

HOUSE COMMITTEE ON ENVIRONMENT AND ENERGY

April 2, 1997 Hearing Room E

1:00 P.M. Tapes 47 - 49

**MEMBERS PRESENT:**

Rep. Leslie Lewis, Chair

Rep. Frank Shields, Vice-Chair

Rep. Michael Fahey

Rep. Mike Lehman

Rep. Dennis Luke

Rep. Mark Simmons

Rep. Jim Welsh

**STAFF PRESENT:**

Judith Gruber, Policy Analyst

Marjorie Taylor, Administrative Support

**MEASURE/ISSUES HEARD:**

HB 3121 Work Session

HB 3114 and HB 3396 Public Hearing

HB 3444 Public Hearing

**These minutes are in compliance with Senate and House Rules. Only text enclosed in quotation marks reports a speaker's exact words. For complete contents, please refer to the tapes.**

<b>Tape/#</b>	<b>Speaker</b>	<b>Comments</b>
<b>TAPE 47, A</b>		
003	Chair Lewis	Calls the meeting to order at 1:10 p.m. and opens a work session on HB 3121.
<b><u>HB 3121</u></b> <b><u>WORK</u></b> <b><u>SESSION</u></b>		
	Judith	Policy Analyst, reviews provisions of HB 3121 and describes the impacts

007	Gruber	of the -1 amendments which replace the original bill ( <b>EXHIBIT A</b> ).
020	Rep. Fahey	<b>MOTION: Moves to ADOPT HB 3121-1 amendments dated 4/1/97.</b>
024	Chair Lewis	<b>Hearing no discussion, declares the motion CARRIED.</b>
025	Rep. Fahey	<b>MOTION: Moves HB 3121 to the floor with a DO PASS AS AMENDED recommendation and BE REFERRED to the committee on Revenue by prior reference.</b>
030	Rep. Lehman	States that he will vote yes to move the bill out of committee, but will not vote for it on the floor. Indicates that switching to electric lawnmowers is not the best way to get rid of pollution.
036	Rep. Welsh	Expresses similar feelings as Rep. Lehman.
		<b>VOTE: 6-0</b> <b>AYE: In a roll call vote, all members present vote Aye.</b> <b>EXCUSED: 1 - Shields</b>
060	Chair Lewis	<b>The motion CARRIES.</b>
061	Chair Lewis	Closes the work session on HB 3121 and opens public hearings on HB 3114 and HB 3396 simultaneously.
<b><u>HB 3114 AND HB 3396 PUBLIC HEARINGS</u></b>		
080	Judith Gruber	Policy Analyst, summarizes the provisions of HB 3114 and HB 3396 which are very similar to each other.
087	Rep. Oakley	State Representative, District 36. Expresses support for HB 3396. Summarizes the background and alternative fuel sources related to HB 3396. Provides a summary of tax credits available.
106	Jerry Chinn	President, Northwest Eagle. Markets products produced by Good Pace, Inc. which has created an Electric Drive system. Provides percentages of vehicles required to be emission free in California and Massachusetts. Explains that alternative fuel vehicles are starting to be used in Oregon. States that the Department of Environmental Quality has indicated the number one way to reduce emissions in the state is to convert to alternative fueled vehicles. Explains that the start up costs for converting a vehicle are high and most people are not willing to make the investment without incentives or assistance ( <b>EXHIBIT B</b> ).
163	Rep. Luke	Asks how the road tax will be paid on alternate fuel vehicles that don't use gasoline.
167	Chinn	Road tax isn't paid, but licensing is doubled.
		States if all vehicles were alternative fuel vehicles, then we wouldn't

