



Biophysical Economics Conference

Oct. 26, 2012

Energy Taxes and Financial Flows

Gary Flomenhoft,
Gund Institute Fellow
Lecturer, Rubenstein School





Acknowledgements

Student Researchers

Green Taxes

Melissa Bailey

Thomas A. Benoit Sr.

Amanda Dow Davis

John Demeter

Cheryl L. Diersch

Peter M. Freeman

Andrew Jope

John Mejia

Rachel Marie Weston

Common Assets

Ross Saxton

Mark Kolonowski

Beth Nolan

Colin McClung

Conor Casey

Ian Raphael

Will Murray

Elliot Wilkinson-Ray

Susan Skalka



TAXES=THIRD RAIL OF POLITICS



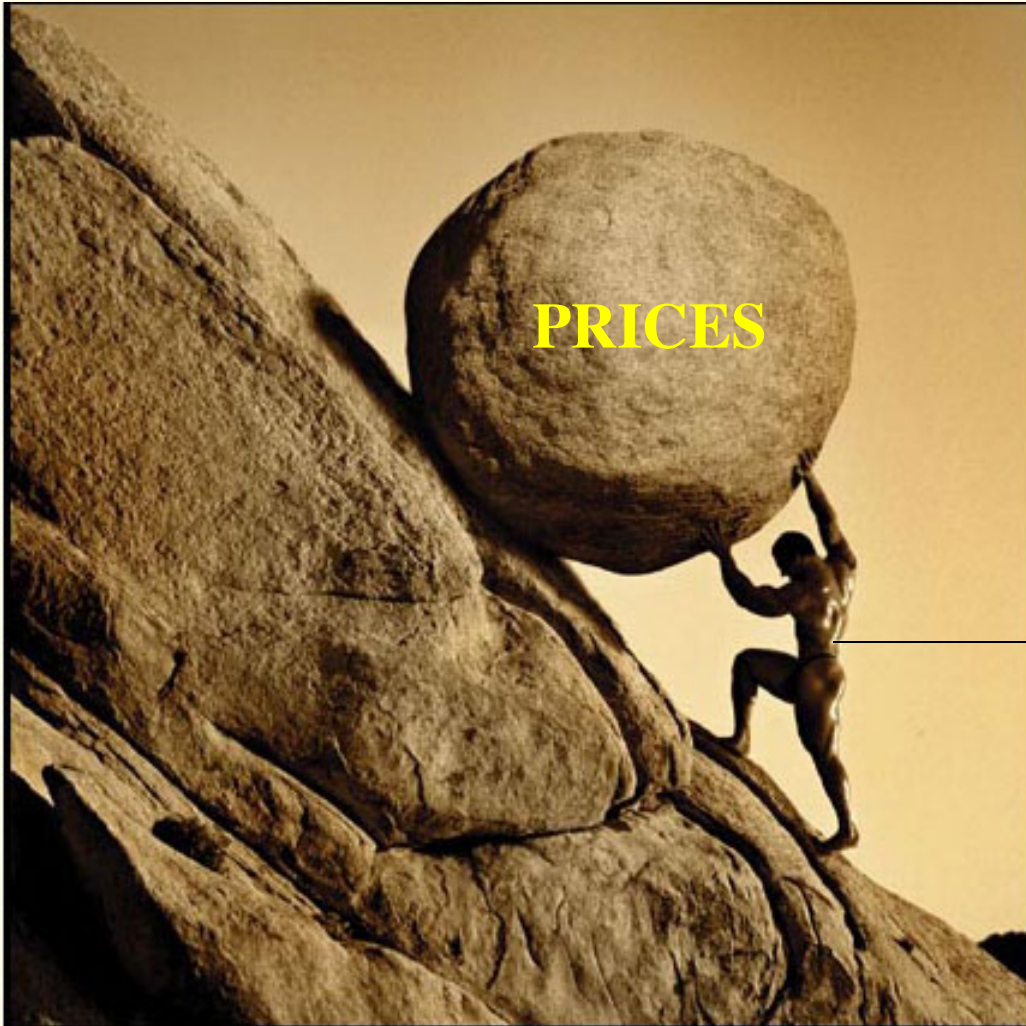


WHOSE OX WILL YOU GORE? OR WILL IT GORE YOU?





GREEN ECONOMY?



VT GREEN ECONOMY

Always cheaper to do the wrong thing.



