



# GOVERNOR'S ENERGY PROGRAM

1981-1983

Energy Conservation and Renewable Resource Development Budget  
Recommendations to the 61<sup>st</sup> Session of the Oregon Legislature

A handwritten signature in blue ink, appearing to read "Victor Atiyeh".

Governor Victor Atiyeh  
January, 1981

Governor's 1981-83 Special Energy Program

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Part I Governor's Message

This document is a comprehensive and detailed explanation of my 1981-83 budget recommendations for the Special Energy Program I will submit to the 61st Legislative Session and my recommended budget for the Oregon Department of Energy.

I have presented my Energy Budget Recommendations separately from the total State Budget for the 1981-83 biennium to emphasize the critical importance of policy and budgetary decisions that must be made. We face extremely difficult choices among an array of energy policy options as well as equally difficult decisions on the allocation of severely diminished General Fund revenues to support State Government services to the people of Oregon.

This recommended Energy Budget presents the decisions and choices I have made and the rationales for each proposal. My own decision-making process was lengthy, deliberate and sensitive to the less-than-optimistic projections of State revenues in the coming biennium. Because the Legislature must make its decisions by a similar process, I have prepared an unusually detailed and documented package of energy measures.

The high priority I have assigned to my Special Energy Program for 1981-83 is a logical progression of the "New Energy Directions for Oregon" policy that I submitted to and which was approved by the 1979 Legislature. In endorsing that policy, the Legislature joined me in declaring that helping Oregonians conserve energy -- by eliminating energy waste and displacing some of the drain on finite energy resources by developing renewable supplies -- is a legitimate and essential role of State government.

"New Energy Directions for Oregon" defined an overall objective: A significantly higher level of energy self-reliance for Oregonians. My 1981-83 Special Energy Program proposes specific measures and actions by which both the near-term and long-term elements of that objective can be achieved.

In large part, the Special Energy Program is a product of one of the most remarkable examples of citizen voluntarism in Oregon's long tradition of the people and their government working together for the common good. "New Energy Directions for Oregon" created the Alternate Energy Development Commission and charged the Commission with designing a development plan for the State's renewable energy resources.

In just one year, the Commission and its Task Forces on Alcohol Fuels, Solar/Conservation, Wind, Geothermal, Hydro, Biomass delivered that plan -- "Future Renewable". The effort involved nearly 100 citizen volunteer experts and no pricetag can be placed on the value of their time, talent and commitment.

The Commission's mandate required credible estimates of how much energy can be acquired from conservation and renewable resources, how much it will cost and when that energy can be delivered. The Commission accomplished its work under an unusually difficult time constraint. "Future Renewable" is a plan which, without the work done by the Commission and Task Forces, would have required two or three years for government to finish. And, because government in Oregon simply does not have the Commission's breadth and depth of skills and experience, the Commission's real-world know-how provides important distinctions between goals which are desirable and goals which are achievable. That is not to say the Commission has been timid. On the contrary, "Future Renewable's" 87 recommendations for conservation and resource development and my Special Energy Program propose commitments and actions that have no parallel in this nation.

Time and again, during these first two years of my Administration, I have insisted that Oregonians must come to grips with things as they are and not as they were or as we might wish them to be. Oregon needs energy. Without reliable sources of energy, we risk a crippled economy and the social devastation that is a sure consequence. There is an irrefutable link between adequate energy supplies and a viable economy, just as there is a direct and vital relationship between a healthy, stable economy and social well-being. In short, energy is jobs.

To assure a healthy social and economic climate, Oregon must produce nearly 150,000 new job opportunities by 1985. Producing those jobs and meeting the energy demand growth implied in increased productivity, increased population -- and diminishing our vulnerability as a net importer of energy -- is a responsibility that simply cannot be left to chance.

The recommended budgets I will propose to the Legislature for my Special Energy Program and for the Oregon Department of Energy represent a vow that Oregon will not entrust a secure future to the whims of fate. We must act now. And, I firmly believe an aggressive, bold and innovative energy development plan has the enthusiastic support of an overwhelming majority of Oregonians. In the span of a half-decade, Oregonians have seen energy prices double and triple. We have endured shortages and probably not the last of them. But, at the same time, the people have sent clear signals to government that they are ready and willing to support energy policies which effectively address the future, even if those policies imply that many old ideas, old strategies and old policies must be changed or abandoned.

There are many reasons for wishing that revenue projections were brighter for the 1981-83 biennium. But the fact is that my overall State budget for 1981-83 is the leanest budget since World War II. The Alternate Energy Development Commission recommended that Oregon commit more than \$66 million, from either the General Fund or an Energy Use Assessment, to support actions in energy conservation and renewable resource development. And, the Commission said, those actions would conserve or acquire energy equal to 10 percent of Oregon's demand growth for the rest of this century and provide the momentum to conserve and acquire even more.



The General Fund cannot be tapped that deeply. But, I will propose alternate financing plans which can produce comparable results. My recommended budget for the Oregon Department of Energy (ODOE) totals \$99.2 million. This includes \$7.5 million to continue basic programs and \$91.7 million (General Obligation Bonding) for the Small Scale Energy Loan Program.

I will recommend that \$12.8 million in General Funds be committed to strengthening or expanding tax credits for energy conservation and renewable resources.

I am recommending a \$2 million General Fund appropriation for State and Local Government Building Conservation projects. I am also recommending more than \$1 million in General Funds to match federal financing available for weatherizing the homes of low-income Oregonians.

I will recommend to the Legislature that residential conservation and renewable resource incentive financing be shifted from the General Fund to direct cash rebates from energy suppliers to their customers who weatherize or install alternate energy systems. This measure will not only ease the strain on the General Fund but will double the dollar value of weatherization incentives for homeowners.

I will propose that Oregon's 35 percent tax credit for business and industry be expanded to include conservation and recycling.

My recommended budget for the Oregon Department of Transportation (ODOT) includes \$288,509 to continue the ridesharing program established in 1979-81. ODOT will continue to offer local government and private industry technical and marketing assistance to encourage ridesharing.

I will also ask the Legislature to assume State government's fair share of the cost of local public transportation and mass transit by allocating approximately \$7 million for in-lieu payroll taxes on the earnings of State government employees who work in local transit districts.

In total, my 1981-83 Recommended Budget will include more than \$144 million to finance Oregon's major energy programs.

This Special Energy Program is my response not only to the recommendations of the Alternate Energy Development Commission, but also to a clearly overwhelming mandate from the people of Oregon that we must not forfeit any opportunity to take decisive actions that will capitalize on available energy options. If we do nothing -- or less than we should -- those options will wither and disappear. We still have time to make decisions and the time to start is now.

GOVERNOR'S 1981-83 RECOMMENDED BUDGET  
ENERGY PROGRAMS

	<u>AMOUNT</u>
DEPARTMENT OF ENERGY	
• Other Funds	\$3,529,704
• Federal Funds	3,984,337
Subtotal	\$ 7,514,041
• Small-Scale Energy Loans	
Other Funds - Administration	2,668,595
" " - Loans (non-limited)	<u>(89,000,000)</u>
	<u>91,668,595</u>
DEPARTMENT OF ENERGY - TOTAL Non-General Fund	\$ 99,182,636
DEPARTMENT OF TRANSPORTATION	
• Ridesharing Technical and Marketing Assistance - Other Funds	288,509
• In Lieu of Payroll Taxes	
General Fund	3,000,000
Other Funds	3,000,000
Federal Funds	1,000,000
Subtotal	7,000,000
	<u>7,288,509</u>
EXISTING TAX CREDITS - General Fund	10,634,100
SPECIAL ENERGY PROGRAM	
• New or Expanded Tax Credits - General Fund	\$ 2,260,000
• State and Local Building Conservation - General Fund	2,000,000
• Low-Income Weatherization Grants - General Fund	1,059,037
• State Efforts to Promote Energy Conservation and Renewable Resources	6,630,274
• General Fund	\$ 48,802
• Other Funds	5,708,041
• Federal Funds	873,431

• Low-Interest Commercial and Industrial Loans through Industrial Development Revenue Bonds - Other Funds - Administration	31,583
"      "      - Non-Limited (Loans)	\$ <u>(15,000,000)</u>

SPECIAL ENERGY PROGRAM - TOTAL	\$ 26,980,894
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ENERGY PROGRAMS - GRAND TOTAL	\$ <u>144,086,139</u>
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General Funds	\$ 19,001,939
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Other Funds	119,226,432
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Federal Funds	5,857,768
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## Part II. Special Energy Program Overview

The following four parts of this document contain detailed descriptions of measures proposed by the Governor in his 1981-83 budget recommendations for his Special Energy Program and for the Oregon Department of Energy (ODOE).

Part III presents each of the Alternate Energy Development Commission's (AEDC) 87 recommendations for conservation and renewable resources. Following each recommendation is a brief summary of the Governor's response to the Commission, including actions already taken as well as measures the Governor will recommend for legislative approval. In many cases, summaries include parenthetical references to further details in Budget Packages (Part IV) and legislative summaries (Part VI).

Part IV has 16 sections, each dealing with a distinct element of the Special Energy Program. Each program consists of one or more Budget Packages which explain the purpose of the measure, how that purpose is to be accomplished, source of funds and positions recommended. Budget Packages include cross references to AEDC recommendations and/or legislative summaries and other relevant material in this document.

Part V contains recommendations submitted to the Governor by the Transportation Energy Conservation Task Force and the measures taken or proposed by the Governor in response.

Part VI contains summaries of legislation the Governor will propose to the 1981 Session in his Special Energy Program.

Part VII contains detailed budget appendices.

Part III. Alternate Energy Development Commission Recommendations

- Recommendation 1 - Charge a single public body with responsibility for developing and implementing an Oregon energy supply plan that is consistent with state energy policy.

This plan would identify Oregon's energy needs and how those needs will be met by conservation, renewable resources, and conventional facilities. Plan implementation would require the energy planning body to evaluate the effectiveness of public and private programs in providing these resources, and to recommend necessary changes to the plan or to state programs to meet the state's energy needs. The Commission believes that the state Energy Facility Siting Council (EFSC) may now have the necessary authority and direction to be Oregon's energy planning body. If EFSC is unable or unwilling to carry out this charge, then we recommend that a new public body be formed and authorized to carry this responsibility.

The Governor has approved this recommendation and the Energy Facility Siting Council (EFSC) has accepted the responsibility. EFSC conducted hearings in late 1980 to develop a process for determining energy demand and the resources to meet that demand.

- Recommendation 2 - Provide adequate staff to the ODOE to compile known resource inventory data, analyze the energy supply potentially available through conservation and renewable resources, evaluate state energy programs, develop accurate energy supply projections for Oregon, and provide for other general support for the planning body.

The Governor has approved this recommendation. (See Energy Supply Program, Part IV, Page 29.)

- Recommendation 3 - Require, through the PUC, that all regulated utilities offer appropriate cost-effective incentives for conservation and weatherization. The Energy Planning Body should review the aggressiveness with which these programs are pursued and seek legislation to remedy ineffective programs. If utility financing is not adequate, the feasibility of State bonding should be examined.

The Public Utility Commissioner (PUC) has approved tariffs for no-interest, deferred-payment weatherization loans to the space heating customers of Pacific Power & Light Company, Portland General Electric Company and CP National. The PUC is considering other cost-effective measures which could be extended to all customers of investor-owned utilities. (See Strengthened Residential Weatherization, Part IV, Page 33.)

Recommendation 4 - Require, through the PUC, similar no-interest, deferred-payment loan programs from all of the regulated electric utilities in Oregon and to extend those programs to as many customer classes as can be cost-justified.

The PUC has approved a tariff which allows Portland General Electric Company to offer free water heater insulation installation to non-space heating customers. The PUC is considering other cost-effective measures which could be extended to investor-owned utilities' non-space heating customers. (See Recommendation 87.)

Recommendation 5 - Refer to the voters a Constitutional amendment to permit public power systems to finance conservation loans.

The Governor has approved this concept and has asked the Attorney General to determine if a Constitutional amendment is necessary. Legislation has been drafted which would allow public power systems to make conservation loans to customers. (See Residential Weatherization Programs and Budget Discussion, Part IV, Page 33 and Legislative Summary A-3, Part VI, Page 65.)

Recommendation 6 - Amend the existing state-subsidized low-interest loan program for residential weatherization to allow for higher interest ceilings.

The Governor will offer legislation which amends the 1977 Energy Supplier Weatherization Program by removing the interest rate ceiling on state-subsidized commercial weatherization loans. (See Residential Weatherization Financing Program and Budget Discussion, Part IV, Page 34 and Legislative Summary A-1, Part VI, Page 65.)

Recommendation 7 - Establish a quality control program for weatherization installations which includes a reasonable rate of post-installation inspections by either energy suppliers or local building officials. Inspections should be available upon request to those homeowners who have concerns about the quality of the weatherization they received.

The PUC has taken appropriate action to implement post-installation weatherization inspections under the 1977 Energy Supplier Weatherization Program for investor-owned utilities. The Governor will offer appropriate legislation to add the post-installation inspection feature to the 1977 Energy Supplier Weatherization Program for public power supply systems and fuel-oil dealers. (See Legislative Summary A-1, Part VI, Page 65.)