170	Rep. Luke	have roads to drive on since no road taxes would be collected.
173	Chinn	Indicates that the issue will be addressed later.
175	Rep. Shields	Indicates that 6.1 million vehicles are on the road and only 260 are electric, so the road tax isn't a problem yet.
180	Rep. Lehman	Asks if alternative fueled vehicle drivers would be willing to pay for a portion of their highway use since they are getting tax credits.
184	Chinn	Answers affirmatively.
185	Rep. Fahey	Asks what residential refers to in the bill.
188	Chinn	Charging systems in a home.
189	Rep. Fahey	Asks if the residential tax credit is for houses or cars.
195	Gruber	Explains that references in both bills to "dwellings" refer to space for electric chargers or gas compressors.
204	Chair Lewis	Reads into the record a letter from Denise McPhail, representative of Portland General Electric ( <b>EXHIBIT C</b> ).
224	Rep. Shields	Testifies in favor of the use of alternatively fueled vehicles. Explains how vehicles have been converted to run on electric batteries. States that an utility or business can get tax credit for converting vehicle, so why not individuals also. Agrees that the issue of alternatively fueled vehicles needing to pay a road tax needs to be addressed. Some car companies are producing prototype automobiles which are more appealing than the "cookie cutter" cars available now. Explains that while car companies are designing their prototype automobiles, the tax credit can serve as an incentive for other people to convert to alternative fueled vehicles.
317	Rep. Welsh	Asks if another tax credit could be applied to the reducing of noise pollution.
323	Chair Lewis	Asks how much tax credit is currently given to businesses.
327	Rep. Shields	Doesn't have the exact numbers.
333	Chair Lewis	Hears from the audience that businesses usually gain credit on 35% of the cost of conversion.
338	Kris Nelson	Representative, Alternative Fuels Consulting. Encourages the support of HB 3396. The business tax credit program was initiated in 1991 and was a logical place to start seeing that some businesses operate with fleets of vehicles with a common fueling station. Explains that fueling locations are very important to the process of conversion to alternatively fueled vehicles. Speaks of emissions issues stating that air pollution from vehicles is no longer an urban issue ( <b>EXHIBIT D</b> ).
<b>TAPE 48, A</b>		
		Explains that vehicle emissions are no longer just a health issue but also an economic one. States that businesses are not able to expand due to

008	Nelson	standards from the Environmental Protection Agency. Indicates that there is also a loss of crop productivity with increased emissions. Focusing on health issues, studies indicate that the conversion of one gas powered vehicle would save \$17,000 in pollution control costs. States that if Oregon encourages conversions, it can spark new entrepreneurial industries.
055	Nelson	Indicates that Oregon has very low electricity rates which are attractive to the conversion industry. Explains that fuel costs for an electric vehicle run about a penny per mile. State that there is a federal tax credit for conversion, but it is not as large an incentive as the proposed legislation. Indicates that this legislation is a crucial step for building the conversion industry.
097	Rep. Welsh	Asks what size the batteries are.
098	Nelson	Explains that advanced batteries are 2/3 the size of a conventional lead/acid battery. More high tech batteries are being produced.
113	Rep. Welsh	Asks how many batteries it takes to run a vehicle.
114	Nelson	It is difficult to compare to lead/acid batteries.
118	Rep. Shields	Asks how many batteries were in the General Motors EV1.
120	Nelson	Twenty four.
121	Rep. Shields	States that a passenger or driver is not aware that so many batteries are in the car since they are stored in conspicuous locations. Asks how long a battery will last.
125	Nelson	States that a lead/acid battery will last 30-40 thousand miles. Indicates that lead/acid batteries are not being used as frequently and companies are moving to non-lead/acid batteries.
141	Rep. Shields	Asks if the non-lead/acid batteries will last longer than lead/acid.
143	Nelson	Nickel-metal hydride batteries can last 6-8 years. Fiber Nickel Cadmium batteries can last over 300,000 miles. Zinc/air batteries can last over 100,000 miles.
153	Rep. Simmons	Ask what the costs of advanced batteries are.
154	Nelson	Nickel metal hydride batteries can run about \$30,000 for one pack. Costs will go down as the production rises. A zinc/air battery is about \$50 more per battery than lead/acid.
173	Rep. Shields	Explains that costs are hard to pinpoint since technology is changing so rapidly for the conversion of vehicles.
178	Rep. Simmons	Asks how big a generator needs to be carried to recharge batteries when a fueling station is not available.
186	Nelson	Explains that is the next step in hybrid vehicles and that a 100cc