SUMMARY-make prices tell the truth

GREEN TAX SHIFT:

“TAX BADS, NOT GOODS”

COMMON ASSETS:

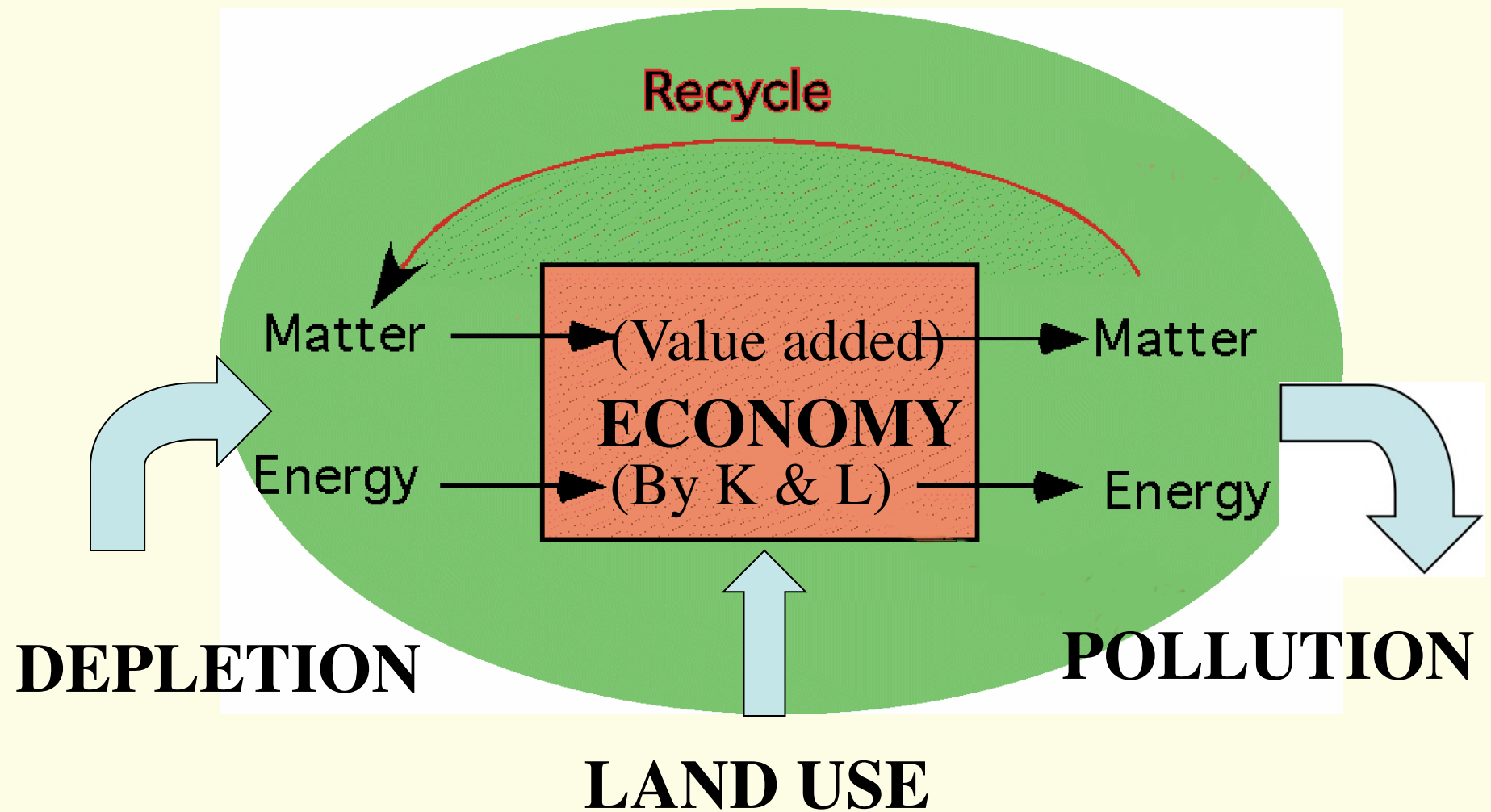
***"PAY FOR WHAT YOU TAKE, NOT
FOR WHAT YOU MAKE"***

SUBSIDY REFORM:

***“STOP SENDING GOOD MONEY
AFTER BADS”***



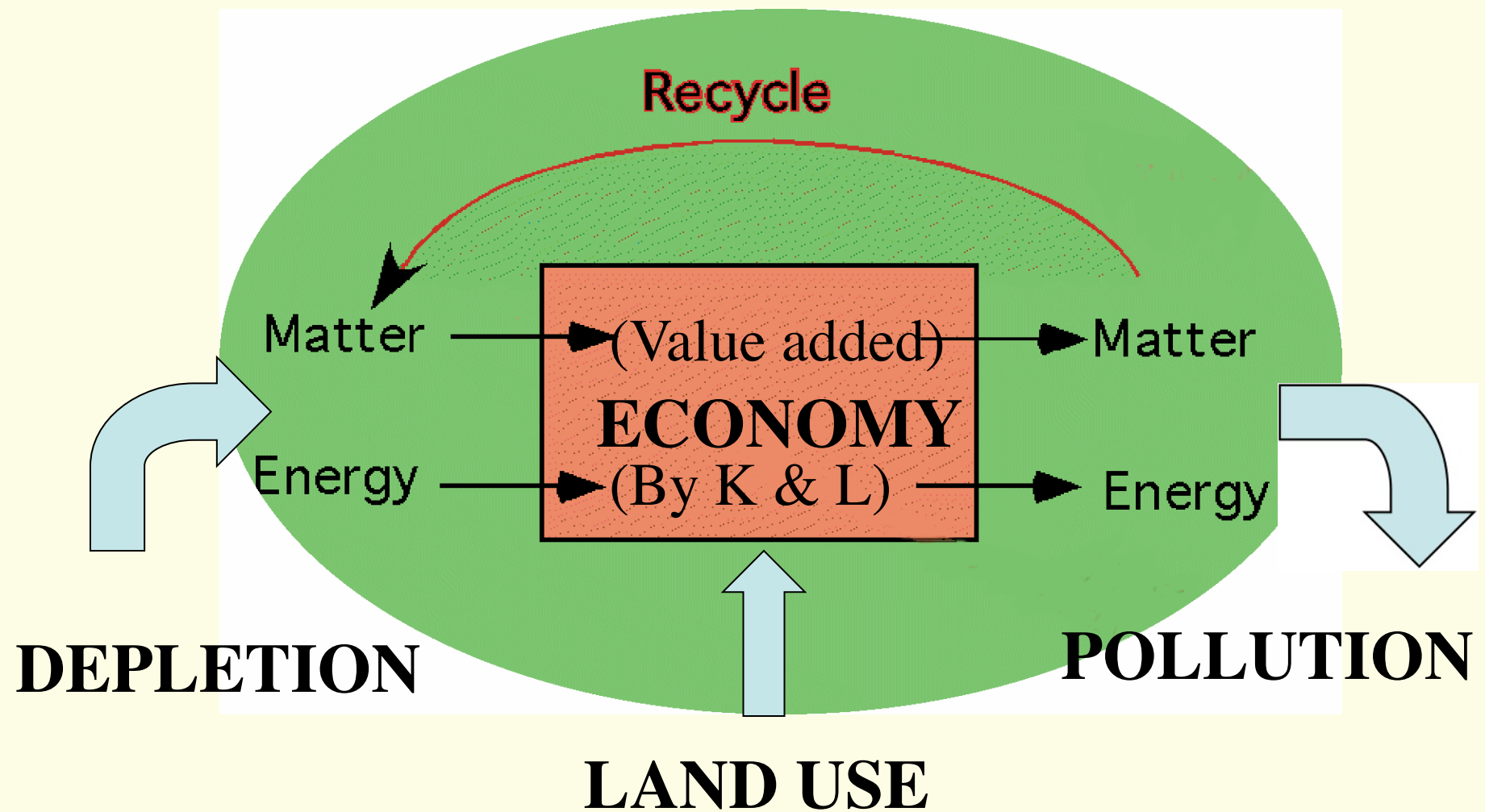
ECONOMY = Physical THROUGHPUT