Recommendation 8 - Amend the state tax credit program for residential weatherization to increase the maximum tax credit of \$125 to \$500 and limit the items eligible for tax credit to basic weatherization.

The Governor recommends replacing the \$125 state weatherization tax credit with direct cash rebates of up to \$250 from investor-owned and public power system energy suppliers to their space-heating customers. The Governor's Special Energy Program endorses legislation to repeal the 1977 Weatherization Tax Credit Program and legislation to permit public power systems to make weatherization loans (and cash rebates) to customers. The PUC will issue tariffs allowing investor-owned utilities to offer direct cash rebates for weatherization.

Recommendation 9 - Adopt legislation providing a personal income tax credit of 25 percent to a maximum of \$125 per housing unit for the cost of installing certain space and water heating system improvements.

The Governor recommends that heating system improvements be eligible for direct cash rebates from energy suppliers. (See Recommendation 8.)

Recommendation 10 - Implement state-subsidized financing for consumers not eligible for utility-sponsored programs.

The Governor recommends that State-subsidized 6 1/2 percent interest loans be made available to homeowners who do not qualify for direct utility cash rebates or no-interest or low-interest loan programs through the utilities. The Governor will offer legislation which amends the 1977 Energy Supplier Weatherization Program by removing the interest rate ceiling of 12 percent for state-subsidized commercial weatherization loans. (See Recommendation 6 and Residential Weatherization Financing, Part IV, Page 34.) The Governor also recommends a \$1 million General Fund appropriation to match Federal financing available for weatherizing the homes of low-income Oregonians. (See Low Income Weatherization and Budget Summary, Part IV, Page 35.)



Recommendation 11 - Utility audits should be available to all residential customers throughout the state. Oregon law should be amended to require public power systems to provide audits to their non-space heating customers.

The Governor has adopted this recommendation and the PUC will take appropriate action. The Governor's Special Energy Program includes appropriate legislation for non-regulated public power systems. (See Strengthened Residential Weatherization, Part IV, Page 33 and Legislative Summary A-1, Part VI, Page 65.)

Recommendation 12 - Amend the State Unlawful Trade Practices Act (ORS 464.605-652) to authorize ODOE to adopt rules and impose civil penalties regarding the conduct of state-sanctioned energy audits. Auditors who provide false or misleading information or who sell weatherization services at the time of the audit would also be subject to being removed from the list of eligible auditors.

The Governor recommends a more concentrated enforcement of the Unlawful Trade Practices Act to ensure against fraudulent or misleading trade practices in the sale and promotion of weatherization services. The Attorney General has agreed to make a greater allocation of existing personnel to ensure market surveillance. The Governor's budget also includes one new position in the Department of Justice to accomplish this objective. The Special Energy Program includes the development of a training program for energy auditors and legislation and authority in ODOE to develop and maintain a list of eligible auditors. (See Strengthened Residential Weatherization Program, Part IV, Page 33 and Consumer Protection Program, Part IV Page 51; and Budget Discussions, Part IV, Pages 35 and 51, and Legislative Summary A-6, Part VI, Page 66.)

Recommendation 13 - Support expansion of the Energy Extension Service to all Oregon counties.

The Energy Extension Service (EES) is one of Oregon's most successful and useful energy programs and the Governor has recommended doubling the existing program. (See Energy Extension Service, Part IV, Page 41, and Budget Discussion, Part IV, Page 43.)

Recommendation 14 - The Energy Planning Body periodically should review the effectiveness of voluntary programs and the potential for additional energy savings from conservation. It should be prepared to recommend to the Legislature mandatory programs if it appears that voluntary measures will not achieve the appropriate levels of conservation.

The Governor approves this concept and has directed ODOE to develop a standard for retrofit weatherization actions. This standard

would serve as the benchmark against which progress in weatherization activity can be measured. And, this standard will also serve both as a guide for homeowners and a standard for State weatherization subsidy programs such as the Department of Veterans' Affairs weatherization loan program. Appropriate legislation to establish standards is included in the Governor's Special Energy Program. (See Strengthened Residential Weatherization Program, Part IV, Page 33 and Legislative Summary A-7, Part VI, Page 66.)

Recommendation 15 - Restructure each building code advisory board to address energy considerations related to their area of expertise.

The Governor has approved this recommendation and will offer appropriate legislation which would add energy expertise to existing boards rather than continuing a separate energy advisory board. (See Legislative Summary A-4, Part VI, Page 65.)

Recommendation 16 - Revise the code adoption process to place sole adoption authority in the Director of the Department of Commerce.

The Governor supports the concept of a more effective code adoption process. However, rather than abolishing the shared adoption authority (between various codes advisory boards and the Director) the Director will develop more effective processes and improved relationships in the existing structure.

Recommendation 17 - Establish and provide adequate staff to an Energy Codes Section within the Department of Commerce to ensure that energy concerns are adequately addressed in code language and enforcement. The staff should also be charged with responsibility to educate the construction industry and other code officials on energy requirements in the code and to develop a licensing or certification program for wind and solar installers.

The Governor has approved this recommendation and will propose appropriate staffing levels in the Department of Commerce. (See Energy Code Section, Part IV, Page 45, and Budget Discussion, Part IV, Page 46.)

Recommendation 18 - Revise the 1973 Building Permit Fee Schedule which governs local and state permit fees to reflect the additional demand created by energy conservation requirements, inspections, and code enforcement.

The Governor has approved this recommendation and will propose legislation to revise the building permit fee schedule. Revenues from the revised permit fee schedule will finance Recommendations 17, 19, 20 and 21. (See Legislative Summary A-4, Part VI, Page 65.)

Recommendation 19 - Provide sufficient building inspectors to insure that energy requirements are enforced.

The Governor has approved this recommendation. (See Improved Code Enforcement and Budget Discussion, Part IV, Page 46.)

Recommendation 20 - Provide sufficient personnel to the Department of Commerce to follow the implementation of the energy codes and spread ideas and programs which are working well throughout the energy codes process.

The Governor has approved this recommendation. (See Local Energy Code Monitoring and Budget Discussion, Part IV, Page 46.)

Recommendation 21 - Establish a goal for energy savings to be achieved through code revisions for new home construction, heating system performance efficiency, and water heating efficiency. The goal is to reduce energy consumption significantly when compared to similar homes built to 1980 standards. The goal should take into account the cost-effectiveness of potential weatherization and heating efficiency options and should be reflected in code modifications.

The Governor has approved this recommendation and has directed the Department of Commerce, in conjunction with ODOE and other state agencies and the private sector, to draft major code revisions to take effect in July 1983. (See Energy Code Section, Part IV, Page 45, and Budget Discussion, Part IV, Page 46.)

Recommendation 22 - Request the Governor, Oregon's Congressional Delegation, and the Legislature to encourage US Department of Housing and Urban Development (HUD) and US Department of Energy (US DOE) to strengthen the energy efficiency standards for new mobile homes.

The Governor has asked the U.S. Department of Housing and Urban Development to propose higher energy efficiency standards for mobile homes sold in Oregon. Oregon's Congressional Delegation has been asked to support the Governor's request.

Recommendation 23 - Establish a loan fund to finance conservation projects which cost less than \$500,000 in the commercial/industrial sector.

The Governor endorses this concept but has deferred action on the Commission's recommendation that the loan fund be financed by general obligation bonds pending consideration of the report by the State Bonded Debt Advisory Committee.

Recommendation 24 - Adopt legislation requiring that eligibility standards for Industrial Development Revenue Bonds be revised, where reasonable, to require projects to meet an energy efficiency standard, and to extend eligibility of the bonds to energy conservation and renewable resource projects.

The Governor has approved this recommendation and his Special Energy Program includes legislation which would qualify conservation and renewable resource projects for loans financed by State Industrial Development Revenue Bonds. The Governor's recommended budget provides for administration of the program in the Department of Economic Development. (See Revisions to Industrial Development Revenue Bonds and Budget Discussion, Part IV, Page 36. See Legislative Summary B-1, Part VI, Page 67.)

Recommendation 25 - Amend the existing Business and Industry Tax Credit program to include conservation measures, extend its sunset to 1985, and raise the investment ceiling from \$30 million to \$50 million.

The Governor has approved the recommendation and will offer appropriate legislation. (See Amendments to Business and Industry Tax Credit and Budget Discussion, Part IV, Page 37. See Legislative Summary B-11, Part VI, Page 69.)

Recommendation 26 - Adopt legislation requiring all IOUs, natural gas utilities, and public power systems to provide energy audits to all their commercial customers.

The Governor has approved this recommendation and will offer appropriate legislation. (See Legislative Summary A-2, Part VI, Page 65.)

Recommendation 27 - Expand ODOE's Energy Conservation Clearinghouse program to provide up-to-date financial information on state and federal financing mechanisms, tax advantages in energy

conservation investments, and the general economic advantages of energy conservation investments to Oregon firms. The program should be expanded to teach about conservation techniques and corporate energy management programs.

The Governor has approved this recommendation and his Special Energy Program includes a new position in the Clearinghouse Program (a financial expert). (See Business and Industrial Clearinghouse Program, Part IV, Page 41, and Budget Discussion, Part IV, Page 43.)

Recommendation 28 - Identification by ODOE of specific administrative requirements which frustrate business participation in various related financing programs; action by ODOE to propose more efficient administrative procedures for its own programs and for other state and federal programs.

The Governor has approved this recommendation and has directed ODOE to analyze constraints and propose resolutions. (See Business and Industry Clearinghouse Program, Part IV, Page 41, and Budget Discussion, Part IV, Page 43.)

Recommendation 29 - Conduct annually the Governor's Energy Management Conference as a forum in which the private sector can describe its successes and constructive failures. Among other topics, the conference should present the most current and authoritative information available on future energy supplies and forecasted energy prices.

The first Governor's Energy Management Conference was conducted in March 1980 and was an effective and successful meeting of corporate and government energy decision-makers. The conference was a clear signal to Oregon's private sector that State government intends to promote improved channels of communication and problem-solving. The Governor has approved the Commission's recommendation and ODOE will be responsible for planning and conducting the Second Annual Governor's Energy Management Conference in March 1981.

Recommendation 30 - Adopt legislation to require the Department of Commerce to develop and enforce maximum lighting power standards for existing commercial buildings. The standards should govern all commercial buildings above a specified size or connected lighting load and built before July 1, 1978, when lighting standards for new buildings became effective. The Legislature should require that the standards become effective by January 1983.

The Governor has approved this concept and will offer appropriate legislation. (See Maximum Lighting Standards and Budget Discussion, Part IV, Page 38.)

Recommendation 31 - Establish a goal for energy savings to be achieved through code revisions for new commercial construction, heating and cooling system performance efficiency, and water heating efficiency. Code revisions should serve to reduce energy consumption significantly when compared to similar buildings constructed to 1980 standards. The goals should be set taking into account the cost-effectiveness of potential weatherization, cooling, and heating efficiency options. Goals should be reflected in code modifications.

The Governor has approved this recommendation and will propose appropriate staffing levels in the Department of Commerce. (See Energy Codes Section, Part IV, Page 45, and Budget Discussion, Part IV, Page 46.)

Recommendation 32 - Implement a corporate style energy management program for State buildings.

The Governor has approved this recommendation and has set a goal of a 20 percent energy use reduction in State buildings in 1981 as compared to 1976. His Special Energy Program includes one new position in the Department of General Services, one new position in the Department of Human Resources, and one-half new position in ODOE to strengthen energy management. The Governor is also recommending a \$1 million General Fund appropriation to finance State Building Energy Conservation Projects. (See State Energy Management Program and Budget Discussion, Part IV, Page 44.)

Recommendation 33 - Appropriate money from the State General Fund to provide a 50 percent match for energy conservation and renewable resource measures implemented by local governments and public care institutions; replenish the State Building Retrofit Fund to continue conservation projects in State buildings.

The Governor has approved this recommendation. His recommended budget calls for a \$1 million General Fund appropriation to provide state grants to match 50 percent local funding for conservation measures in local government buildings and public care institutions. The recommended budget also includes \$1 million to replenish the conservation retrofit fund for State buildings. (See Recommendation 32.) The Governor also recommends one-half additional position in ODOE to administer increased workload. (See Local Government Assistance Program, Part IV, Page 39, and Budget Discussion, Part IV, Page 40.)



Recommendation 34 - PUC should prepare buyback and wheeling tariffs for the purchase and distribution of power from cogenerators and small power producers. These tariffs should comply with the federal Public Utility Regulatory Policies Act (PURPA) regulations and should be clear and easily understood. Such rates and the federal PURPA legislation should be reviewed no later than 1990 to assure that the difference between utilities' avoided costs and the actual cost of production of power from such sources does not result in an unreasonable windfall for those producers.

The Governor has approved this recommendation. The PUC has conducted public hearings on cogeneration tariffs and will adopt a tariff on or before March 20, 1981.

Recommendation 35 - ODOE should review comprehensive land use plans for elements that unnecessarily restrict potential energy facilities; ODOE should work with appropriate agencies to implement necessary revisions.

The Governor has approved this recommendation. The Governor's Special Energy Program includes one additional ODOE position for land use planning review and technical assistance grants through DLCDC. (See Local Government Assistance Program and Budget Discussion, Part IV, Pages 39-40. Also see Recommendation 61.)

