35.5	$ 16.3	$ 2.4	$ 1.4	$ 3.6	$ 104.9
Capital expenditures	$ 52.3	$ 100.0	$ 72.6	$ 4.4	$ .9	$ 2.4	$ 232.6

Operating earnings not allocated to segments include the Corporation's share in the earnings and losses of 50 percent owned affiliates, certain general and administrative expenses, interest income and expense and other nonoperating revenue and expense items which cannot be associated with specific business segments. Assets not allocated consist primarily of cash and short-term investments and investments in 50 percent owned affiliates.

Foreign operations consolidated in the financial statements are carried on primarily in Canada. Foreign sales, operating earnings, and identifiable assets included in the above were as follows:

(In millions of U.S. dollars)

	1980	1979	1978
Sales:			
To unaffiliated customers	$514.1	$451.9	$377.8
Intercompany	97.3	99.1	90.2
	$611.4	$551.0	$468.0
Operating earnings	$ 70.3	$ 94.6	$ 64.0
Identifiable assets	$501.6	$392.1	$343.4

Export sales were not a material factor in the Corporation's business.

Report of Certified Public Accountants

To the Board of Directors and Shareholders
Crown Zellerbach
San Francisco, California

We have examined the consolidated balance sheets of Crown Zellerbach and Subsidiaries as of December 31, 1980 and 1979, and the related consolidated statements of income, shareholders' equity and changes in financial position for the three years ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the above mentioned financial statements present fairly the consolidated financial position of Crown Zellerbach and Subsidiaries at December 31, 1980 and 1979, and the consolidated results of their operations and changes in their financial position for the three years ended December 31, 1980, in conformity with generally accepted accounting principles consistently applied during the period except for the change, with which we concur, in accounting for interest costs as described in the note "Properties."

Coopers & Lybrand
San Francisco, California

January 23, 1981

Five Year Summary of Selected Financial Data

	1980	1979	1978	1977	1976
Income (In millions of dollars)					
Net sales	$3,066.6	$2,806.1	$2,457.7	$2,341.5	$2,127.3
Income before unusual items and income taxes	104.7	221.1	149.1	168.9	151.8
Unusual items	23.1	(10.0)	12.1	(2.7)	(4.7)
Federal, state and foreign income taxes	30.4	77.6	49.1	55.1	49.8
Net income	$ 97.4	$ 133.5	$ 112.1	$ 111.1	$ 97.3
Per share of common stock					
Net income	$ 3.46	$ 5.24	$ 4.39	$ 4.35	$ 3.87
Common dividends declared	2.25	2.05	1.90	1.85	1.80
Common dividends paid	2.20	2.00	1.90	1.82½	1.80
Common stock equity	41.58	40.54	37.37	34.88	32.52
Common stock market price range:					
High	62¾	44	38	45⅛	49
Low	33½	30⅞	29	32	35⅝
Financial position (In millions of dollars)					
Assets:					
Current assets	$ 858.2	$ 816.3	$ 729.1	$ 654.7	$ 635.4
Properties, net	1,438.6	1,264.6	1,151.7	1,039.0	986.6
Other assets	75.9	79.7	82.9	101.5	63.0
Total assets	$2,372.7	$2,160.6	$1,963.7	$1,795.2	$1,685.0
Liabilities and Shareholders' Equity:					
Current liabilities	$ 472.3	$ 414.1	$ 309.0	$ 286.0	$ 283.9
Long-term debt	486.1	545.2	559.2	494.1	478.7
Deferred income taxes and other liabilities	181.3	135.5	104.3	90.9	72.2
Minority interest	44.0	35.2	28.8	24.9	22.1
Redeemable preferred stock	–	–	13.0	13.2	14.7
Nonredeemable preferred stock	125.0	–	–	–	–
Common stock equity	1,064.0	1,030.6	949.4	886.1	813.4
Total liabilities and shareholders' equity	$2,372.7	$2,160.6	$1,963.7	$1,795.2	$1,685.0
Effects of changing prices (In millions of average 1980 dollars, except per share amounts)					
Net sales	$3,066.6	$3,185.0	$3,104.0	$3,184.5	$3,080.3
Cash dividends declared per common share	2.25	2.33	2.40	2.52	2.61
Market price per common share at December 31	48½	49⅜	39⅛	46¼	65⅛
Average level of the Consumer Price Index (1967 = 100)	246.8	217.4	195.4	181.5	170.5