Purpose: Max throughput = **DUMB GROWTH!**



ECONOMY = Physical THROUGHPUT

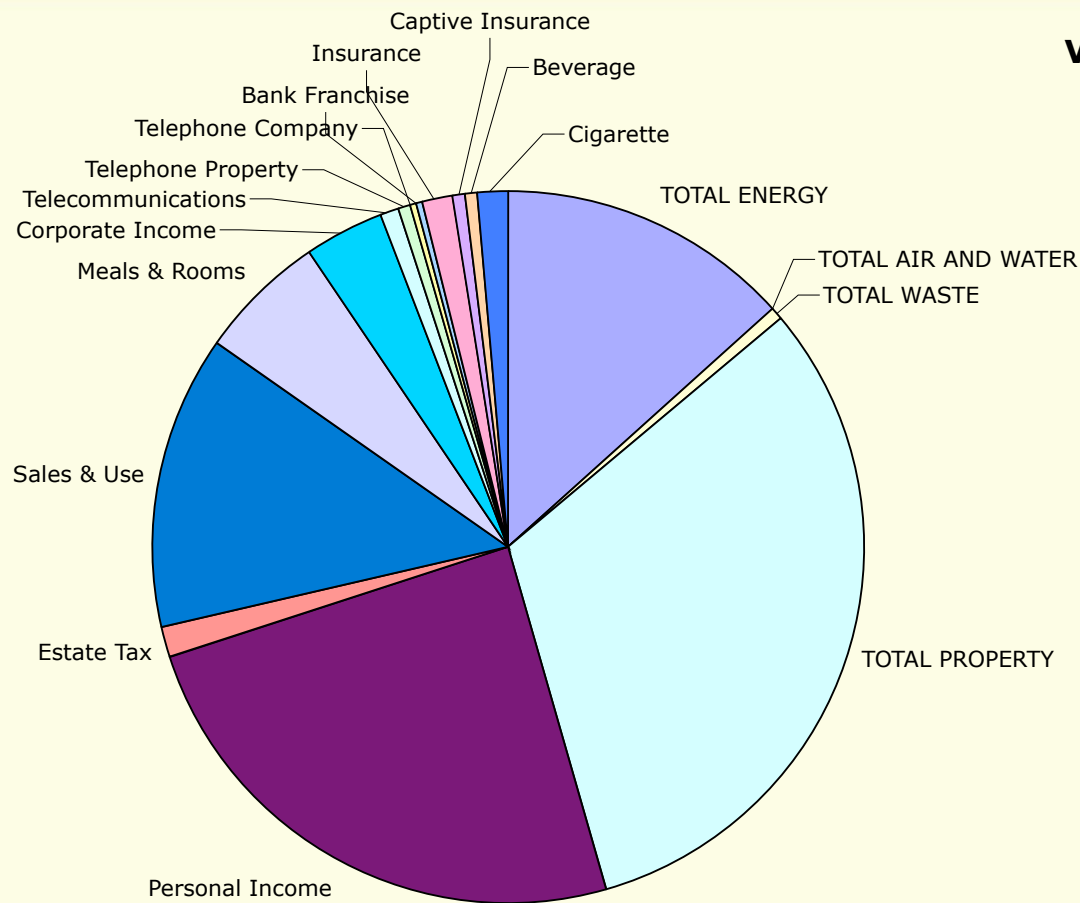