		generator was used on a cross country trip to recharge a vehicle.
208	Chair Lewis	Asks what level of tax credit would encourage people to convert to alternatively fueled vehicles.
211	Nelson	Explains that the federal tax credit is 10% of the vehicle cost, but the \$1200 proposed in HB 3396 in addition to the federal tax credit would be a spark.
228	Rep. Luke	Asks about the reference to "dwelling" in the bills.
231	Gruber	Explains that the reference is to the space needed in a dwelling for charging devices or natural gas compressors.
235	Rep. Luke	Indicates that there is still a question as to whether the reference to dwelling can also be applied to converting to alternative energy in the home.
237	Chair Lewis	Explains that the original bill was related to a residential tax credit program.
244	Rep. Luke	Continues to question the reference to "dwelling". Asks if citizens will receive tax credit for converting their homes to natural gas.
260	Chair Lewis	That is not the intent of the bill.
264	Tom Berry	Manager of Government Relations, Northwest Natural Gas. Mentions that Mr. Dunford is the expert on natural gas vehicles.
276	Doug Dunford	Director, Natural Gas Vehicle Program, Northwest Natural Gas. Expresses support for the home refueling market. Explains the importance for the United States to establish a domestic fuel source. States that natural gas is the cleanest burning alternative fuel on the market. Explains that major vehicle manufacturers have created bi-fuel vehicles which use gasoline or natural gas. States that passage of the proposed legislation would encourage the development of the alternative fueled vehicle market.
328	Rep. Luke	Asks about the inclusion of homes being converted to natural gas in the bill.
333	Dunford	The language of HB 3396 addresses a fuel maker or home refueling appliance.
342	Rep. Luke	Explains that the bill's language extends credits to homes not just cars.
354	Rep. Shields	Indicates that language will need to be altered.
361	Gruber	States that Mike Grainey from the Department of Energy will address issues related dwellings.
371	Rep. Luke	Verifies that the proposed legislation is related to vehicles that run on natural gas and refuel at home.
372	Dunford	Answers affirmatively and indicates that a meter will monitor natural gas usage for a vehicle and a highway tax will be applied.
387	Rep. Shields	Asks if a home must first be converted to natural gas before a fueling station can be built.

391	Dunford	Cars can go to refueling stations also.
392	Rep. Shields	Verifies that a home with natural gas can easily have a refueling station built in to it.
397	Dunford	Answers affirmatively and indicates that the fueling is a slow fill process
406	Rep. Luke	Asks if two natural gas lines need to go to the house.
411	Dunford	States that a submeter on one line monitors the use of a refueling station.
413	Rep. Luke	Asks how a homeowner will be prevented from tapping into a natural gas line.
418	Dunford	States that there are several preventive measures.
429	Berry	Explains that monitoring of meters and indicates that sudden surges of use would be investigated.
<b>TAPE 47, B</b>		
018	Dunford	A sudden surge on a submeter would still show on a primary meter. Indicates that line tapping has occurred.
022	Rep. Fahey	Asks if mileage could be monitored from year to year on the vehicle registration.
027	Dunford	That is possible and Washington and California use that system.
029	Rep. Fahey	The usage of fuel would be easy to determine in that manner.
032	Rep. Luke	States that meter tapping is very hard to do.
035	Rep. Simmons	Asks how fast the fast fill process is.
037	Dunford	Fast fill can take a couple of minutes.
042	Rep. Simmons	Asks what the supply of natural gas is.
046	Dunford	States that North America is to natural gas what the Middle East is to world oil supply. Indicates that is drilling stopped now, there would still be a 60 year supply. Explains that the American Gas Association has projected a 300 year supply of gas using modern drilling technology.
056	Rep. Simmons	Verifies that the projected supply was calculated with current usage.
057	Dunford	Answers affirmatively.
058	Rep. Simmons	Verifies that supply would change with a change in consumption levels.
060	Dunford	States that the price of fuel today is less than it was 15 years ago.
063	Rep. Shields	Asks what kind of mileage a vehicle can get with natural gas.
071	Dunford	States that natural gas is a 130 octane fuel which is very powerful. Studies have shown natural gas to be equivalent in horsepower as gasoline. Explains that he has gone 200 miles on a "full tank" of gas. Indicates that miles per gallon is equivalent to gasoline.