Recommendation 36 - To prevent alcohol produced in small stills from being used in human consumption, the State should license all stills sold in Oregon that are manufactured exclusively from stainless steel, glass, copper, or any combination thereof.

The Governor has approved this recommendation and will offer appropriate legislation. (See Legislative Summary B-12, Page 69.)

Recommendation 37 - Eliminate duplication and delay in Prevention of Significant Deterioration and New Source Review matters by seeking delegation of authority to the State by the U.S. Environmental Protection Agency (EPA).

The Governor has approved this recommendation and his recommended 1981-83 DEQ budget includes one position to assume this responsibility.



Recommendation 38 - Establish state-wide uniform code enforcement for wood stove installations.

The Governor has approved this recommendation. The Department of Commerce, the State Fire Marshal, DEQ and ODOE will participate in a comprehensive program that includes not only measures to effect code compliance but also measures to promote safety, energy-efficient stove operation and air quality protection. (See Recommendation 62.)

Recommendation 39 - Amend ORS 469.320(3) to clarify provisions exempting cogeneration facilities from the need to obtain a site certificate from the Energy Facility Siting Council.

The Governor has approved this concept and has directed ODOE to work with the EFSC to adopt clarifying rules which are proposed for adoption by January 1981.

Recommendation 40 - Request the Governor and Oregon Congressional Delegation to push for adequate forest management funding for the US Forest Service and the Bureau of Land Management.

The Governor strongly supports the Commission's recommendation. Congressional approval of the Reforestation Trust Fund (HR 4310) introduced by U.S. Sen. Bob Packwood, assures long-term higher funding levels for reforestation and forest land management.

Recommendation 41 - Request that the Governor, the Oregon Legislature, and the Oregon Congressional Delegation ask the federal Interagency Geothermal Coordinating Council (IGCC) to investigate and report on how their 1978 streamlining recommendations have been applied to Oregon's federally-managed lands. IGCC also should promptly determine what specific additional actions are necessary for a rapid expansion in Oregon energy resource exploration and leasing activities.

The Governor has approved this recommendation. He has sent his request to the Coordinating Council and has asked Oregon's Congressional Delegation to support the request.

Recommendation 42 - Refine the Energy Facility Siting Council's (EFSC) 1974 Site Suitability Study specifically to evaluate crucial geothermal areas identified by the Department of Geology and Mineral Industries, Department of Water Resources, and the Oregon Department of Energy.

The Governor has approved this recommendation and ODOE and the EFSC will implement the geothermal site suitability survey.

Recommendation 43 - Adopt legislation to establish provisions for the management and operation of a geothermal reservoir to assure that it is developed for maximum benefit.

The Governor has approved this recommendation and will offer legislation which establishes provisions for geothermal resource management in the Department of Geology and Mineral Resources (DOGAMI). (See Legislative Summary B-3, Part VI, Page 67.)

Recommendation 44 - Develop a program to directly involve local geothermal heating districts in the management of their geothermal reservoirs.

The Governor has approved this recommendation and his recommended budget provides additional staff for the Department of Water Resources for geothermal management. (See Recommendation 43.) The Special Energy Program directs ODOE, the Department of Water Resources (DWR), and DOGAMI to work with local heating districts in developing reservoir management plans.

Recommendation 45 - Notify heating districts of any well drilling notices for wells that are in the vicinity of the heating district.

The Governor has approved this recommendation and DOGAMI and the DWR have implemented a notification process.

Recommendation 46 - Exempt geothermal pipelines less than 16 inches in diameter and less than five miles long, or which are distribution lines for a heating district, from the Energy Facility Siting Council site certificate requirement.

The Governor has approved this recommendation and will offer legislation exempting such geothermal pipelines from EFSC site certification. (See Legislative Summary B-2, Part VI, Page 67.)

Recommendation 47 - Require all state agencies with relevant authority to clearly delineate requirements that must be met by hydro permit applicants. Agency criteria for licensing hydro projects should be developed as expeditiously as possible and should include established time lines within which applications will be processed. Adequate staff should be provided to the Oregon Department of Fish and Wildlife and the Oregon Department of Water Resources to enable those agencies to be responsive to hydroelectric application reviews.

The Governor has approved this recommendation and the DWR has published informational materials explaining water power licensing standards and processes. Additional staff is recommended for the Department of Fish and Wildlife to develop timely agency response and direction. (See Increased Hydro Licensing Workload and Budget Discussion, Part IV, Pages 49 & 50. Also see Improved Fish & Wildlife Reviews and Budget Discussion, Part IV, Pages 49 & 50.)

Recommendation 48 - Continue and expedite action by the Water Policy Review Board to reduce extensive prohibitions against hydro development larger than 7.5 hp in water basin plans.

The Governor has approved this recommendation. The Water Policy Review Board is reviewing Water Basin Plans to eliminate any unnecessary restrictions.

Recommendation 49 - Review for duplication the jurisdiction of the Water Policy Review Board and the Energy Facility Siting Council for licensing hydroelectric sites. Eliminate any avoidable duplication.

The Governor has approved this recommendation and has directed DWR and ODOE to establish a licensing process which avoids unnecessary duplication and overlap.

Recommendation 50 - Require that all dams more than 25 feet high, on a regular water course, and at which power production may someday be practical, be equipped with a penstock/drain that can be used with generating equipment.

The Governor has approved this recommendation and his Special Energy Program includes legislation to give DWR the necessary authority. (See Legislative Summary B-4, Part VI, Page 67.)

Recommendation 51 - Adopt legislation to require cities and counties to revise local land development standards to provide solar and wind access to the extent feasible given the constraints of latitude, topography, micro-climate, permitted uses and densities, and existing development patterns.

The Governor supports the Commission's concept and will offer legislation to authorize cities and counties to take such action. The Governor's Special Energy Program provides technical assistance to local governments through ODOE and DLCD. (See Local Government Assistance Program and Budget Discussion, Part IV, Pages 39 & 40. Also see Recommendation 61.)

Recommendation 52 - Revise the building codes covering the installation of solar and wind devices to assure adequate consumer protection without unduly inhibiting construction of these systems or increasing system costs.

The Governor has approved this recommendation. The Department of Commerce has drafted a report which identifies code provisions which may inhibit solar systems. The final report is to be issued in January 1981. A similar effort to identify code hindrances to wind systems will be developed by the Department.

Recommendation 53 - Adopt a licensing or certification program through the Department of Commerce for residential solar and wind technicians who install complete solar and wind systems.

The Governor supports a voluntary education program and has directed the Department of Commerce and ODOE to offer technical training and assistance to residential solar and wind installers. (See Energy Codes Section, Part IV, Page 45.)

Recommendation 54 - Require the recording of all leases, options, and rentals of sites for wind project developments with county recorders and ODOE. Provide information through ODOE on wind access agreements to land owners in wind areas, and adopt rules of leasing state-owned lands for wind resource development. Lease agreements to develop wind resources on state-owned land should require the lessee to make reasonable efforts to develop the site's wind potential or lose the lease.

The Governor supports the Commission's concept and his Special Energy Program includes legislation to authorize the recording of wind leases. ODOE will provide technical assistance to local governments in developing wind lease recording processes. ODOE will also work with the Division of State Lands to develop provisions for wind leases on state-owned land. (See Legislative Summary B-5, Part VI, Page 67.)

Recommendation 55 - Create a \$2 million fund to be used by ODOE to contract for appropriate resource assessment studies. ODOE would review available data and fund additional studies.

The Governor supports the recommendation and his Special Energy Program proposes support for needed resource assessment studies. The Governor's recommended budget provides additional positions to utilize existing and new resource knowledge in developing the state's energy and land use policies. (See Resource Assessment Program and Budget Discussion, Part IV, Pages 31 & 32.)

Recommendation 56 - Adopt legislation providing a refundable state income tax credit for wind measuring instrumentation and supporting structures. Persons who claim this credit should be required to submit their wind data to the State to expand the resource data base. Claiming this tax credit should not reduce the tax credits available to homeowners who subsequently install a wind generator. The tax credit should be 50 percent of the first \$500 of actual costs. The business tax credits should be 25 percent of the first \$2,500 of actual costs.

The Governor has approved this recommendation and his Special Energy Program includes legislation to provide tax credits for homeowners and businesses to offset the cost of wind measuring equipment. (See Tax Credit for Wind Measuring Equipment and Budget Discussion, Part IV, Page 57. See Legislative Summary B-6, Part VI, Page 68.)

Recommendation 57 - Direct ODOE to coordinate the state's information and education functions to ensure effective efforts and to avoid unnecessary duplication.

The Governor has approved this recommendation. His recommended budget includes one additional position in ODOE to consolidate energy-related public information and education programs. (See Energy Information Efforts, Part IV, Page 41, and Budget Discussion, Part IV, Page 43.)

Recommendation 58 - Provide additional training and technical information/assistance staff for renewable resource services at fo higher education institutions. We recommend that one professional and one clerical assistant be added to the staffs of the University of Oregon Solar Energy Center, the Oregon Institute of Technology's Geo-Heat Center, Oregon State University's Energy Research Institute and Eastern Oregon State College's Alcohol Fuels Clearinghouse. This supplemental service should be assured of continuing state support.

The Governor has approved this concept. His recommended budget provides state support for technical assistance at each of three existing Resource Centers: University of Oregon, Eastern Oregon State College and Oregon State University. A direct federal grant finances the geothermal program at the Oregon Institute of Technology. (See Resource Centers Program and Budget Discussion, Part IV, Page 53.)

Recommendation 59 - Strengthen ODOE's programs to assure the availability of independent and objective statewide information on renewable resource options and financing incentives, to act as a central source of technical assistance and financing for energy buyers and fuel suppliers, and to help facilitate projects through the State's permit processes.

The Governor has approved this recommendation and his Special Energy Program provides additional ODOE capability for technical assistance and information, with emphasis on co-generation, wind and hydro development. (See Resource Development Program, Part IV, Page 47.)

Recommendation 60 - Support efforts by Oregon's active citizen volunteer groups to provide information on local resource availability, technological options and "how to" information to individuals and local communities.

The Governor has approved this recommendation and the Public Information and Outreach Program provides additional support of and assistance to local citizen volunteer groups. (See Citizen Volunteer Groups and Budget Discussion, Part IV, Pages 42 & 43.)

Recommendation 61 - Establish an ODOE technical assistance program to help local governments include resource inventories and ordinances in comprehensive land use plans. These ordinances should allow continued land development in a manner which preserves, wherever possible, its potential and value for future energy production from renewable resources.

The Governor has approved this recommendation. ODOE has published two manuals related to land use and energy planning and has distributed the publications to city and county land use planners. The Governor's Special Energy Program provides ODOE with additional staff and grants to local governments through DLCDC for energy and land issues. (See Recommendation 35. Also see Local Government Assistance Program, Part IV, Page 39, and Budget Discussion, Part IV, Page 40.)

Recommendation 62 - Conduct an aggressive state-wide education program for proper wood stove installation and operation.

The Governor has approved this recommendation and has authorized ODOE to accept a grant from the Pacific Northwest Regional Commission (PNRC) to develop a comprehensive public information and education program on the safe installation and efficient operation of woodstoves. (See Resource Development Program, Part IV, Pages 47-49 and Budget Discussion, Part IV, Page 50.)

Recommendation 63 - Develop model collection and disposal ordinances for local governments to encourage recycling. The Department of Environmental Quality should have lead responsibility and have adequate staff to provide technical assistance for resource recovery and recycling projects.

The Governor has approved this recommendation and his recommended Special Energy Program budget provides one position in DEQ to help local communities address solid waste disposal. (See Resource Recovery and Recycling Program and Budget Discussion, Part IV, Pages 49 & 50.)

Recommendation 64 - Fund ODOE research and demonstration projects to promote consumer confidence in and acceptance of new technologies.

The Governor has approved this recommendation to develop successful demonstration projects to build public confidence in renewable energy resources and in particular, those resources (geothermal,



wind, solar) which have substantial potential in Oregon. The Governor's recommended budget provides additional ODOE staff. (See Research and Demonstration and Budget Discussion, Part IV, Page 54.)

Recommendation 65 - Increase the interest ceiling and length of loan terms available under the state-subsidized low-interest loan program (ORS 1979 Chapter 483).

The Governor has approved this recommendation and will offer legislation to remedy SB 517 (1979) which authorizes corporate tax credits for commercial lenders which finance low-interest loans for residential alternate energy systems. (See Low-Interest Commercial Loans for Renewable Resources and Budget Discussion, Part IV, Page 55. See Legislative Summary B-7, Part VI, Page 68.)

Recommendation 66 - Modify legislation for the residential renewable resource tax credit program to make the credit refundable, to extend the sunset clause to 1991, and increase the tax credit for wind devices to 25 percent of the first \$28,000.

The Governor has approved the concept and will offer legislation to make the tax credit refundable and to extend the sunset provision for renewable resource tax credits to 1987. An increase in the wind credit is not recommended. (See Revisions to the Residential Renewable Resources Tax Credit Program and Budget Discussion, Part IV, Page 56. See Legislative Summary B-8, Part VI, Page 68.)

Recommendation 67 - Amend the rules governing the residential and business/industry tax credit program to include groundwater heat pumps.