Purpose: max value added (well-being)/ minimum
throughput=**SMART GROWTH!**



1999 VERMONT TAXES

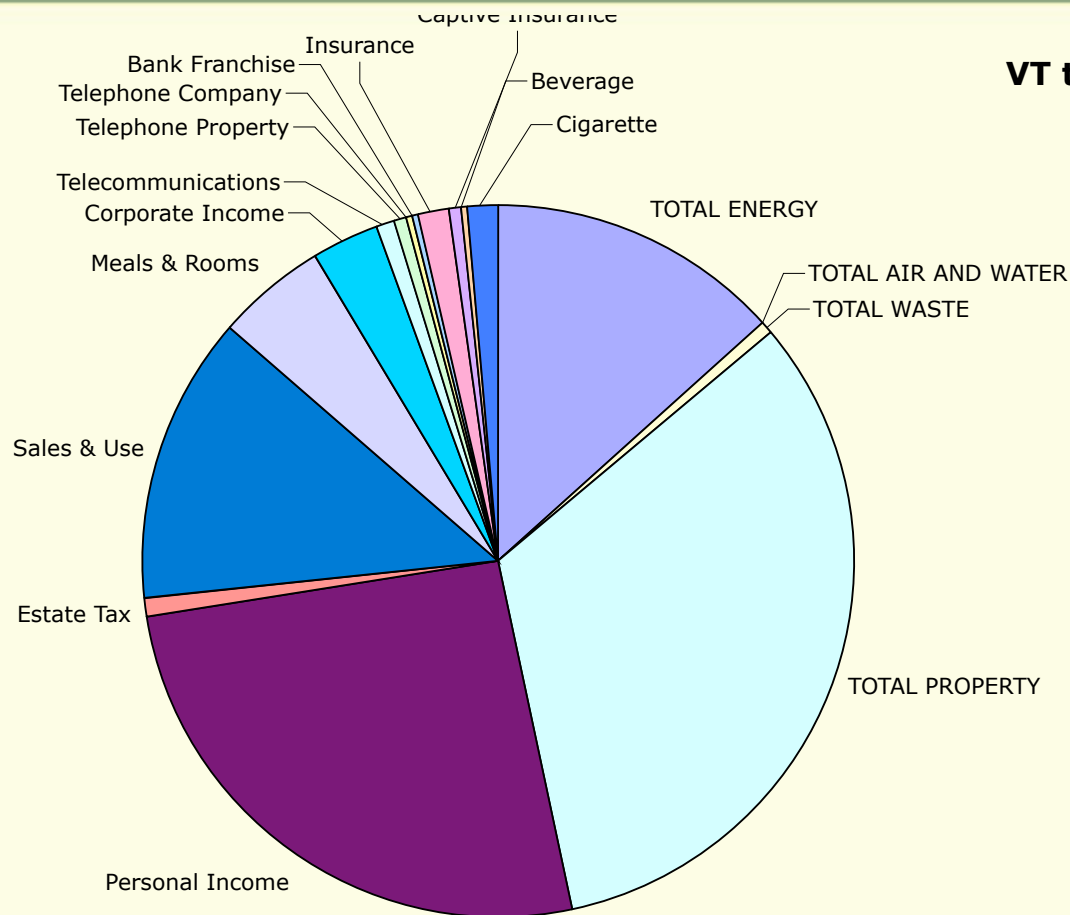