087	Rep. Shields	Asks what average cost per gallon is.
088	Dunford	When used as vehicle fuel, it's about \$.62 per gallon plus the highway tax.
094	Rep. Simmons	Verifies that per volume, the issue between natural gas and gasoline is storage space.
096	Dunford	Answers affirmatively, and explains that extra tanks are usually placed in the trunk.
108	Rep. Shields	Asks what kind of tank is on board volume wise.
109	Dunford	Explains that there the tanks are of different sizes and metals and that military technology has aided in design efforts.
124	Rep. Welsh	Asks about safety considerations related to the tanks.
126	Dunford	In all applications with natural gas, safety is the first consideration. Explains that codes have been established for refueling stations in homes.
137	Rep. Luke	Asks what the freezing point of natural gas is.
139	Dunford	The freezing point is -258 degrees Fahrenheit. States that Portland has 10 buses running on condensed natural gas which allows for storage of a large volume of fuel in a small area.
147	Rep. Welsh	Asks if there is more development surrounding condensed natural gas.
148	Dunford	Answers affirmatively.
151	Rep. Welsh	Asks about the "solidification" of natural gas as a fuel source.
155	Dunford	States that there advantages to all forms of alternative fuels.
161	Rep. Luke	Asks if ice forms on natural gas tanks while they are in use.
167	Dunford	No, engineering physics deters the formation of ice.
168	Rep. Luke	Asks if ice formation could happen in a vehicle.
170	Dunford	It is possible but, design efforts have stopped it.
174	Steve Vincent	Representative, Washington Water and Power. Describes safety tests on the natural gas tanks that have not created punctures or damage to the tanks. States that natural gas ignites at a much higher temperature than gas. Explains performance standards of the natural gas tanks. At 50 mph the engine is working at 1500 rpm. Describes a how clean engines are with natural gas. States that the next step to better air quality is to convert vehicles to alternative fuels. Explains the need for income tax incentives to provide incentive to individuals to use alternatively fueled vehicles.
247	Rep. Luke	States that the natural gas and electric companies have been great sponsors to homebuilders to improve the efficiency of homes.
260	Rep.	Asks if natural gas vehicles are available for test drives.

	Shields	
265	Dunford	Offers to give rides in a company car.
274	Rep. Shields	Asks about commercial production of natural gas vehicles.
281	Dunford	Indicates that natural gas powered vehicles are available today and provides brochures of several <b>(EXHIBIT E)</b> .
308	Rep. Luke	Asks if any car can be converted to natural gas.
310	Dunford	Answers affirmatively.
314	Rep. Luke	Asks if the vehicles need to be tested for emissions.
317	Dunford	They are tested but emissions are so low that they don't show up.
321	Rep. Shields	Explains that owners of electric vehicles needed to have their vehicles tested also even though they don't use conventional fuel.
340	Rep. Fahey	Asks if fast fill pumps can be installed at home.
342	Dunford	Answers affirmatively <b>(EXHIBIT F)</b> .
344	Rep. Fahey	Asks what the price of a home filling unit is.
345	Dunford	The manufacturers price is about \$4400 which is not the fast fill pump
348	Rep. Fahey	Asks what the price of a fast fill pump is.
350	Dunford	A fast fill pump would be an extra \$1000
358	Rep. Shields	Verifies that the \$4400 model is displayed in the brochure.
363	Dunford	Indicates that there are currently very few filling stations in the state which means most owners would need a personal station.
365	Lana Butterfield	Representative, Northwest Propane Gas Association. States that propane is a clean burning fuel and explains it's benefits to an engine. Indicates that emissions from a propane powered vehicle are lower than Environmental Protection Agency standards. States that a tax benefit would be helpful to the conversion industry and indicates that in recent years the number of conversions has decreased. Expresses a preference for HB 3114 rather than HB 3396 <b>(EXHIBIT G)</b> .
<b>TAPE 48, B</b>		
012	Norm Knocker	Representative, Suburban Propane. Explains that fewer conversions to alternative fuel sources are occurring now because petroleum sources are not in as great a crisis as they were and there are few incentives for citizens to convert. States that citizens need incentives to convert to alternative fuel sources.
036	Mike Grainey	Assistant Director, Office of Energy. Expresses support for HB 3114, HB 3396, and the use of alternative fuels. Agrees that emphasis for alternative fuels has been on businesses because of central refueling stations for vehicle fleets, but the proposed legislation provides the