The Governor has approved the Commission's recommendation to make ground water heat pumps eligible for renewable resource tax credits. ODOE will prepare and adopt administrative rules for both the Residential and Business and Industry Tax Credit Programs to include ground water heat pumps. (See Residential Renewable Resource Tax Credit Program, Part IV, Page 56.)

Recommendation 68 - Adopt legislation to make residential hydroelectric devices eligible for the Department of Veterans' Affairs Loan Program.

Small-scale, residential-size hydro projects -- unlike solar, geothermal and wind -- do not qualify for residential alternate energy device loans from DVA. The Governor concurs with the

Commission's recommendation that hydro systems be eligible for loans up to \$3,000 from DVA and appropriate legislation will be proposed. (See VA Loans for Hydro Development and Budget Discussion, Part IV, Page 59. See Legislative Summary B-9, Part VI, Page 68.)

Recommendation 69 - Request Oregon's Congressional Delegation to work to make residential hydro facilities eligible for federal tax credits.

The Governor has approved this recommendation and has asked Congress to amend the Energy Tax Act of 1978 to include hydro facilities.

Recommendation 70 - Prohibit the use of conventional energy resources for new residential swimming pool heating.

The Governor believes the use of renewable energy resources (such as solar and geothermal) for this purpose should be encouraged, rather than mandated, and economic disincentives should be imposed through the regulatory process.

Recommendation 71 - Amend DEQ rules to limit municipal solid waste low-interest loan/grant program funds to incinerators equipped with heat recovery systems.

The Governor concurs with this recommendation and has directed DEQ to clarify administrative rules governing eligibility for loans.

Recommendation 72 - Extend the eligibility of biomass-fired facilities, including cogeneration equipment, under DEQ's pollution control tax credit program.

The Governor recommends that projects which are primarily energy-related should qualify for ODOE's Business and Industry Tax Credit Program and not DEQ's pollution control program.

Recommendation 73 - Adopt a new tax credit program to provide a 10 percent investment tax credit for the cost of equipment purchased for and dedicated to recycling. State agencies such as DEQ and the Department of Economic Development should work to bring industries that use recycled materials to Oregon.

The Governor will offer legislation to amend the Business and Industry Tax Credit Program to include recycling. (See Amendments to Business and Industry Tax Credit and Budget Discussion, Part IV, Page 37. Also see Recommendation 25 and Legislative Summary B-11, Part VI, Page 69.)

Recommendation 74 - Adopt legislation establishing a Geothermal Development Fund to be administered by ODOE and used for cost-sharing of pioneer direct-use projects.

The Governor concurs with the Commission's concept and will propose direct financing, rather than lease revenues, to support the geothermal development fund. (See Geothermal Development Fund and Budget Discussion, Part IV, Page 48.)

Recommendation 75 - Establish a 20 percent state income tax credit for geothermal end-use industries which establish operations in geothermal areas of the state.

The Governor agrees with the Commission's concept and believes such industries should be encouraged to take advantage of the state's Business and Industry Tax Credit (35 percent) incentive program for renewable resource development.

Recommendation 76 - Provide consumer guidance through the ODOE based on a quality and performance review of installed systems. ODOE should monitor the testing of renewable resource equipment at accredited testing facilities and determine if product testing should be a tax credit eligibility requirement.

The Governor has approved this recommendation and measures in his Special Energy Program address the Commission's concern. (See Consumers Protection Program and Budget Discussion, Part IV, Page 51. Also see Recommendation 12.)

Recommendation 77 - Require commercially-installed solar and wind systems to be installed by a certified solar or wind technician in order to be eligible for the state tax credit program.

The Governor concurs with the Commission's concept and has directed the Departments of Energy and Commerce to develop appropriate training programs to help ensure qualified commercial installers, rather than setting new licensing standards.

Recommendation 78 - Fund environmental baseline studies of areas having a potential for geothermal development.

The Governor has included funding for these types of studies in his 1981-83 recommended budget. (See Research and Demonstration and Budget Discussion, Part IV, Page 54.)

Recommendation 79 - Fund a market study of wind energy applications, economics, and incentives. This would include a detailed study of wind energy users and their responsiveness to incentives.

The Governor included funding for these types of studies in his 1981-83 recommended budget. (See Research and Demonstration and Budget Discussion, Part IV, Page 54.)

Recommendation 80 - Fund cost-shared feasibility studies for representative model projects using forest and agricultural residues.

The Governor included funding for these studies in his 1981-83 recommended budget. (See Research and Development and Budget Discussion, Part IV, Page 54.)

Recommendation 81 - Fund OSU's Agricultural Experiment Station to research fermentation technology, evaluate alternate crops, conduct an economic analysis of Oregon-specific alcohol production and analyze the quality of by-product materials as animal feed.

The Governor has included funding for these types of studies in his 1981-83 recommended budget. The work will be accomplished as outlined in the Special Energy Program's Research and Demonstration Program. The Governor's recommended budget includes one new position at the Oregon Department of Agriculture to staff an Alcohol Fuels Office. (See Research and Demonstration, Part IV, Page 54; Alcohol Fuels Office and Budget Discussion, Part IV, Page 47.)

Recommendation 82 - Research methane recovery from Oregon landfills.

The Governor has approved this recommendation and has directed DEQ to continue to monitor methane recovery from solid wastes. (See Resource Recovery and Recycling and Budget Discussion, Part IV, Pages 49 & 50. Also see Recommendation 63.)

Recommendation 83 - Continue review of improved systems for energy storage and ocean wave generation in Oregon.

The Governor has approved this recommendation and has directed ODOE to monitor and report emerging technology.

Recommendation 84 - Request the Oregon Legislature to memorialize Congress and BPA to guarantee that the development of renewable energy resources by a

public power system in Oregon will not reduce that system's allotment of low-cost federal power.

The Governor concurs with the Commission's recommendation. The Governor and ODOE will represent the state's interests in the implementation of the Pacific Northwest Regional Power bill, which addresses this issue, and the development of a revised Bonneville Power Administration allocation policy.

Recommendation 85 - Adopt legislation to allow the cost of construction for renewable resource projects to flow immediately into the utility rate base.

The Governor concurs with the Commission's belief that voters did not intend (by passage of Ballot Measure 9 in 1978) to exclude the construction costs of renewable resource projects from the rate base. The Governor's Special Energy Program includes legislation to amend the law. (See Legislative Summary B-10-a, Part VI, Page 68.)

Recommendation 86 - Adopt legislation delaying the assessment of ad valorem property taxes on utility renewable resource projects until energy from the project comes on-line.

Legislation will be offered to amend existing statutes to include renewable resource projects. (See Legislative Summary B-10-b, Part VI, Page 68.)

Recommendation 87 - Encourage the utilities, through the PUC, to conduct more state-related renewable resource demonstration and resource assessment studies. We believe that the cost of these actions should be allowed to be passed through to the utility's ratepayers as an expense. In addition, the PUC should review the cost of generation from on-line renewable resource projects and allow unanticipated cost variances for these projects to flow rapidly into the ratebase.

The Governor has approved this recommendation and has directed the PUC to take appropriate action. Initial reviews are underway.

PART IV.

Section A: Energy Supply Program. (The elements in this Section address AEDC Recommendations 1 & 2).

Purpose: Oregon can choose how much and what kinds of energy resources are developed to meet energy needs. If these choices are made by default, Oregon will be obliged to live with decisions made by others. But, Oregon can take decisive actions now to determine its own energy future. This Budget Package improves the State's capability to analyze energy supply options and to establish policies to pursue preferred options for development.

How accomplished: Four tasks are fundamental to achieving the purpose:

- (1) Develop a reliable estimate of future energy demand.
- (2) Quantify the energy available from different resources and determine when that energy can be brought on-line.
- (3) Analyze impacts of different energy development options so that decision-makers can make informed and sound judgments on preferred options.
- (4) Speed development of preferred energy options and monitor progress toward meeting energy demand; if necessary, modify supply plans and State programs to assure energy demand will be met.

ODOE's Recommended Agency Budget provides staff to estimate statewide energy demand. This Budget Package contains positions and contract funds to identify energy demand in specific energy supplier service areas and to more completely analyze energy demand and conservation options in the commercial/industrial sector.

ODOE's Recommended Agency Budget provides staff to analyze the availability of conventional energy supplies but does not include positions to develop estimates of the energy potential from renewable resources. This Budget Package provides staff to develop and use these estimates. Funding to develop new resource data is in the Resource Assessments Budget Package. (See Page 31).

ODOE's Recommended Agency Budget provides one position to analyze the impact of renewable resources on utility loads and the ability of identified resources to meet projected demand. This Budget Package adds a second position to assure timely completion of the analyses.

Staffing Impact: Staff in addition to that in ODOE's Recommended Agency Budget is necessary to accomplish the four tasks outlined above.

- (1) To develop accurate assessments of Oregon's resource potential in solar, wind, geothermal, hydro, biomass and alcohol fuels, and to quantify the energy that can be developed from these resources: Two Environmental Specialists 3, and One Environmental Specialist 4. The latter position will also be responsible for assisting local government resource development planning, reviewing utility supply plans and work with resource owners to determine how much of the resource can be developed.
- (2) To properly analyze the availability of variable resources such as wind and solar and how these resources can help meet utility loads, ODOE's analytical capability should be supplemented by one Senior Utility/Economic Analyst.
- (3) ODOE's Recommended Agency Budget includes capability to analyze energy use in the residential sector. However, most of Oregon's future energy demand growth will occur in the industrial/commercial sector and ODOE needs comparable analytical capability to determine how energy is used in that sector. To analyze the sector's potential for energy conservation and to evaluate the impact of energy-saving State programs in the sector, two positions, a Senior Utility/Energy Economic Analyst and a Utility/Economic Analyst, are needed.
- (4) Three positions are required to develop service area demand analyses and a Resource Plan: one Senior Utility/Energy Economic Analyst and two Utility/Energy Economic Analysts.
- (5) Two Clerical Specialists and two Clerical Assistants are required to provide necessary clerical support for the positions described above.

Adoption of this Budget Package is important to Oregonians and their energy future. Work outlined in the package will provide clear and timely signals to Oregon's energy suppliers about the manner by which State decision-makers intend to meet energy demand. This Budget Package provides a means by which policies and goals can be developed and achieved.

Revenue Source: Other Funds/Energy Supplier Assessment.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Energy Supply Analysis Department of Energy	965,091	Other Funds	14.0	12.80



Section B: Resource Assessment Program. (This Section addresses AEDC Recommendation 55).

Purpose: Economic risks resulting from insufficient resource data are a major barrier to private development of Oregon's indigenous energy resources. Reliable information on resource quantity and availability is needed before developers will consider a development project. Accurate resource assessments will also better identify Oregon's energy supply options and policy choices.

How Accomplished: This Budget Package provides State support for developing resource data in specific areas of potential importance. A \$1.6 million fund will allow ODOE to contract for studies in areas where improved resource definitions can produce the greatest benefit to the State. ODOE will contract with other State agencies and private contractors for resource assessments.

Most of the funds are for geothermal assessment drilling to verify the resource in likely areas. Geothermal assessment is to be done through the Department of Geology and Mineral Industries (DOGAMI).

Lesser funding is for other resource assessments. The Department of Water Resources (DWR) will identify hydroelectric sites for development. Wind resource assessment will be contracted to a state university or private contractor. Site-specific biomass and solar assessments will be done as needed. All ODOE assessment work will be coordinated with private and public utilities, the Bonneville Power Administration (BPA) and other State, Federal, and local agencies to avoid duplication.

Staffing Impact: ODOE staffing for resource assessments is described in the Energy Supply Program Budget Package. (See Part IV, Page 29).

Federal funding can help support resource assessments but cannot be assured now. Federal funding has not been available for site-specific wind or biomass assessments. Future Federal funding for geothermal programs is uncertain. Assessment of State-specific resource opportunities is important to help identify Oregon's energy resource options as early as possible and to motivate development.

Revenue Source: Other Funds/Energy Supplier Assessment

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Resource Assessment				
Department of Energy	62,726	Other Funds	.0	.00
Department of Geology and Mineral Industries	1,400,602	Other Funds	2.0	1.80
Department of Water Resources	-136,672	Other Funds	1.0	.90
Total	<u>1,600,000</u>		<u>3.0</u>	<u>2.70</u>

Section C: Residential Weatherization Programs (The elements in this Program address AEDC Recommendations 7, 10, 11, 12 and 14)

(1) Strengthened Residential Weatherization Program

Purpose: Oregon's State-mandated and subsidized weatherization program needs repair. This Budget Package provides a strengthened State capability to work with lenders, oil heat dealers, utilities, weatherization contractors and others so that effective residential weatherization programs are available to Oregon homeowners.

How Accomplished: Tasks defined in this Budget Package are:

- Establish a quality-control program for weatherization installations which includes a reasonable number of post-installation inspections by energy suppliers;
- Develop a training procedure and certification program for energy auditors eligible to perform State-sanctioned energy audits;
- Develop a procedure for revoking the certification of auditors who provide false or misleading information;
- Develop advisory minimum weatherization standards for existing residences;
- Work with lenders and energy suppliers to improve reporting of weatherization actions taken and resultant energy savings;
- Improve monitoring and technical assistance to public power systems and oil dealers that are required by State and Federal statutes to offer weatherization programs.