VT Taxes 1999





2000 VERMONT TAXES

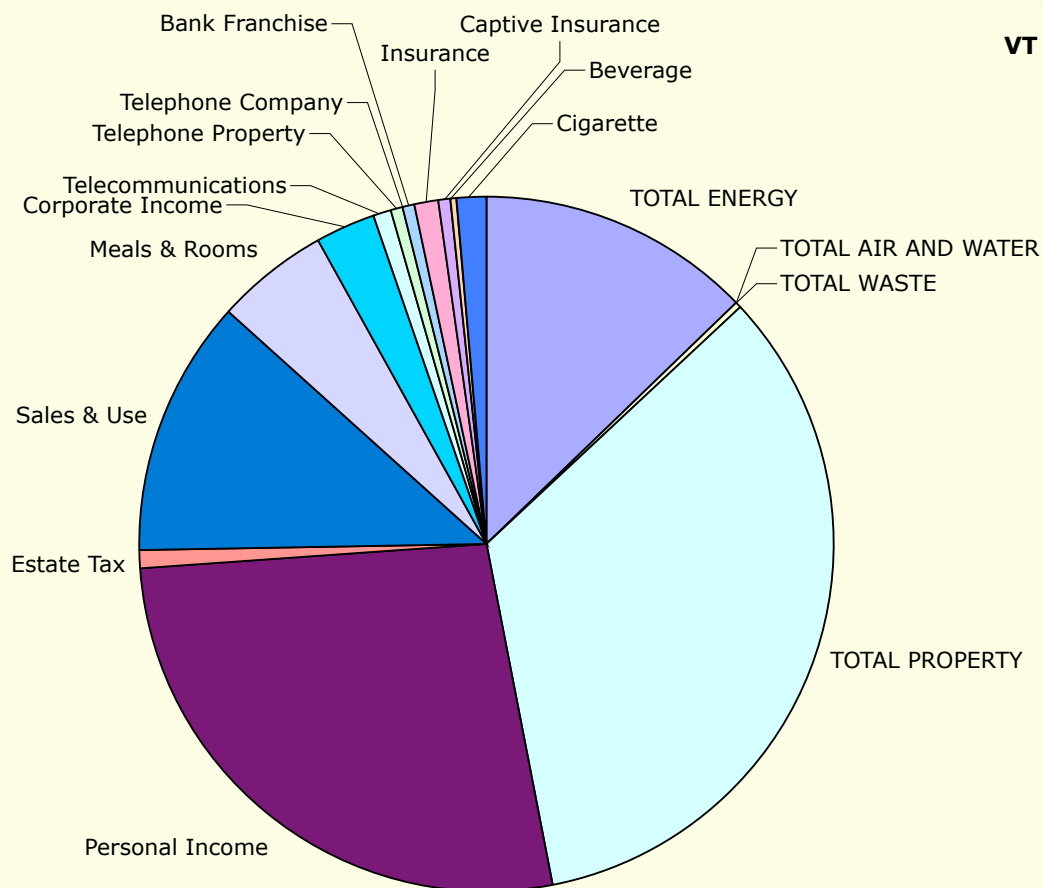
VT taxes 2000





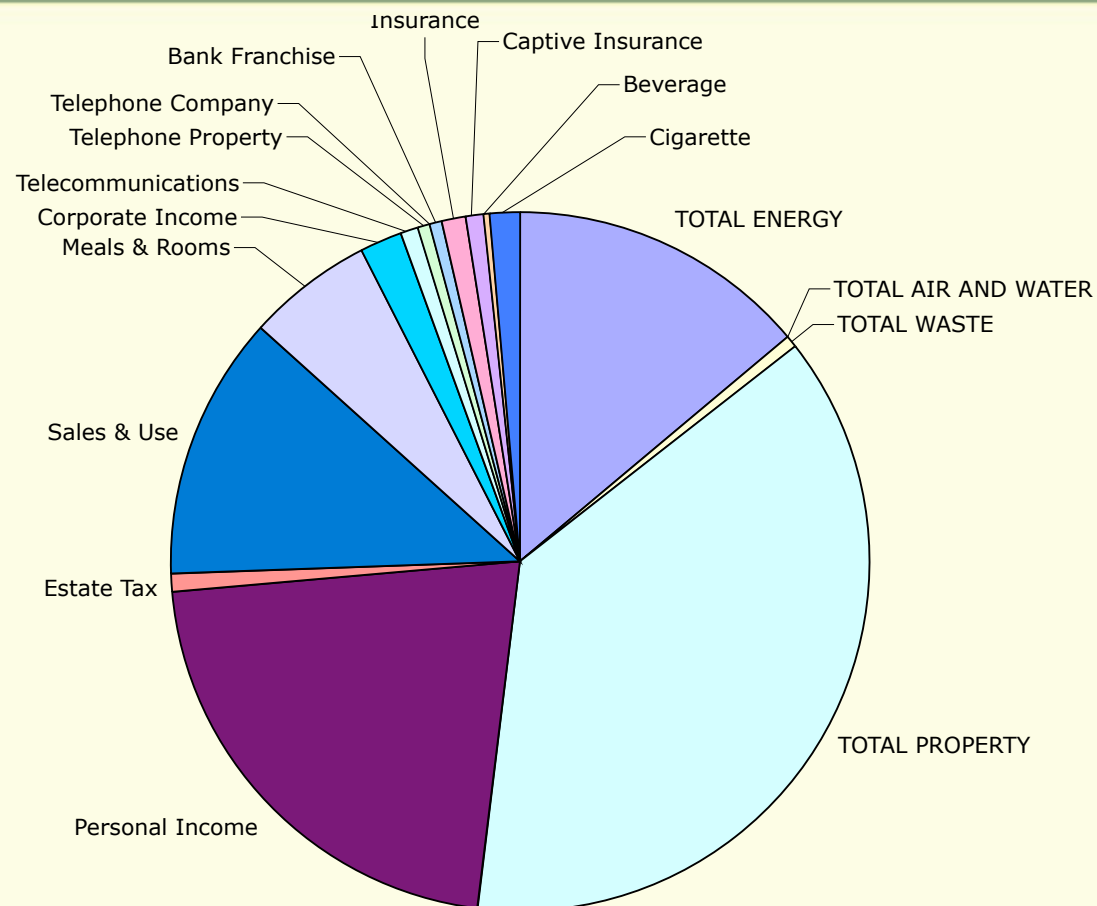