	1980	1979	1978	1977	1976
Other statistics (In millions of dollars)					
Internal funds generated	$273.5	$265.7	$221.6	$227.8	$212.5
Additions to properties	281.6	215.5	232.6	154.5	110.3
Depreciation, amortization, depletion and cost of timber harvested	116.1	110.2	104.9	97.8	106.9
Employment costs, excluding social security taxes	763.4	737.0	661.9	653.5	583.3
Retirement plan costs	46.5	61.2	60.6	58.2	50.6
All taxes	122.5	162.7	123.9	129.5	117.3
Ratio of current assets to current liabilities	1.8 to 1	2.0 to 1	2.4 to 1	2.3 to 1	2.2 to 1
Days sales in accounts receivable	30	31	31	30	31
Days inventories on hand	61	63	55	60	60
Debt as a percent of total capitalization	26%	32%	34%	33%	34%
Production					
Paper and containerboard (In thousands of tons):					
Newsprint	460	418	403	446	422
Other printing papers	392	352	372	389	386
Business and converting papers	567	565	517	634	612
Tissue and sanitary papers	321	333	261	301	283
Containerboard	637	694	669	661	564
	2,377	2,362	2,222	2,431	2,267
Pulp for sale (In thousands of tons)	290	267	245	271	238
Total paper, containerboard and pulp	2,667	2,629	2,467	2,702	2,505
Lumber (In millions of board feet)	770	1,059	1,039	1,044	943
Plywood (In millions of square feet)	561	614	624	601	548
Logs harvested (In millions of cubic feet)	360	402	397	388	407
Oil and gas equivalents (In thousands of barrels)	764	645	634	605	596
Natural resources					
Managed forest system (In thousands of acres)					
Owned in fee:					
United States	1,705	1,739	1,703	1,704	1,701
Canada	322	313	313	313	313
	2,027	2,052	2,016	2,017	2,014
Controlled:					
United States	375	381	373	374	381
Canada	981	1,017	1,010	1,011	1,017
	1,356	1,398	1,383	1,385	1,398
Total acres	3,383	3,450	3,399	3,402	3,412
Oil and gas reserves					
Oil (In thousands of barrels)	3,750		Data not available		
Gas (In millions of cubic feet)	3,709		Data not available		

Quarterly Information

(In millions of dollars, except per share data)

	Sales	Gross profit on sales	Net income	Net income per share
1980				
First quarter	$ 738.4	$118.4	$ 24.3(1)	$ .93
Second quarter	756.9	121.6	29.0(1)(2)	1.03
Third quarter	787.1	98.1	8.8	.23
Fourth quarter	784.2	113.5	35.3(3)	1.27
	$3,066.6	$451.6	$ 97.4	$3.46
1979				
First quarter	$ 626.2	$105.2	$ 21.4	$ .84
Second quarter	710.1	146.4	45.1	1.77
Third quarter	742.0	135.7	33.1	1.30
Fourth quarter	727.8	131.7	33.9	1.33
	$2,806.1	$519.0	$133.5	$5.24

Per Share Information

	1980	1979
Dividends Paid Per Share on Common Stock		
First quarter	$ .52½	$ .47½
Second quarter	.52½	.47½
Third quarter	.57½	.52½
Fourth quarter	.57½	.52½
	$2.20	$2.00
Common Stock Market Price Range (High and low)		
First quarter	$54⅝-$33½	$37 -$30⅞
Second quarter	46⅜- 33½	43⅛- 32¾
Third quarter	53⅜- 45	41¼- 34⅞
Fourth quarter	62¾- 47	44 - 36

The principal market for the common stock is the New York Stock Exchange.