		opportunity for the general public to be involved. Indicates that amendments will be introduced later to clarify the tax credit. Expresses the need for wider distribution and refueling stations.
076	Rep. Luke	Asks if utilities will get tax credits on the wholesale or retail price of installation of refueling stations.
078	Grainey	The tax credit would be for the cost of equipment.
083	Rep. Luke	Asks if it is a wholesale cost or retail cost of the equipment.
089	Grainey	Wholesale.
092	Rep. Shields	Asks about the reference to "dwelling" in the bill.
096	Grainey	Explains that the intent of the language is to credit an alternative energy refueling devices in the home.
103	Rep. Shields	Asks if there is a difference between the bills that makes one better for the consumer.
108	Grainey	Explains that the bills are the same except for the amount of tax credit.
121	Chair Lewis	Closes the public hearings on HB 3114 and HB 3396 and opens a public hearing on HB 3444.
<b><u>HB 3444</u></b> <b><u>PUBLIC</u></b> <b><u>HEARING</u></b>		
125	Rep. Johnston	State Representative, District 31. Expresses support for HB 3444 and provides a -1 amendment. Explains that Marion County has a waste burner. The issue of the bill revolves around what credit towards achieving the 50% recovery rate should be given to Marion County for burning waste. Indicates that the waste is being used to create energy which is better than burying it in a landfill. Marion County wants pound for pound credit for burning waste but the Department of Environmental Quality is only willing to give partial credit. Explains that mediation has been attempted but not successful.
184	Rep. Luke	Verifies that no money is involved with the recovery credits.
186	Rep. Johnston	Answers affirmatively.
190	James Sears	Director of Solid Waste, Marion County. Explains the solid waste program in Marion County. Indicates that the burner processes approximately 186,000 tons of waste per year. Marion County wants the waste to be counted pound for pound. Explains that the proposed amendment is to clarify that materials burned in the burner are non-recyclables. States that Marion County will definitely continue to have a recycling program. The main issue is that the recycling and waste playing fields need to be even ( <b>EXHIBIT H</b> ).
260	Rep. Luke	Asks what happens to the energy created by the burner.
261	Sears	The electricity that is generated goes into Portland General Electric's grid. Enough electricity is generated to power the city of Woodburn.

265	Carol Fischer	Public Affairs Director, Marion County. On behalf of the Marion County commissioners, expresses support for HB 3444. States that Marion County will not reduce recycling in any way. The concern is over inequity in the system ( <b>EXHIBIT I</b> ).
283	John Matthews	Recycling Coordinator, Garten Foundation. Agrees that there is an inequity in the waste system but disagrees with the proposed solution. The hierarchy for recycling preference was enacted in the late 1970's during the energy crisis to preserve energy integrity. Explains that the policies of recovery rates were designed to recognize the hierarchy of recycling.
340	Matthews	Expresses support for the Marion County recycling programs, but is concerned that if the bill is passed, other counties will decide to decrease or halt recycling programs. States that markets need to be created for the waste products.
358	Rep. Fahey	Asks why it is more effective to bury waste in the ground than burn it for energy.
360	Matthews	Explains that energy recovery is a better use of waste products than burying it for disposal.
371	Rep. Fahey	States that Portland garbage is being transported to Arlington for disposal, but if it was burned for energy the recycling rate of the city would still be high. Doesn't understand why it is better to pollute the air by having trucks haul garbage away than to burn it for energy.
385	Rep. Luke	Explains that Deschutes County is in the process of siting a new landfill and explains that it is still the cheapest process.
397	Matthews	Agrees that waste reduction is also a matter of economics, but encourages citizens to study the true cost of energy.
<b>TAPE 49, A</b>		
007	Rep. Simmons	Verifies that Mr. Matthews is advocating higher and better use of the waste in Marion County.
010	Matthews	Indicates that the law advocates waste disposal and recycling.
011	Rep. Simmons	Explains that the waste is not needed according to supply and demand.
014	Matthews	Encourages recognition of the true economics of the waste system. Recycling needs to be used when it's cost does not exceed that of land filling.
023	Chris Taylor	Environmental Advocate, Oregon State Public Interest Research Group (OSPIRG). Expresses opposition to HB 3444 and indicates that acknowledging incineration towards the waste recovery rate would not be a positive move. Explains that Marion County is currently in compliance with recovery rates so the loophole doesn't need to be opened wider for them. Indicates that a compromise might be reached between opposing parties and states that disposal is not equal to recovery.
051	Rep. Fahey	Explains that Marion County doesn't want to decrease their recycling program. They want credit for creating energy.