Staffing Impact: One professional position and one Clerical Specialist in ODOE.

Revenue Source: Other Funds/Energy Supplier Assessment

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Strengthened Residential Weatherization Department of Energy	104,825	Other Funds	2.0	1.80

(2) Residential Weatherization Financing

Purpose: The State-subsidized weatherization loan program established by the 1977 Legislature has been near-dormant since interest rates went above 12 percent. This Budget Package would reactivate that program.

How Accomplished: The success of this program depends on the voluntary participation of private commercial lenders. By allowing lenders to claim administrative costs and claim a refundable corporate excise tax credit, this program will again attract more participation by lenders.

Staffing Impact: Staffing for this package is included in the budget recommendations for "Strengthened Residential Weatherization" (See Page 33).

Revenue Source: General Fund. Proposed corporate excise tax credit revisions would reduce 1981-83 General Fund revenues by an estimated \$410,000.

Budget Summary:

Residential Weatherization  
Financing

None -- General Fund revenue reduction

(3) Low-Income Weatherization

Purpose: Many low-income Oregonians, particularly the fixed-income elderly, live in unweatherized homes. This package provides State weatherization financing to complement Federal financing programs for those householders .

How Accomplished: Federal funds are available for low-income weatherization. In 1981-83, \$7 million in Federal funds is anticipated for Oregon. However, Federal restrictions on the use of these funds often have hampered local programs. A \$1 million General Fund appropriation to the Department of Human Resources' Community Services Program will leverage Federal funds. State funds would provide the necessary flexibility for local programs for an effective weatherization program.

Staffing Impact: One new position in the State Community Services Program, Department of Human Resources.

Revenue Source: The weatherization grants and staffing would be financed by a General Fund appropriation of \$1,059,071.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Low Income Weatherization				
Department of Human				
Resources	1,059,071	General Fund	1.0	.90

Section D: Commercial/Industrial Conservation and Renewable Resource Financing

(1) Revision to Industrial Development Revenue Bonds (AEDC Recommendation 24)

Purpose: Oregon Industrial Development Revenue Bonds (IDRBs) are a potential source of financing for large (\$500,000 or more) energy conservation and renewable resource projects. IDRBs were authorized by the Oregon Legislature to promote economic development. The bonds, which are sold by the State, could help new and existing businesses to finance acquisition of property, construction/reconstruction, and improvement or extension of facilities.

How Accomplished: This Budget Package amends IDRB legislation to make conservation and renewable resource actions eligible.

Staffing Impact: One staff position to accommodate increased workload in the Department of Economic Development.

Revenue Source: Fees charged applicants for IDRBs will finance the increased staff. Revenue bonds will finance the loans.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Commercial/Industrial Department of Economic Development				
-Administration	31,583	Other Funds	1.0	.45
-Loans (non-limited)	(15,000,000)	Other Funds	.0	.00

(2) Amendments to Business and Industry Tax Credit (AEDC Recommendation 25)

Purpose: Encourage conservation and recycling in Oregon's business and industrial sector.

How Accomplished: The 1979 Oregon Legislature approved a 35 percent tax credit for installing equipment using renewable energy resources or waste heat. The credit is taken in increments of 10-10-5-5-5 percent, over a five-year period. The aggregate total cost of facilities for which tax credits can be approved is now limited to \$30 million in any given year. This program is to sunset on December 31, 1983.

This package adds conservation and recycling equipment as eligible tax credit measures, extends the program through 1987 and increases the investment limit to \$50 million in any given year.

Staffing Impact: None

Revenue Source: The credit would reduce General Fund revenues, but impact will be nominal during 1981-83 because of the delay between the time a credit is earned and when the tax return is filed.

Budget Summary:

Amendments to Business and  
Industry Tax Credit

None -- General Fund revenue reduction



Section E: Maximum Lighting Standards for Existing Commercial Buildings (AEDC Recommendation 30)

Purpose: Lighting consumes about 20 percent of all of the electricity used in the United States. Substantial savings of electricity are possible from a mandatory lighting standard for existing commercial buildings.

How Accomplished: Since 1978, Oregon has had a voluntary lighting standard for commercial buildings built before July 1, 1978. However, this voluntary program has not been effective, although many commercial buildings are overlighted and could reduce the lighting energy used cost-effectively without expensive retrofits.

The Department of Commerce (DOC) will develop maximum lighting power standards for existing commercial buildings. The standards are to govern all commercial buildings of more than 5,000 square feet built before July 1, 1978, when the lighting standards for new public buildings became effective.

Owners of all effected buildings would be notified by mail of the new standards and required compliance. Workshops and seminars would be conducted around the state to help building owners and managers comply with the standards. The standards would be written to avoid costly lighting system retrofits.

Standards would be adopted by April 1982 to take effect in July 1983. No enforcement would occur in the 1981-83 biennium. Building owners and managers would self-certify and post a certificate of compliance in their buildings.

An evaluation and report would be made by DOC to the Governor by January 1984, including a recommendation on whether enforcement of the standards should be undertaken. If enforcement becomes necessary to achieve compliance, a budget request would be prepared for the 1985 Legislature.

Staffing Impact: Two new positions will be established in the Energy Codes Section, Department of Commerce.

Revenue Source: Other Funds/Energy Supplier Assesments

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Maximum Lighting Standards Department of Commerce	160,111	Other Funds	2.0	1.80

Section F: Local Government Technical Assistance in Land Use and Energy Management (The elements of this program address AEDC Recommendations 32, 35 and 61.)

Purpose: To provide for efficient future use of energy through land use planning and to establish and improve energy conservation and renewable resource management programs at the local government level.

How Accomplished:

Land Use: Proper land use decisions can reduce future energy costs. Oregon's comprehensive land use planning process includes Goal 13 (Energy Conservation) which requires that "Land and uses on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles." However, adequate technical assistance in meeting Goal 13 has not been available to local planners and decision-makers. This package provides that assistance.

(1) Energy and Land Use Planning (AEDC Recommendations 35 and 61.)

The field of energy and land use is an evolving specialty and new techniques and methodologies are emerging at a rapid pace. Keeping abreast of new planning strategies has been difficult for local planners and local government decision-makers. This Budget Package provides a strong technical assistance capability to ODOE to ensure that the latest and best methodologies are available to those who make energy decisions at the local level. ODOE's efforts to encourage the development of model ordinances, including workshops and handbooks, would be continued and expanded. This package combines those efforts with a grant program of \$250,000 through the Department of Land Conservation and Development (DLCDC) to help local governments finance energy-related land use planning.

Emphasis will be on resource inventories for wind, solar, small-scale hydro and other renewable resources. Without the capability to adequately inventory local energy resources, the limited number of good sites for wind farms, for example, might be foreclosed by non-compatible development.

A second emphasis will be on assuring access to solar and wind resources. SB 299 (1979) allows local government to provide for solar access. However, a strong effort should be made now to ensure that local governments do not forfeit the potential in solar and wind resources for lack of technical assistance and expertise.

(2) Local Government Energy Management (AEDC Recommendation 32)

ODOE would also provide technical assistance to local governments which implement energy management programs. Through workshops, site

visits and arranging for expert consultants, ODOE will help transfer the experience gained by the State and the private sector to local governments.

A fund of \$1 million would be created to provide 50 percent matching grants for energy conservation measures in local governments and public care institutions. The Federal Institutional Buildings Grant Program ("Schools and Hospitals Program"), provides 50 percent Federal matching funds for energy audits, technical assistance studies and installation of energy conservation measures for public and non-profit schools and hospitals. However, local government buildings and non-profit public care institutions are eligible only for audit and technical assistance Federal aid and must pay all retrofit costs. Schools and hospitals have participated actively in the program but local governments and public care institutions have not. A fund to provide State aid to local governments and public care institutions to match Federal funds will stimulate energy conservation activity well beyond that which the \$2 million State and local expenditure will buy.

Staffing Impact: Two and one-half new positions would be established in ODOE. One position will work directly on land use; one will provide technical assistance for energy management and one-half position will handle increased workload in the Schools and Hospitals program resulting from the Local Government Building Conservation Fund.

Revenue Source: Staff costs and \$250,000 in grants for local governments would be financed through an assessment on energy suppliers. The \$1 million fund for local governments and non-profit public care institutions will be provided from General Funds. Since the energy operating expenses for local government buildings are supported by local property taxes, the funding available to local governments is a form of local property tax relief.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Local Government Technical Assistance				
Department of Energy	1,000,000	General Fund	.0	.00
	148,556	Other Funds	2.5	2.50
Department of Land Conservation and Development	250,000	Other Funds	.0	.00
Total	<u>1,398,556</u>		<u>2.5</u>	<u>2.50</u>

Section G: Energy Information and Outreach (The elements in this program address AEDC Recommendations 13, 27 and 60.)

Purpose: Strengthen and effectively coordinate all State-sponsored, energy-related public information in Oregon.

How Accomplished:

(1) Strengthen and Coordinate Energy Information Efforts

The 1977 Legislature agreed that energy suppliers, rather than government, should be the primary source of information on weatherization and energy conservation for their consumers. The Federal Residential Conservation Service (RCS) has established a similar program nationwide. RCS has also expanded the role of utilities to include providing information on certain renewable resource measures. Since 1977, there have been many new efforts -- both private and public -- to provide energy information, creating a potential for duplication and overlap. To help ensure that the appropriate organizations effectively are delivering energy information services, ODOE needs to strengthen its capability to coordinate all energy information efforts in the state. Strengthening of ODOE's central information coordination function was one of the Alternate Energy Development Commission's highest priorities. Establishment of one management level position in ODOE would consolidate responsibility for information programs and recognize the substantial current and proposed workload.

(2) Energy Extension Service (AEDC Recommendation 13)

The Energy Extension Service (EES), is a major new Federal program established in 1979 and implemented in Oregon by the Oregon State University Extension Service under contract with ODOE. Federal regulations require that EES avoid duplication of services offered by other organizations. In Oregon, EES provides programs for small businesses and the construction industry as well as the general public. However, because of limited Federal funds, only six Oregon counties are directly served by EES. Public demand upon the agents' time has been overwhelming. This package expands EES to provide at least nine agents statewide. Three more agents would be added if Federal funds are available.

(3) Energy Conservation Clearinghouse for Commerce and Industry (AEDC Recommendation 27)

As part of the Governor's 1979 Energy Package, the Energy Conservation Clearinghouse for Commerce and Industry was established to promote the cooperative exchange of energy information in Oregon's business sector and between business and government. The program

provides information, regional energy workshops and demonstration projects to increase energy efficiency in the commercial/industrial sectors.

Most of these efforts address the technical or operational needs of business and are directed specifically to equipment and facility managers who have direct responsibility for improving energy efficiency. Technical information programs, however, are limited. Of particular importance is up-to-date, factual, easy-to-understand information on financial incentives for conservation. Many Oregon businesses are not familiar with available energy incentives. For example, at the Governor's 1980 Workshop on Cogeneration, many participants were surprised to learn that several State and Federal incentives could, in combination, help finance expensive cogeneration equipment.

Effectively combining State and Federal energy incentives, however, is a complex process and in many instances, one set of regulations may void an applicant's eligibility for other incentives. Specific and complex Federal and State rules are in themselves a barrier to business use of energy conservation incentives. This information barrier, unless removed, will continue to inhibit accelerated energy efficiency efforts in Oregon's commercial and industrial sectors. The AEDC has recommended that ODOE expand its current Clearinghouse program to provide up-to-date information on State and Federal financing mechanisms, tax advantages of energy conservation investments, and the general economic advantages of energy conservation investments to Oregon firms.

(4) Citizen Volunteer Groups (AEDC Recommendation 60)

During the past three years, local community solar and energy information groups have emerged to provide information about solar energy and energy conservation to the general public through workshops, energy fairs, public meetings and demonstration projects. For the most part, these groups are staffed by talented volunteers who donate many hours of work because of a personal commitment to solar energy or energy conservation. The work generated by nominal funding for these groups far exceeds what might reasonably be expected. It is a good investment for the State to help these groups maintain a high level of effective volunteer service.

Staffing Impact: One management level position would be required to consolidate responsibility for information programs. One position would be added to ODOE's Clearinghouse to provide financial expertise. Six additional agents, a full-time extension specialist and 3 1/2 secretarial support personnel would be added to the EES program. These are academic positions within the Department of Higher Education.

Revenue Source: Other Funds/Energy Supplier Assessments for the two ODOE positions and 50 percent of the EES expansion. Federal funds will be used to support citizen volunteer groups and 50 percent of EES expansion.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Energy Information and Outreach				
Department of Energy	79,823	Other Funds	1.0	.90
-Information Coordination	25,000	Federal Funds	.0	.00
Subtotal	<u>104,823</u>		<u>1.0</u>	<u>.90</u>
-Industrial and Commercial Clearinghouse	63,426	Other Funds	1.0	.90
-Citizen Volunteer Groups	150,000	Federal Funds	.0	.00
Energy Total	<u>318,249</u>		<u>2.0</u>	<u>1.80</u>
Energy Extension Service	293,431	Other Funds	.0	.00
	293,431	Federal Funds	.0	.00
Energy Extension Total	<u>586,862</u>		<u>.0</u>	<u>.00</u>
GRAND TOTAL	905,111		2.0	1.80

Section H: State Energy Management Program (The program addresses AEDC Recommendation 32)

Purpose: To establish and improve State government energy management programs and to provide leadership in energy conservation.