2001 VERMONT TAXES

VT TAXES 2001





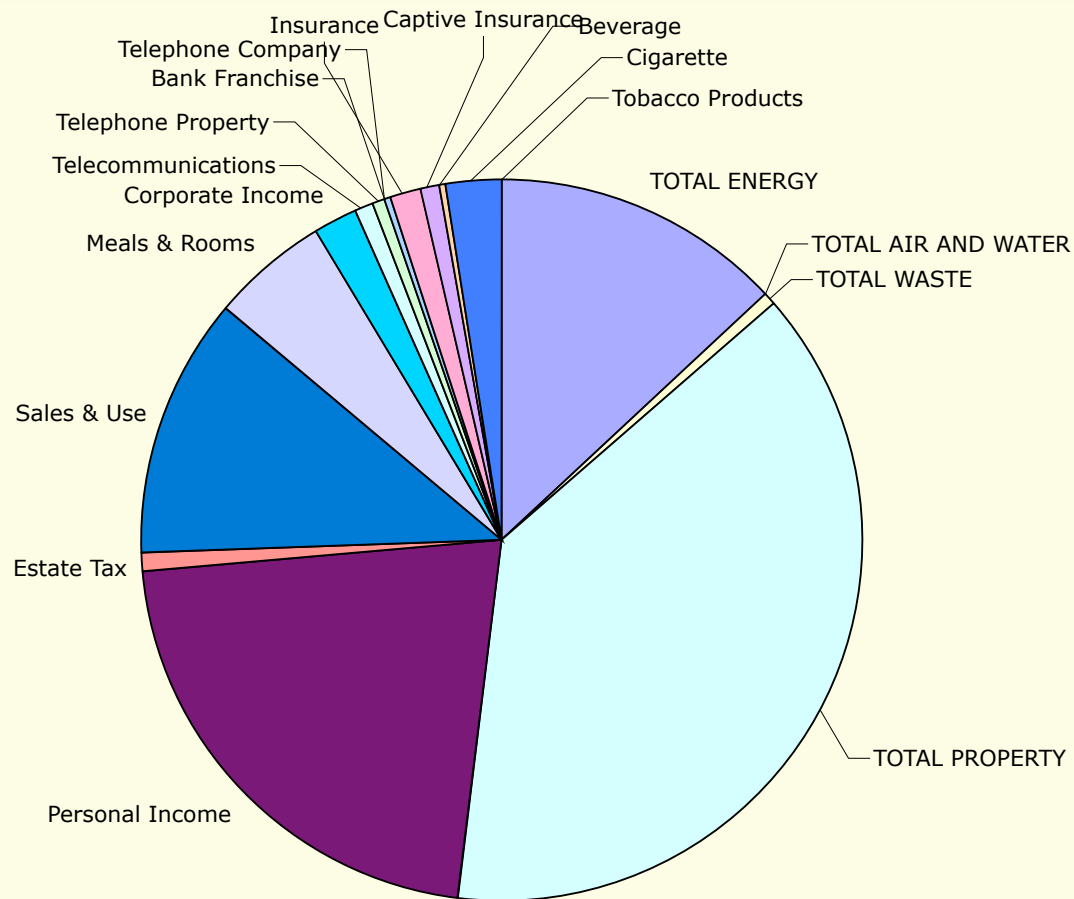
2002 VERMONT TAXES





