CHAPTER 13 GOAL 13: ENERGY CONSERVATION

SECTION 13.0 ENERGY CONSERVATION GOAL

To conserve energy.

SECTION 13.1 ENERGY CONSERVATION BACKGROUND AND DISCUSSION

Information used in the energy element can only be from a state⁴⁵ level since no regional or county study has been done. Some comparisons can be made from other regional studies⁴⁶ as an indicator of possible future inquiry, but not as an absolute basis to draw conclusions in regard to the City of Umatilla.

The state level study is useful in pointing out energy use trends. To develop energy policy, it is proper to begin with such an overview before proceeding through the next step of regional or county trends. Only after these first phases of research and analysis are done can the City of Umatilla find its place in the maze of energy use and conservation.

13.1.100 Primary Energy Users

First, the primary energy sources and users must be identified to then find how efficient they are or could be. Table 13.1-1 points out Oregon's three primary energy users: Transportation, Industry, and Residential. Together they use 67.4% of Oregon's current energy flow. Table 13.1-2 shows what the major uses are for each of the primary users:

- Transportation 29.1% of Oregon's total energy use (automobile/truck using 85% of this).
- *Industry* 22.6% of Oregon's total energy use (lumber/wood/paper products using 55.3% of this).
- Residential 15.7% of Oregon's total energy use (space/water heating using 84.6% of this).

13.1.200 ENERGY CONSERVATION

Oregon trends would indicate the City of Umatilla should focus energy conservation in the three primary areas identified under Section 13.1.100, compare their individual energy use efficiencies and recommend possible courses of action for the future (based on a more specific level of data, when available).

⁴⁶ Regional Energy Analysis, CRAG, 1977.

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⁴⁵ <u>Transition</u>, Office of Energy Research and Planning, January, 1975.

Similar regional analysis has led to considerations in the following areas:

Residential Energy Conservation

- Utilization of lot size, dimension and siting controls
- Availability of light, air and wind
- Bulk, height and surface area of residence
- Using available housing programs:
 - Utility marketing of energy savings (utility company)
 - ~ Home energy conservation loans (banks)
 - ~ Direct grants (federal and state)
 - ~ Tax credit and rebate (proposed federal legislation)

<u>Transportation Energy Conservation</u>

- Mass transit (bus/light rail serving high density areas)
- Car pooling
- Increasing housing densities along high capacity corridors

Table 13.1-1 Oregon Direct Energy End Uses of Energy Consumption

(Trans.)	Private Automobile	23.4%
(Res.)	Home Heating	13.4
(Ind.)	Lumber and Wood	7.0
(Ind.)	Paper Products	6.7
-	Construction	8.1
(Ind.)	Primary Metals	4.6
-	Trade	4.2
(Trans.)	Trucks	4.0
-	Agriculture	2.5
(Res.)	Residential hot Water	2.3
(Ind.)	Food Processing	2.2
-	Services	2.0
(Ind.)(Trans.)	(other less than 2%)	(6.9)
Transportation		29.1%
Industrial		22.6%
Residential		15.7%

Source: <u>Transition</u>, Office of Energy Research and Planning, January 1975, pages 94, 97, 98.

Table 13.1-212 Oregon Direct Energy Comparisons By Land Use

Transportation	Industrial	Residential
Automobile 73.1%	Paper Products 28.0%	Space Heating 71.1%
Truck 11.9	Lumber & Wood 27.3	Water Heating 13.5
Aircraft 4.9	Primary Metals 20.0	Cooking 3.5
Train 4.3	Food Processing 9.5	Refrigeration 2.9
Bus .09	Clay-stone-glass 4.7	Lighting 2.6
(other) (4.6)	(other) (10.5)	(other) (6.4)

Source: <u>Transition</u>, Office of Energy Research and Planning, January 1975, page 92.

- SECTION 13.2 (RESERVED FOR EXPANSION)
- SECTION 13.3 (RESERVED FOR EXPANSION)
- SECTION 13.4 (RESERVED FOR EXPANSION)
- SECTION 13.5 (RESERVED FOR EXPANSION)
- SECTION 13.6 (RESERVED FOR EXPANSION)

Section 13.7 Energy Conservation Findings

- 13.7.101 Development should occur in a manner which minimizes the consumption of fuels, and maximizes the efficiency of utilities.
- 13.7.102 A municipal emergency energy conservation plan should be prepared.
- 13.7.103 The recycling of older buildings in compliance with the Uniform Building Code, and the recycling of waste materials should be encouraged and promoted.

SECTION 13.8 ENERGY CONSERVATION POLICIES

- 13.8.101 The City will encourage practices and forms of development that:
 - A. Reduce or shorten energy consuming trips;
 - B. Provide recreation in proximity to developed areas;
 - C. Take advantage of climatic conditions for light, heating and cooling.