How Accomplished:

The State of Oregon has reduced energy use in buildings by about 12 percent since 1976. For the most part, this has been done through improved operation and maintenance procedures at little or no cost. In the private sector, however, savings of 20 percent or more have been achieved in corporate situations in which authority for energy management is the responsibility of a top-level executive. ODOE coordinates an energy management program for State buildings, but responsibility for building operations is dispersed. For example, the Department of Human Resources (DHR) manages leased space and institutional buildings separately. This package provides technical engineering positions to DHR and the General Services Department (GSD) to assume responsibility for energy use in all buildings within those agencies. ODOE's capability to coordinate the State's energy management program would also be strengthened. This package also includes \$1 million to replenish the State Building Retrofit Fund established by the 1979 Legislature.

Staffing Impact: One new engineer position (energy manager) would be added in DHR and in GSD. One-half position would be added to ODOE to strengthen coordination of the State's energy management program and provide technical assistance to other State agencies. This .5 FTE would be consolidated with the .5 FTE in the Local Government Assistance Program Budget Package (See Page 39).

Revenue Source: The position in GSD will be financed by fees from other State agencies (Other Funds). The positions in DHR and ODOE will be financed with assessments on energy suppliers.

The \$1 million for State buildings will be financed with General Funds.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
State Energy Management				
Department of Energy				
-Grants	1,000,000	General Fund	.0	.00
-Technical Assistance	34,257	Other Funds	.5	.50
Energy subtotal	<u>1,034,257</u>		<u>.5</u>	<u>.90</u>
General Services	69,027	Other Funds	1.0	.90
Department of Human Resources	69,027	Other Funds	1.0	.90
Total	<u>1,172,311</u>		<u>2.5</u>	<u>2.30</u>



Section I: Energy Code Improvements Program (The elements of this program address AEDC Recommendations 17, 19, and 20.)

Purpose: This package strengthens Oregon's code adoption and implementation processes so that greater energy savings will be achieved.

How Accomplished:

(1) Energy Codes Section (AEDC Recommendation 17)

Since 1973, the Building Code has become an important means to achieve increased energy efficiency in new construction.

However, the Department of Commerce Building Codes Division (BCD) lacks adequate technical staff and expertise in energy conservation and renewable resources. In adopting and modifying codes, the Director is at a serious disadvantage without technical energy staff. Objective, adequate research is essential. The Division and the Director should not be obliged to rely only on the volunteered expertise of citizen advisory groups.

Energy concerns often cut across several sections of the codes. For example, solar systems could be covered by the structural, mechanical, plumbing and electrical codes. A comprehensive Energy Codes Section is needed to infuse energy considerations throughout the codes.

New and emerging energy technologies often require some initial nurturing until their value can be demonstrated or repudiated. The Energy Codes Section would be responsible for seeing that innovation is not needlessly stifled or that a specialty code board does not summarily dismiss innovative techniques.

(2) Improved Code Enforcement (AEDC Recommendation 19)

While Oregon's code is "on paper" one of the best in the country, enforcement has not been as effective. Additional responsibilities to enforce energy requirements have been imposed on building officials without commensurate additional resources.

Energy conservation often suffers because newer code requirements -- not energy waste -- are perceived by some as "the problem". And, building officials are primarily concerned with fire and life safety enforcement. While it is difficult to estimate how much more energy could be saved by better enforcement, there is evidence that energy requirements do not receive adequate attention in many cases. For example, enforcement of the commercial energy code relies primarily on self-certification by architects and engineers. The Lighting Efficiency Standard for new commercial buildings is not enforced at all.

Providing additional code inspection staff to DOC specifically for enforcement of energy requirements would signal that the State intends to enforce the code to achieve maximum code-related conservation.

(3) Local Energy Code Monitoring (AEDC Recommendation 20)

DOC needs resources to monitor local energy code enforcement and to assist building officials to improve code enforcement. Coupled with permit fee increases to support local energy code enforcement, the monitoring function will increase code-related conservation.

Code monitoring would include continuous survey and analysis of enforcement issues and problems. The function would also include recommendations to local inspection departments for improved procedures and to DOC for relevant training and necessary code changes.

Staffing Impact: Five new positions in the Energy Codes Section. The Energy Codes staff would also be responsible for monitoring code enforcement, planning, education, and other corrective actions, and for developing and implementing lighting standards for existing commercial buildings. Two additional positions in the Energy Codes Section are contained in the Mandatory Lighting Standards Budget Package (See Page 38). Three additional code enforcement positions, two construction inspectors and one plumbing inspector, would be added to strengthen structural and mechanical inspections so that energy requirements adequately can be covered.

Revenue Source: Building permit fee increases would finance the proposed budget.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Energy Code Improvements				
Department of Commerce				
-Energy Codes Section				
Including Local				
Energy Codes Monitoring	323,676	Other Funds	5.0	4.60
-Improved Energy Code				
Enforcement	<u>206,342</u>	Other Funds	3.0	2.75
Commerce Total	<u>530,092</u>		8.0	7.35

Section J: Resource Development Program (The elements in this program address AEDC Recommendations 47, 49, 50, 62, and 63.)

Purpose: This Budget Package enables ODOE to encourage development of specific energy projects.

How Accomplished: This Budget Package assures the availability of objective, statewide information on renewable resource options and financing incentives. It would provide potential developers with information necessary for a successful project, bring together energy suppliers and fuel sources, provide technical assistance and financing resources, and staff to work with other agencies to help projects through permit processes.

This package meets these goals by providing adequate support to ODOE to focus programs on each renewable resource area, improve State planning for each technology, assist other agencies in removing institutional barriers, and develop reliable information on State and Federal grant opportunities.

The increasing use of wood for residential heating is a substantial contributor to air quality problems. This package also includes one Environmental Engineer at the Department of Environmental Quality (DEQ) to monitor the air quality impact of residential wood heating and to develop information upon which to base remedial actions.

Staffing Impact: Three new positions in ODOE: one hydro specialist, one Program Coordinator to provide consistent direction, interagency coordination, and development of financial assistance, and one secretary. One new position, an Environmental Engineer for air quality review, is recommended for DEQ.

Revenue Source: Other Funds/Energy Supplier Assessments. This decision package also includes \$205,000 in Federal Funds to support a cogeneration handbook, an aggressive public information effort on proper woodstove installation and use, and support of feasibility studies for new projects.

(1) Alcohol Fuels Office (AEDC Recommendation 81)

Purpose: To increase the responsiveness of the State's alcohol fuels information program to Oregon's agricultural community and to foster State participation in new Federal incentive programs.

How Accomplished: This package establishes an Office of Alcohol Fuels in the Oregon Department of Agriculture.

Staffing Impact: One-half FTE in the Department of Agriculture to coordinate alcohol information and funding sources.

Funding Source: Other Funds/Energy Supplier Assessments.

(2) Geothermal Development Fund (AEDC Recommendation 74)

Purpose: To help Oregon municipalities in good geothermal areas with initial costs of forming local heating districts.

How Accomplished: This package would provide some State financial support for local geothermal development.

Staffing Impact: Staff proposed in the Recommended Agency Budget and the Resource Development Program Budget Package (See Page 47).

Revenue Source: \$250,000 Other Funds/Energy Supplier Assessment.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Geothermal Development Fund Department of Energy	250,000	Other Funds	.0	.00

(2) Improved Fish and Wildlife Reviews (AEDC Recommendation 47)

Purpose: To provide clearly formulated rules and responsive regulatory action for new hydro, wind, and geothermal facilities.

How Accomplished: This Budget Package speeds development of standards so developers will be aware of State requirements. The package assures timely project review by providing one new position in the Department of Fish and Wildlife.

Staffing Impact: One Fish and Wildlife Biologist to develop standards, coordinate the agency's role in accelerated energy development and to assist in the agency's review of specific project proposals.

Revenue Source: Other Funds/Energy Supply Assessments

(3) Increased Hydro Licensing Workload (AEDC Recommendations 47 and 50.)

Purpose: To provide timely State response to proposed hydro projects.

How Accomplished: Additional staffing for the Department of Water Resources (DWR) to expedite processing applications for hydroelectric projects.

Staffing Impact: One Hydroelectric licensing engineer in DWR.

Revenue Source: Other Funds/Energy Supplier Assessments.

(4) Resource Recovery and Recycling (AEDC Recommendation 63)

Purpose: This package encourages communities to investigate resource recovery and recycling as preferred ways to solve solid waste disposal problems.

How Accomplished: One staff position is proposed for DEQ to:

1. Prepare model collection and disposal ordinances for local communities.
2. Review activities in other states for promising resource recovery and recycling projects which could be used in Oregon.
3. Help communities plan and develop recycling and resource recovery projects.

Staffing Impact: One Senior Environmental Engineer in DEQ.

Revenue Source: Other Funds/Energy Supplier Assessment.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Resource Development				
Department of Energy	185,340	Other Funds	3.0	2.70
Energy Total	<u>205,000</u>	Federal Funds	<u>.0</u>	<u>.00</u>
	390,340		3.0	2.70
Department of Environmental Quality				
-Air Quality	71,106	Other Funds	1.0	.90
-Recycling	<u>71,106</u>	Other Funds	<u>1.0</u>	<u>.90</u>
Environmental Quality Total	142,212		2.0	1.80
Department of Agriculture	34,827	Other Funds	.5	.50
Department of Fish & Wildlife	66,063	Other Funds	1.0	.90
Department of Water Resources	<u>65,848</u>	Other Funds	<u>1.0</u>	<u>.90</u>
Total	<u>699,290</u>		<u>7.5</u>	<u>6.80</u>

Section K: Consumer Protection (This program addresses AEDC Recommendation 76.)

Alternate Energy Device Review

Purpose: This package improves information services to purchasers of energy equipment and strengthens consumer protection.

How Accomplished: Most renewable energy systems installed in Oregon are registered with ODOE for tax credit certification. Administering the tax credit program keeps ODOE informed about new sales campaigns and products.

ODOE will review installed equipment to check dealer claims and to identify installation, equipment or performance problems. ODOE will also monitor equipment tests performed in other states. These two sources of information will help develop improved training for dealers and installers, consumer guidance publications and administration of the tax credit program. No additional ODOE staff beyond that requested in the Governor's Recommended Agency Budget and the Resource Development Budget Package is required. However, a new position is recommended for the Department of Justice to strengthen consumer protection services.

Staffing: One new position is recommended for the Department of Justice. Existing technical staff at ODOE supported by staff recommended in the Recommended Agency Budget and the Resource Development Budget Package, will review the performance of installed systems in Oregon and testing performed elsewhere to provide accurate consumer guidance.

Revenue Source: A General Fund appropriation for the position at the Department of Justice.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Consumer Protection				
Department of Justice	48,802	General Fund	1.0	.90

Section L: Geothermal Resource Administration (This program addresses AEDC Recommendation 43.)

Purpose: This package enables the Department of Water Resources (DWR) to develop a comprehensive management program for low-temperature geothermal energy resources. The goal of the program is to expedite the development of low-temperature geothermal fluids, and to insure the availability of the resource for future users.

How Accomplished: DWR would implement a management program based on limited available information about low-temperature geothermal resources in Oregon. DWR would collect data to further refine and improve that program. DWR also will:

- Supervise the low-temperature geothermal management program, including statutory responsibilities for well permits and fluid disposal.
- Coordinate the low-temperature State geothermal program to insure adherence to the groundwater management policies.
- Help local geothermal heating districts establish a local reservoir management plan to facilitate district heating services and protect all ground water users in the area.
- Provide public information about low-temperature geothermal use.
- Design a program with the Department of Geology and Mineral Industries (DOGAMI) to collect data from exploratory drilling projects and eliminate interference between low and high-temperature resources, and
- Design a program with ODOE to encourage and manage the development of ground water heat pumps in Oregon.

Staffing Impact: One supervisor (Geologist 4) and one Geologist 3 at DWR.

Revenue Source: Other Funds/Energy Supplier Assessment

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Geothermal Resource Administration	\$ 146,159	Other Funds	2.0	1.80



Section M: Resource Centers Program (This program addresses AEDC Recommendation 58.)

Purpose: This package provides technical information and training to Oregonians interested in renewable energy development.

How Accomplished: This package establishes centers to provide training and accurate technical information on solar, wind, hydro, biomass, alcohol fuels, and geothermal. Funding would maintain a solar center at the University of Oregon, provide additional support to the Energy Extension Service (Oregon State University) to offer information on water, wind and biomass, and for continuing an alcohol fuels clearinghouse at Eastern Oregon State College.

This package provides a minimum funding base to ensure an ongoing program. This would be accomplished by providing State support for one technical person and one clerical position for each institution. Any additional funding would be from private, State and Federal contract and grant funds.

Staffing Impact: Support towards one professional and one clerical position at the University of Oregon Solar Center, Eastern Oregon State College's Alcohol Fuels Clearinghouse, and Oregon State University's Energy Extension Service.

Revenue Source: Other Funds/Energy Use Assessment.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Resource Centers				
Department of Energy	250,000	Other Funds	.0	.00

Section N: Research and Demonstration (The elements in this program address AEDC Recommendations 55, 64, and 79.)