(1) Includes unusual items: Share of operating earnings (losses) and writedown of investment in 50 percent owned affiliate, first quarter $2.0, second quarter ($33.9).

(2) Includes unusual item: Gain on disposal of investment, $35.0.

(3) includes unusual item: Gain on involuntary conversion, $10.8.

Directors

C.R. Dahl[1]
Chairman of the Board and
Chief Executive Officer

W.T. Creson[1]
President

W.J. Bowen[3,4]
Chairman and Chief Executive
Officer, Transco Companies, Inc.,
Houston
An interstate gas pipeline and
petroleum exploration firm

H.C. Cornuelle[3,4]
President and Chief Executive Officer
Dillingham Corporation, Honolulu
A property, construction, marine
transportation and energy firm

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Executive Vice President

M.F. Granville[2,4]
Retired Chairman of the Board
and Chief Executive Officer
Texaco Inc.
White Plains, N.Y.

R.M. Hendrickson[2,4]
Executive Vice President and Chief
Insurance Officer
The Equitable Life Assurance
Society of the U.S., New York City
A life insurance firm

C.S. LaFollette[1]
Executive Vice President

L.W. Lane, Jr.[2,4]
Chairman of the Board, Lane
Publishing Co. and Publisher
Sunset Magazine
Menlo Park, Cal.

E.A. Mitchell[1]
President and Chief Executive Officer
Crown Zellerbach International, Inc.

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Retired Chairman of the Board
Lever Brothers Company
New York City

R.W. Roth[3,4]
President and Chief Executive Officer
Jantzen Inc., Portland, Ore.
A sportswear manufacturer

Dr. Dorothy M. Simon[2,4]
Vice President, Research
AVCO Corporation, Greenwich, Conn.
A diversified financial, insurance and
manufacturing firm

W.J. Zellerbach[1]
President
Zellerbach Paper Company

1 Executive Committee
2 Audit Committee
3 Organization and Compensation Committee
4 Nominating Committee

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Chairman of the Board and
Chief Executive Officer

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Executive Vice President

C. S. LaFollette
Executive Vice President

E. A. Mitchell
Executive Vice President

H. L. Fledderman
Senior Vice President
General Counsel, Secretary

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S. B. Weldon
Senior Vice President

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President and
Chief Executive Officer

W. F. Edwards
Vice President

G. K. Provo
Vice President

L. J. Ross
Vice President

J. Sawka
Vice President, Treasurer

Crown Zellerbach Canada Limited

R. G. Rogers
Chairman of the Board

T. G. Rust
President and
Chief Executive Officer

Executive Offices
One Bush Street
San Francisco, California 94104

Transfer Agent
The Bank of California, N.A.
San Francisco and New York City

Auditors
Coopers & Lybrand
Certified Public Accountants
San Francisco

Annual Meeting
The Annual Meeting of Stockholders of Crown Zellerbach Corporation will be held in the Masonic Auditorium, 1111 California Street, San Francisco, California, at 2:00 o'clock P.M. on Thursday, May 14, 1981. A notice of the meeting and proxy material will be mailed to stockholders on approximately April 1.

Requests for additional copies should be directed to
Crown Zellerbach
Corporate Communications
One Bush Street
San Francisco, California 94104

10-K Available
The Crown Zellerbach Corporation Report on Form 10-K for the fiscal year ended December 31, 1980, filed with the Securities and Exchange Commission, is available without charge to shareholders on written request to:

Crown Zellerbach
Corporate Communications
One Bush Street
San Francisco, California 94104

Systematic Investment
A Systematic Investment service offers two convenient and cost-free plans for holders of CZ common stock to increase their investments in the company. Your dividends can be invested automatically in more shares or fractions of shares, or you can acquire additional shares by voluntary cash payments. For a free brochure explaining Systematic Investment write to:

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R. F. Rush
Director of Investor Relations

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