055	Taylor	States that Marion Counties incinerator shouldn't be shut down, but equal recovery credit should not be given for incineration.
064	Rep. Fahey	Asks what OSPIRG's position is on waste: to have it buried or burnt.
066	Taylor	States that a blanket statement can't be made since it depends on varying economic issues. All landfills and incinerators are not created equal and some will protect the environment more than others.
075	Rep. Fahey	Indicates that changing groundwater flow will someday deliver waste right back to Portland.
085	Rep. Simmons	States that recycling is not traditional. Asks if markets will drive higher and better use of waste products.
092	Taylor	Explains that traditional recycling is defined as turning one product to another. Indicates that recycling processes at the top of the hierarchy need to be promoted rather than incinerate products that could be recycled.
106	Rep. Simmons	States that the curbside recycling program is well developed in Marion County and that reusable products are pulled out before being incinerated. Asks if the markets will drive higher and better use of materials when markets are in place to do so.
114	Taylor	States that it depends on the system in place.
130	Bob Danko	Waste Management and Clean-up Division, Department of Environmental Quality (DEQ). Expresses opposition to HB 3444 as written. States that changing the Oregon Recycling Act as passed by 1991 legislation would have wide implications <b>(EXHIBIT J)</b> .
147	Paul Slyman	Solid Waste Program, Department of Environmental Quality. Explains opposition to HB 3444. The proposed legislation is a negative departure from the 1991 Oregon Recycling Act. Explains that the burning and recycling of garbage would be counted on the same levels. Explains that Marion County is already in compliance with recovery goals.
163	Rep. Fahey	Asks what the DEQ position is on burying or burning waste.
164	Danko	States that in any case, environmental laws need to be enforced.
173	Rep. Simmons	Asks if the 1991 Recycling Act set reasonable goals.
175	Danko	Explains that county goals were set for 1995 and almost every county met them. The Act was meant to be a step in a process, not the final answer. The current focus is on how to reach the 50% recovery rate.
195	Rep. Simmons	Explains that the waste being burned are not high value products. Asks if markets will provide a better use for the waste.
209	Danko	Explains that markets have been getting worse lately, but they hope to recover. The major question is if burning should be counted as recycling
219	Rep. Simmons	States that the decreasing markets for waste products should indicate whether the recycling goals were reasonable.

221	Danko	States that the recycling goals were reasonable.
226	Rep. Simmons	States that the goals are unreasonable since the markets are worse.
229	Danko	Explains that overall the markets should get better, but everybody needs to do a better job at recycling.
242	Rep. Fahey	Doesn't understand how landfills are better than burning since the landfill will produce a methane problem years down the road whereas burning gets rid of the waste immediately.
253	Danko	Expresses the hope that landfills will improve. Indicates that the capturing of methane could also be used in recovery rates and states that there are many issues that still need work.
271	Chair Lewis	Enters written testimony into the record ( <b>EXHIBIT K</b> ).
283	Chair Lewis	Closes the public hearing on HB 3444 and adjourns the meeting at 3:25 p.m.

Submitted By, Reviewed By,

Marjorie Taylor, Judith Gruber,

Administrative Support Policy Analyst

**EXHIBIT SUMMARY**

**A - HB 3121, -1 amendments, Committee Staff, 2 pp.**

**B - HB 3114 & HB 3396, Written testimony, Jerry Chinn, 2 pp.**

**C - HB 3114 & HB 3396, Memo, Denise McPhail, 1 p.**

**D - HB 3114 & HB 3396, Written testimony, Kris Nelson, 1 p.**

**E - HB 3114 & HB 3396, Brochures, Doug Dunford, 8 pp.**

**F - HB 3114 & HB 3396, Brochure, Doug Dunford, 2 pp.**

**G - HB 3114 & HB 3396, Written testimony, Lana Butterfield, 2 pp.**

**H - HB 3444, Written testimony, James Sears, 2 pp.**

**I - HB 3444, Letter, Carol Fischer, 1 p.**

**J - HB 3444, Written testimony, Bob Danko, 1 p.**

**K - HB 3444, Faxed testimony, Committee Staff, 3 pp.**