Purpose: This package provides demonstration projects to build public confidence in the availability and reliability of renewable energy devices, systems and technologies. Examples of projects which have been recommended include a geothermal wellhead electrical generator, wind generators on State lands, clean-burning woodstoves, and residential-size photovoltaic systems.

This package provides support for research on State-specific technologies and applications. Examples include geothermal environmental baseline studies in areas of geothermal interest in Oregon, a wind resource market study, and research into fermentation technologies and alcohol yields applied specifically to Oregon crops.

How Accomplished: Both research and demonstration projects would compete for the same funds. ODOE would select and fund projects which provide the most benefit.

Staffing Impact: ODOE staff in the Recommended Agency Budget and in the Resource Development Budget Package would carry out this work.

Revenue Source: \$200,000 - Energy Supplier Assessment and \$200,000 Federal.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Research and Demonstration				
Department of Energy	200,000	Other Funds	.0	.00
	200,000	Federal Funds	.0	.00
	<u>400,000</u>		<u>.0</u>	<u>.00</u>

Section 0: Renewable Resource Financing (The elements in this program address AEDC Recommendations 65, 66, 67, 68, 74 and 86.)

(1) Low-Interest Commercial Loans for Renewable Resources (AEDC Recommendation 65)

Purpose: This package helps homeowners pay the high initial costs associated with many renewable resource options.

How Accomplished: Provide State-subsidized low-interest loans to homeowners from commercial lending institutions, provide tax credits to lenders, and remove the interest ceiling on such loans.

Staffing Impact: None.

Revenue Source: The estimated 1981-83 revenue impact would be \$1,700,000 decrease to the General Fund.

Budget Summary:

Low-Interest Commercial Loans      None -- General Fund revenue reduction

(2) Revisions to the Residential Renewable Resources Tax Credit Program  
(AEDC Recommendation 67)

Purpose: To provide an incentive for cost-effective actions to meet residential energy requirements.

How Accomplished: Changes are proposed in the residential tax credit legislation to extend the sunset to 1987; to modify the agency rules regarding the program to include groundwater heat pumps as a geothermal device; to allow for improved processing of tax credit applications, and to make the credit refundable.

Staffing Impacts: None.

Revenue Impact: The addition of the groundwater heat pumps to the residential alternative energy device tax credit program will reduce 1981-83 General Fund revenues by an estimated \$150,000.

Budget Summary:

Revisions to Residential  
Renewable Resources Tax  
Credit -- Groundwater Heat  
Pumps

None -- General Fund revenue reduction

(3) Tax Credit for Wind Measuring Equipment (AEDC Recommendation 66)

Purpose: This package develops increased knowledge about wind resources at residential and commercial sites throughout Oregon and helps persons interested in wind generation pay for site-specific wind energy measurements.

How Accomplished: Tax credits to help offset the cost of wind measuring equipment purchased by homeowners and businesses. The tax credit could be claimed only after submission of wind resource data to ODOE.

Staffing Impact: None.

Revenue Source: This program will have a nominal General Fund revenue impact during 1981-83.

Budget Summary:

Wind Measurement Tax Credit

None -- General Fund revenue reduction

(4) Delay in Property Tax Assessment for Renewable Resource Projects  
(AEDC Recommendation 86)

Purpose: This package encourages utilities to develop energy projects.

How Accomplished: Delay the assessment of ad valorem property taxes on utility energy projects until the projects begin to produce power. Property taxes on conventional facilities would be delayed for up to five years during construction.

Staffing Impact: None.

Revenue Source: There would be a revenue loss to counties, but not to the State General Fund.

Budget Summary:

Delay in Property Tax

None -- General Fund revenue reduction

(5) VA Loans for Hydro Development (AEDC Recommendation 68)

Purpose: This package provides a source of low-cost, initial financing for small-scale residential hydro projects.

How Accomplished: Financing would be through the Department of Veterans Affairs (DVA) home loan program. Oregon veterans can add up to \$3,000 on DVA loans to help finance solar, wind and geothermal devices. Small-scale residential hydro equipment is not eligible. Proposed legislation would extend eligibility to small hydro facilities.

Staffing Impact: None.

Revenue Source: \$30,000 of DVA bond authority would be needed to support this program.

Budget Summary:

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
DVA Loans for Hydro Development Department of Veteran's Affairs (non-limited)	(30,000)	Bonding Revenues	.0	.00

Section P: Ridesharing Program (Oregon Department of Transportation)

Purpose: To develop and operate a state-wide ridesharing program. There are now ridesharing programs in Oregon's three major urban areas. No organized ridesharing programs are available elsewhere in the State.

How Accomplished: This program would allow the Oregon Department of Transportation (ODOT) to provide ridesharing technical and marketing assistance throughout the State. The program would involve large employers with good potential for program support. Advertising would be purchased to achieve the marketing and public information functions. Workshops would provide information to large numbers of employers. Coordination with other ridesharing agencies in the State would be accomplished. Technical assistance to employers in developing car pool or van pool programs, marketing programs, and other rideshare-related activities would be provided.

Staffing: No additional staff will be required. Three ODOT staff positions would be transferred from other Department programs.

Revenue: Other Funds from assessments against Divisions within the Department would be used to finance this program. Federal funds would be used, if available.

Budget Summary: (This Budget Package is in the Recommended Agency Budget for the Department of Transportation.)

	<u>Amount</u>	<u>Source</u>	<u>Positions</u>	<u>FTE</u>
Ridesharing Program	\$288,509	Other Funds	.0	.00



Section Q: ODOE Pass-Through Funding

Purpose: This package provides funds to certain State agencies for the activities described in the Budget Packages.

How Accomplished: Energy financing received by ODOE will be allocated to specific agencies.

<u>Agency</u>	<u>Other</u>	<u>Federal</u>	<u>Total</u>
Dept. of Land Conservation and Development	\$ 250,000		\$ 250,000
Dept. of Commerce	160,111		160,111
Dept. of Agriculture	34,827		34,827
Dept. of Environmental Quality	142,212		142,212
Dept. of Fish & Wildlife	66,063		66,063
Dept. of Higher Education	543,431	\$293,431	836,862
Dept. of Human Resources	69,027		69,027
Dept. of Geology & Mineral Industry	1,400,602		1,400,602
Dept. of Water Resources	<u>348,679</u>	<u>          </u>	<u>348,679</u>
TOTALS:	\$3,014,952	\$293,431	\$ 3,308,383

Staffing Impact: None.

Revenue Source: Other Funds/Energy Supplier Assessments and Federal Funds.

Part V. Recommendations of the Governor's Transportation Energy Conservation Task Force

A. Introduction

Governor Atiyeh's "New Energy Directions for Oregon", a comprehensive legislative energy package approved by the 1979 Oregon Legislature, included the formation of a Special Task Force on Transportation Energy Conservation. The Governor charged the Task Force with developing recommendations for policies and programs to reduce Oregon's demand for transportation energy. The Task Force developed ten recommendations to address three basic issues: reducing transportation energy waste, improving energy efficiency in transportation and developing alternate fuels.

The Task Force recommendations are listed below. Following each recommendation is a summary of action taken or proposed.

B. Task Force Recommendations

1. Reduce projected 1985 energy demand by 10 percent.

The Governor supports the Task Force goal. Actions already underway or recommended in the Governor's 1981-83 Budget represent substantial progress toward the 1985 goal.

2. Promote conservation through employers.

Ken Self, retired chairman of the Freightliner Corporation of Portland, is spearheading a government/private sector effort to work with and encourage Oregon employers to develop effective conservation programs in company vehicle fleets as well as for commuting employees. The Oregon Department of Transportation (ODOT) has added a Public Information Representative to develop a media campaign and conservation education programs for schools.

3. Promote ridesharing.

Loaned executives from the Tektronix Corporation and the Hyster Corporation are assisting ODOT in the promotion of a statewide ridesharing effort. The Oregon Department of Energy (ODOE) has made a \$15,000 grant to ODOT which was matched by ODOT with one full-time employe assigned to ridesharing programs. The Governor's 1981-83 Recommended Agency Budget for ODOT includes \$288,509 to continue ridesharing efforts outside Oregon's three major urban areas.

4. Remove institutional barriers to ridesharing.

The Governor will support legislation to:

- a. Remove ridesharing from Motor Carrier regulation,
- b. Remove injuries received in a voluntary ridesharing arrangement from worker's compensation,
- c. Forbid local jurisdictions from imposing licenses, permits or taxes solely on the basis of participation in a ridesharing arrangement,
- d. Clarify liability issues dealing with ridesharing programs using State and local government vehicles, and
- e. Provide for personal injury protection for participants involved in ridesharing programs using State and local government vehicles.

5. Encourage use of variable workshifts.

ODOT encourages the variable workshift concept among the state's employers. Recommended 1981-83 funding for the ridesharing program will, in part, support publications which explain and promote benefits to employers and employees who participate in ridesharing programs.

6. Encourage trip planning.

Actions underway and proposed in ODOT's Public Information and Ridesharing programs, coupled with a budgeted marketing effort, will promote energy conservation through effective trip planning.

7. Increase State operating assistance for public transit.

The Governor's 1981-83 Recommended Budget includes approximately \$7 million for payment of in-lieu payroll taxes on the earnings of the State government employees who work in local transit districts. This amount includes a \$3 million General Fund appropriation, \$3 million in Other Funds and \$1 million Federal Funds.

8. Establish a State-funded transit equipment pool.

The Governor will recommend continued funding to assist both urban and small rural transit districts. His Recommended Agency Budget for ODOT includes \$2.5 million in General Funds of which \$1.9 million is to help urban transit districts purchase rolling stock and more than \$650,000 to help small community and rural districts with capital and operating costs.

9. Encourage energy efficiency improvements in freight transportation.

The Governor will offer legislation to allow regular and irregular route passenger carriers to run buses to special events and to sell tickets on an individual basis.

10. Develop and use alternate fuels.

ODOT has worked closely with ODOE and the Alternate Energy Development Commission's Alcohol Fuels Task Force in developing strategies and incentives to promote the manufacture and use of alternate fuels.)

## Part VI. 1981 Special Energy Program Legislative Summaries

This section summarizes legislation the Governor will propose in conjunction with his 1981-83 Special Energy Program. Proposed legislation includes measures on conservation, renewable resources and transportation.

In cases in which proposed legislation addresses a recommendation by the Alternate Energy Development Commission, the recommendation number in the Commission's Final Report follows the summary.

### A. Conservation

#### 1. Amendments to Energy Supplier Weatherization Program

Legislation expands conservation services by energy suppliers and provides increased consumer protection authority to ODOE.

Customers of oil and small publicly-owned utilities may rely for financing on the 6½ percent loan program. Large electric utilities and gas companies will provide financing for their customers. Legislation will be supported to authorize utilities to make direct cash rebates to their space heat customers who weatherize. (AEDC #3 and 4)

#### 2. Commercial Building Energy Audits and Utility Conservation Financing

This bill requires all utilities to provide energy audits for commercial buildings. It also requires investor-owned and public power systems selling more than 750 million kWh of electricity per year to finance cost-effective conservation actions in commercial buildings. (AEDC #3, #4, and #26)

#### 3. Constitutional Amendment for Public Power System Conservation Financing

It is uncertain if public power systems have the Constitutional authority to loan money to their customers for weatherization activities. An Attorney General's opinion has been sought to clarify this issue. If needed, a Constitutional amendment would be offered to give public power systems explicit authority to finance conservation efforts. (AEDC #5)

#### 4. Building Codes

The building codes process would be restructured to provide effective implementation of energy conservation measures in new building construction as follows:

- a. Restructure each building code advisory board to include appropriate energy expertise, rather than continuing a separate energy advisory board. (AEDC #15)
- b. Revise the building permit fee schedule to reflect the costs created by energy conservation requirements, inspections and code enforcement. (AEDC #17, 18, 19, 20, 21 and 31)

5. Lighting Standards for Existing Commercial Buildings

Under this proposal the Department of Commerce would develop maximum lighting power standards in existing commercial buildings. The standards would govern all commercial buildings above a specified size built before July 1, 1978, when lighting standards for new buildings became effective. (AEDC #30)

6. Amendments to Existing Residential Energy Conservation Loan Program

This bill removes the interest ceiling on the 6½ percent weatherization loan program offered through commercial lending institutions so that the program will continue to function in the event of higher interest rates. The bill also provides a refundable tax credit to lenders. (AEDC #6)

7. Energy Conservation Standards for Existing Residences

ODOE would establish standards for weatherization retrofits for Department of Veterans' Affairs (DVA) financed homes and offer guidelines to other Oregon homeowners about cost-effective conservation measures, which might become mandatory if voluntary efforts are not achieving goals. (AEDC #14)

8. Amendments to Small Scale Energy Loan Program (SB 611--1979)

This bill is necessary before bonds can be sold. The amendment would allow the State to issue either bearer or registered bonds. (The Federal Windfall Profit Tax Act requires the issuance of registered bonds.)

The bill also includes housekeeping improvements to make the Small Scale Energy Loan Program function more effectively by (1) expediting Advisory Committee review of routine loan applications, and (2) permitting negotiated bond sales and other technical amendments.

## B. Renewable Resources

### 1. Revisions to Eligibility Standards for Industrial Development Revenue Bonds

This legislation would amend eligibility standards for Industrial Development Revenue Bonds to require, where reasonable, a review of energy efficiency standards and would extend eligibility to energy conservation and renewable resource projects. (AEDC #24)

### 2. Modify Existing Exemptions From Energy Facility Siting Council Site Certificate Requirements

This bill exempts geothermal pipelines of less than 16 inches in diameter and less than five miles long, or pipelines used to distribute heat in a geothermal heating district, from Siting Council jurisdiction. The bill also extends EFSC jurisdiction to liquid natural gas (LNG) and synthetic fuel facilities and remedies a statutory conflict regarding geothermal electric generating facilities. (AEDC #46)

### 3. Geothermal Resources Conservation Act

As with oil and natural gas, the rights to geothermal resources may be shared by a number of owners. Each owner may independently drill a well without coordinating production with other owners. To provide maximum benefit and yield from the resource, this bill would treat a geothermal reservoir as a whole and a unified management program would be established. Owners of the resource would be defined and would share benefits of the development although the wells recovering the resource may not be on their property. (AEDC #43)

### 4. Power Generation at Existing Dams

Adding generation capacity at existing dams generally causes minimal environmental impacts, particularly if the dam is equipped with a penstock or drain that can be used with generating equipment. This bill provides authority to the Department of Water Resources to ensure that all new dams more than 25 feet high, at which power production may be practical, be equipped with a penstock or drain. (AEDC #50)

### 5. Local Wind Access and Recording

This legislation would authorize consideration of wind access in land use planning by local jurisdictions, and authorize the recording of all leases, options and rentals of sites for wind and solar project developments with county recorders. (AEDC #54)

6. Wind Monitoring Tax Credit

A potential wind generator owner cannot determine cost effectiveness without site-specific wind resource measurements. To encourage wind data collection and wind utilization, this bill would provide a tax credit for wind measuring instrumentation and supporting structures. Persons who claim the tax credit would be required to submit wind resource data to ODOE. The proposed tax credit would be 50 percent of the first \$500 for individuals, and 25 percent of the first \$2,500 for businesses. (AEDC #56)

7. Residential Loan Program for Renewable Resources

This bill amends the 1979 6½ percent low-interest loan program for residential use of renewable resources by removing the interest ceiling and extending the period during which lenders can claim tax credits. As a result of the statutory interest ceiling of 12 percent and a drafting error which precludes credits on loans which extend past January 1985, only two loans have been made under this program. (AEDC #65).

8. Amendments to the Residential Renewable Resource Tax Credit Program

The legislation would authorize a rebate if tax liability is insufficient to claim the tax credit. It also improves the certification process by eliminating the preliminary certification requirement for dealers who have received prior review of equipment and installation procedures. The bill extends the program until 1988. (AEDC #66)

9. DVA Hydro Loan Amendment

Oregon veterans can add up to \$3,000 on DVA home loans to help finance solar, wind and geothermal devices. This amendment would include small-scale residential hydro systems in the DVA loan program. (AEDC #68)

10. Utility Incentives for Renewable Resource Development

- a. This bill provides financial incentives for electric utilities to invest in renewable resources by allowing the cost of construction for renewable resource projects to flow immediately into the utility rate base. (AEDC #85)
- b. A second bill would delay the assessment of ad valorem property taxes on utility renewable resource projects until energy from the project comes on line. It also provides a limited deferral of property taxes for conventional energy projects. (AEDC # 86)



11. Amendments for Business and Industry Tax Credits

Amendments are proposed to clarify eligibility of companies - other than utilities - which are primarily involved in the production of energy from renewable resources for sale to utilities. Examples will include wind farm companies or privately developed hydro sites. The amendments would also make conservation and recycling expenses eligible for the tax credit and increase the amount of investment eligible for the tax credit from \$30 million to \$50 million. (AEDC #25)

12. Alcohol Fuel Licensing Requirements

Legislation would establish OLCC procedures for licensing alcohol fuel producers. (AEDC #36)

C. Transportation

The following transportation energy conservation legislation is included or endorsed in the Governor's Special Energy Program.

1. Excludes from the computation of taxable gross income, sums collected by the taxpayer from passengers in a rideshare agreement, and ridesharing incentives offered to an employee by an employer.
2. Allows bus operators to operate non charter buses to special events.
3. Two bills originating in the Senate Energy Task Force would remove regulatory restrictions on carpooling relating to insurance coverage, and motor carrier regulation. One bill addresses the use of privately-owned vehicles and the other bill concerns use of State and local government vehicles.

PART VII

Appendices

Appendix I

Governor's Special Energy Program

<u>AEDC #</u>	<u>Description</u>	<u>Expenditure Summary</u>				<u>Position Summary</u>	
		<u>Gen.</u>	<u>Other</u>	<u>Federal</u>	<u>Total</u>	<u>Pos.</u>	<u>FTE</u>
2	Energy Supply Analysis: strengthens the Department's capability to develop comprehensive analyses of future energy demand and how that demand can be met. ODOE	--	965,091	--	965,091	14.0	12.88
55	Resource Assessment: enhance state government efforts to more accurately measure renewable energy resources through a resource assessment program. ODOE	--	1,600,000	--	1,600,000	4.0	3.68
55	Geothermal Site Assessment: funding for geothermal test drilling through DOGAMI	--	(1,400,602)	--	(1,400,602)	(2.0)	(1.84)
55	Hydro Site Assessment: hydro-electric site evaluations by DWR.	--	(136,672)	--	(136,672)	(2.0)	(1.84)

AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
6	Strengthen Residential Weatherization: develop weatherization standards and strengthen assistance to non-regulated energy suppliers to encourage improved residential weatherization services. ODOE	--	104,825	--	104,825	2.0	1.84
6	Residential Weatherization Financing: Low-interest residential weatherization loans through commercial lenders.	(-410,000)	--	--	(-410,000)	.0	.00
65	Low-interest Loans for Renewable Resources: low-interest alternative energy loans to homeowners through commercial lenders.	(-1,700,000)	--	--	(-1,700,000)	.0	.00
ODOE	Low Income Weatherization: help finance weatherization for low-income homeowners. DHR	1,059,037	--	--	1,059,037	1.0	.90
74	Geothermal Development Fund: financial assistance to local governments to develop geothermal heating district projects. ODOE	--	250,000	--	250,000	.0	.00

AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
24	Addition of Cons/RR to IDRBs: revises eligibility requirements for projects financed by Oregon Industrial Development Revenue Bonds to include conservation and renewable resource projects. DED	--	31,583 (15,000,000)	--	31,583 (15,000,000)	1.0	.46
68	Hydro Eligible under DVA: makes small-scale hydro projects eligible for alternative energy loans through DVA.	--	(30,000)	--	(30,000)	.0	.00
30	Maximum Lighting in Existing Buildings: develop maximum lighting power standards for existing commercial buildings and offer technical assistance needed to implement. DOC	--	160,111	--	160,111	2.0	1.84
51,33	Local Government Technical Assistance: technical assistance in land use and energy management to local governments for energy conservation and development of renewable resources. ODOE, DLCD	1,000,000 --	398,556 (250,000)	--	1,398,556	2.5	2.30

AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
57	Information and Outreach Coordination: increased technical assistance to strengthen state programs that provide public information and assistance on energy. ODOE	--	79,823	25,000	104,823	1.0	.90
13	Expanded EES: Extends the Energy Extension Service offered through Oregon State University to more areas of the state. Higher Ed.	--	293,431	293,431	586,862	.0	.00
27	Expand Industrial/Commercial Clearinghouse: expanded services through the Energy Conservation Clearinghouse for Commerce and Industry. ODOE	--	63,426	--	63,426	1.0	.90
60	Citizen Volunteer Groups: funding for local citizen volunteer groups offering local energy services. ODOE	--	--	150,000	150,000	.0	.00
32	State Energy Management Program: establish and improve state energy management programs in state-owned and operated buildings. ODOE	1,000,000	--	--	--	.0	.00
	General Services	--	103,284	--	103,284	.5	.50
	DHR	--	69,027	--	(69,027)	1.0	.90
		--	(69,027)	--	69,027	1.0	.90
	Total	1,000,000	172,311	--	1,172,311	2.5	2.30

AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
64	Research & Demonstration: finances renewable energy resource demonstration projects. ODOE	--	200,000	200,000	400,000	.0	.00
17	Energy Codes Section: strengthen Oregon's building code adoption and implementation processes. DOC	--	219,817	--	219,817	3.50	3.20
19	Improved Energy Code Enforcement: strengthen state enforcement of energy codes. DOC	--	206,342	--	206,342	3.0	2.75
18	Local Energy Codes Monitoring: provide assistance to local building officials in monitoring energy codes. DOC	--	103,859	--	103,859	1.5	1.40
59	Resource Development: promote the development of specific renewable energy resource projects. ODOE, DEQ	--	256,446	205,000	461,446	4.0	3.68
59	Alcohol Fuels Development: to establish an Alcohol Fuels Office. Dept of Ag	--	34,827	--	34,827	1.0	.50
47	Resource Development-F&W: develop standards and expedite agency review of hydroelectric impacts. Fish & Wildlife	--	66,063	--	66,063	1.0	.90

AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
47	Resource Development Licensing: expedite agency review of hydro- electric applications. DWR	--	65,848	--	65,848	1.0	.90
63	Resource Development Recycling: expand efforts in resource recovery and recycling. DEQ	--	71,106	--	71,106	1.0	.90
76	Consumer Protection: funds a position in the Attorney General's Office to provide consumer protection for renewable resource systems. Dept. of Justice	48,802	--	--	48,802	1.0	.90
67	Ground Water Heat Pump Tax Credit: include energy efficient ground- water heat pumps as renewable resource projects eligible for the homeowner's tax credit. DWR	(-150,000)	--	--	(-150,000)	.0	.00
44	Geothermal Resource Administration: establish a compre- hensive management program for low- temperature geothermal energy resources in DWR.	--	146,159	--	146,159	2.0	1.80



AEDC #	Description	Expenditure Summary				Position Summary	
		Gen.	Other	Federal	Total	Pos.	FTE
58	Resource Centers - ODOE financing for state institutions of higher education to offer technical assistance to solar, alcohol fuels, and other renewable resources. Higher Ed.	--	250,000	--	250,000	.0	.00
	TOTALS	3,107,839	5,739,624	873,431	9,720,894	46.00	41.44
	Non-Limited -- Loans		(15,000,000)		(15,000,000)		
	Tax Credit Loss of Revenue	<u>(2,260,000)</u>	_____	_____	<u>(2,260,000)</u>	_____	_____
	GRAND TOTAL	5,367,839	20,739,624	873,431	26,980,894	46.00	41.44

Appendix II  
 Governor's Special Energy Program  
 Agency Budget Summary

<u>Agency</u>	<u>General</u>	<u>Other</u>	<u>Federal</u>	<u>Total</u>
Dept. of Energy	\$2,000,000	2,094,044	\$580,000	4,674,044
Dept. of Land Conservation and Development		250,000*		250,000*
Dept. of Veteran's Affairs		(30,000)**		(30,000)**
Dept. of Commerce		530,018 160,111*		530,018 160,111*
Dept. of Agriculture		34,827*		34,827*
Dept. of Economic Dev.		31,583 (15,000,000)**		31,583 (15,000,000)**
Dept. of Environmental Quality		142,212*		142,212*
Dept. of Fish & Wildlife		66,063*		66,063*
Dept. of General Services		69,027		69,027
Dept. of Higher Education		543,431*	293,431*	836,862*
Dept. of Human Resources	1,059,037	69,027*		1,059,037 69,027*
Dept. of Geology & Mineral Industries		1,400,602*		1,400,602*
Dept. of Justice	48,802			48,802
Dept. of Water Resources		<u>348,679*</u>		<u>348,679*</u>
TOTALS:	\$3,107,839	\$ 5,739,624	\$873,431	\$ 9,720,894
Tax Credits:	<u>2,260,000***</u>			<u>2,260,000***</u>
GRAND TOTAL:	\$5,367,839	\$ 5,739,624	\$873,431	\$11,980,894

\* Passed through Oregon Department of Energy  
 \*\* Non-limited Other Funds Expenditures  
 \*\*\* Loss of General Fund Revenue

Appendix III

GOVERNOR'S SPECIAL ENERGY PROGRAM

<u>Energy Tax Credits</u>	<u>TAX CREDITS</u>		
	<u>Existing</u>	<u>New</u>	<u>Total</u>
Weatherization--Commercial Lenders Credit for 6 1/2% Interest Loans	\$ 100,000	\$ 410,000	\$ 510,000
Alternate Energy--Commercial Lenders Credit for 6 1/2% Interest Loans		1,700,000	1,700,000
Alternate Energy--Homeowners' Tax Credit--25% up to \$1,000	5,534,100	--	5,534,100
- Add Groundwater Heat Pumps		150,000	150,000
- Add Wind Measurement*	--	--	--
Commercial & Industrial Tax Credit for Alternate Energy	5,000,000	--	5,000,000
- Add Conservation Projects*	--	--	--
TOTAL	\$10,634,100	\$2,260,000	\$12,894,100

\* General Fund revenue reduction nominal during 1981-83 biennium because of delayed start-up.

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