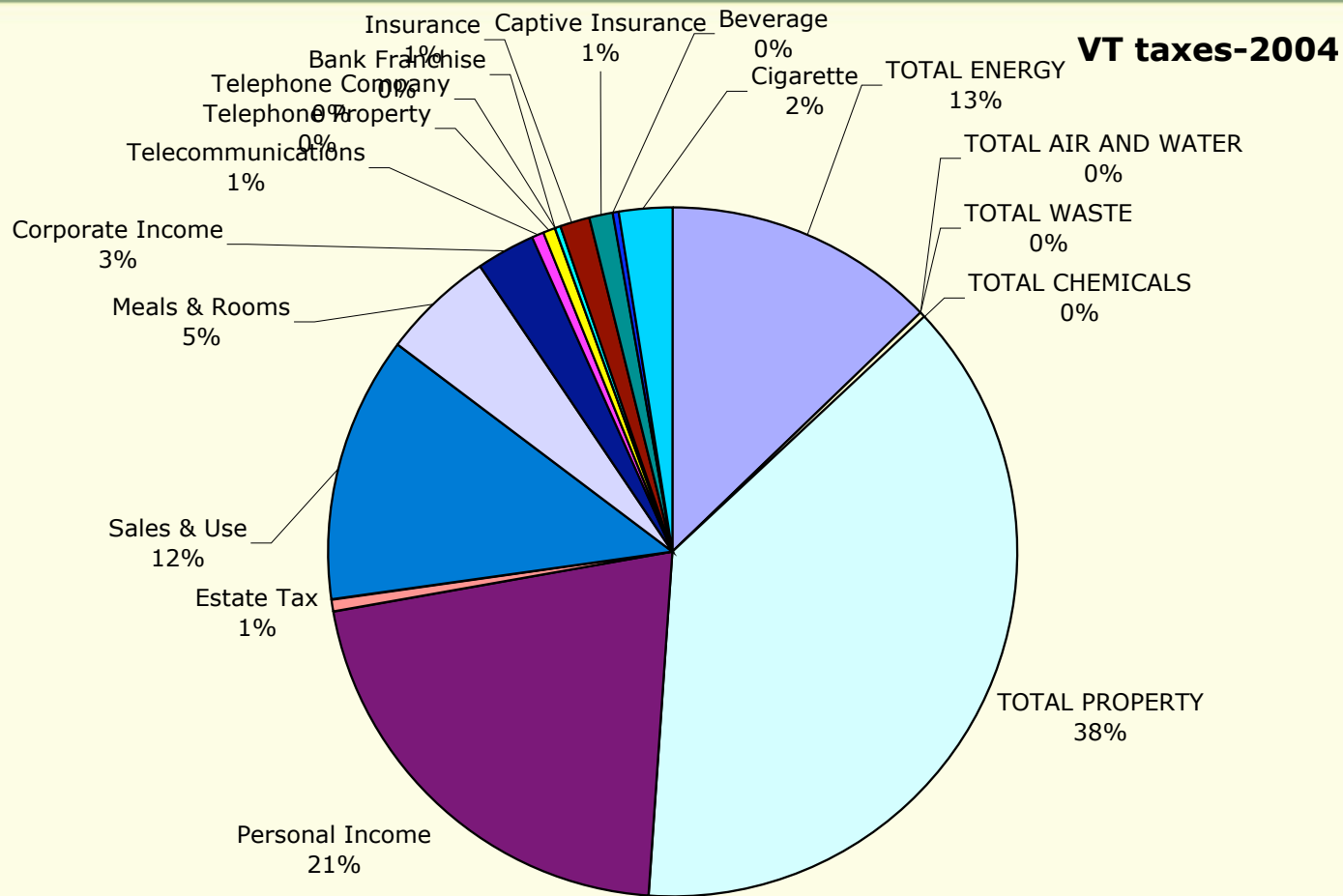
2003 VERMONT TAXES

VT TAXES-2003





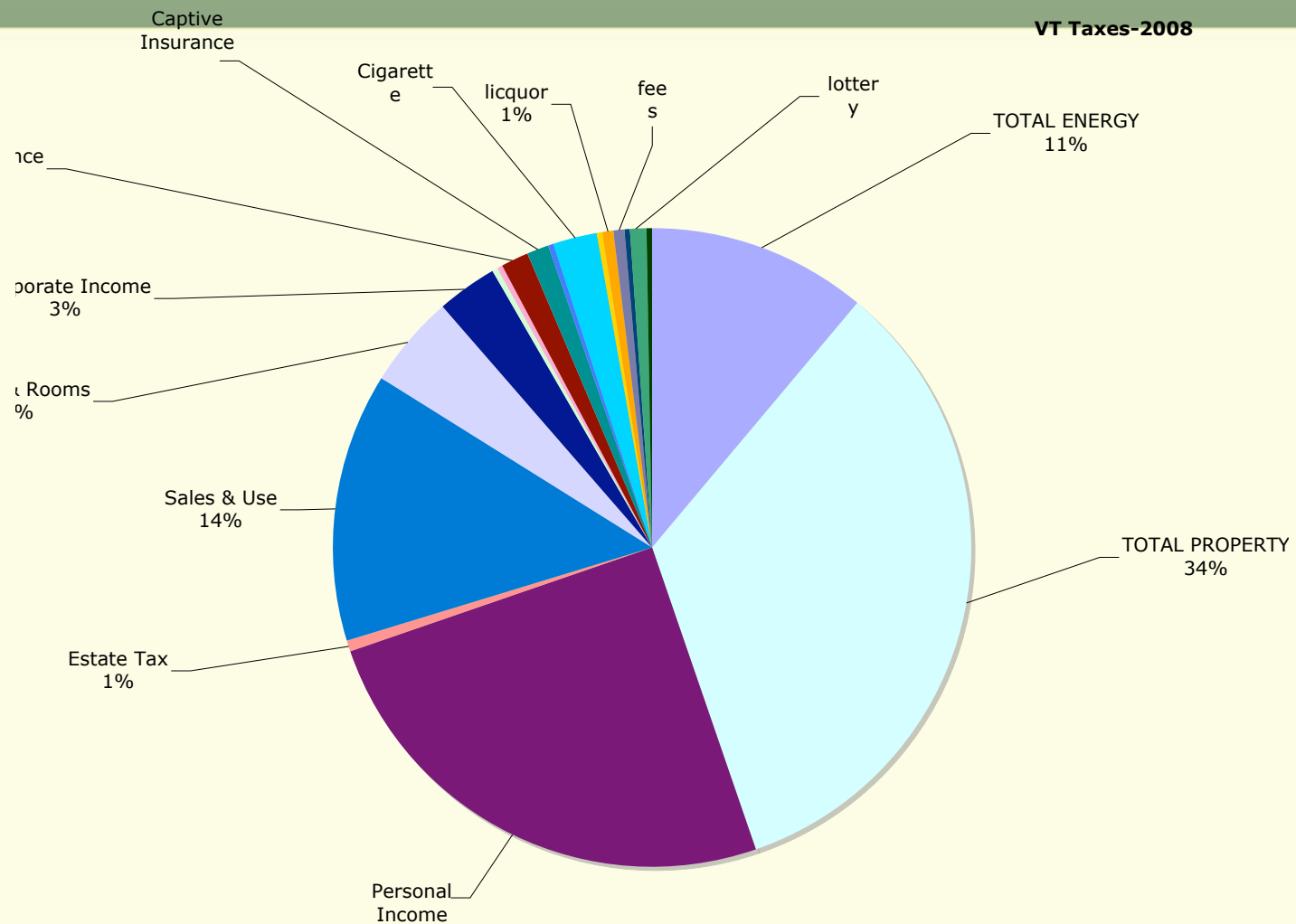
2004 VERMONT TAXES





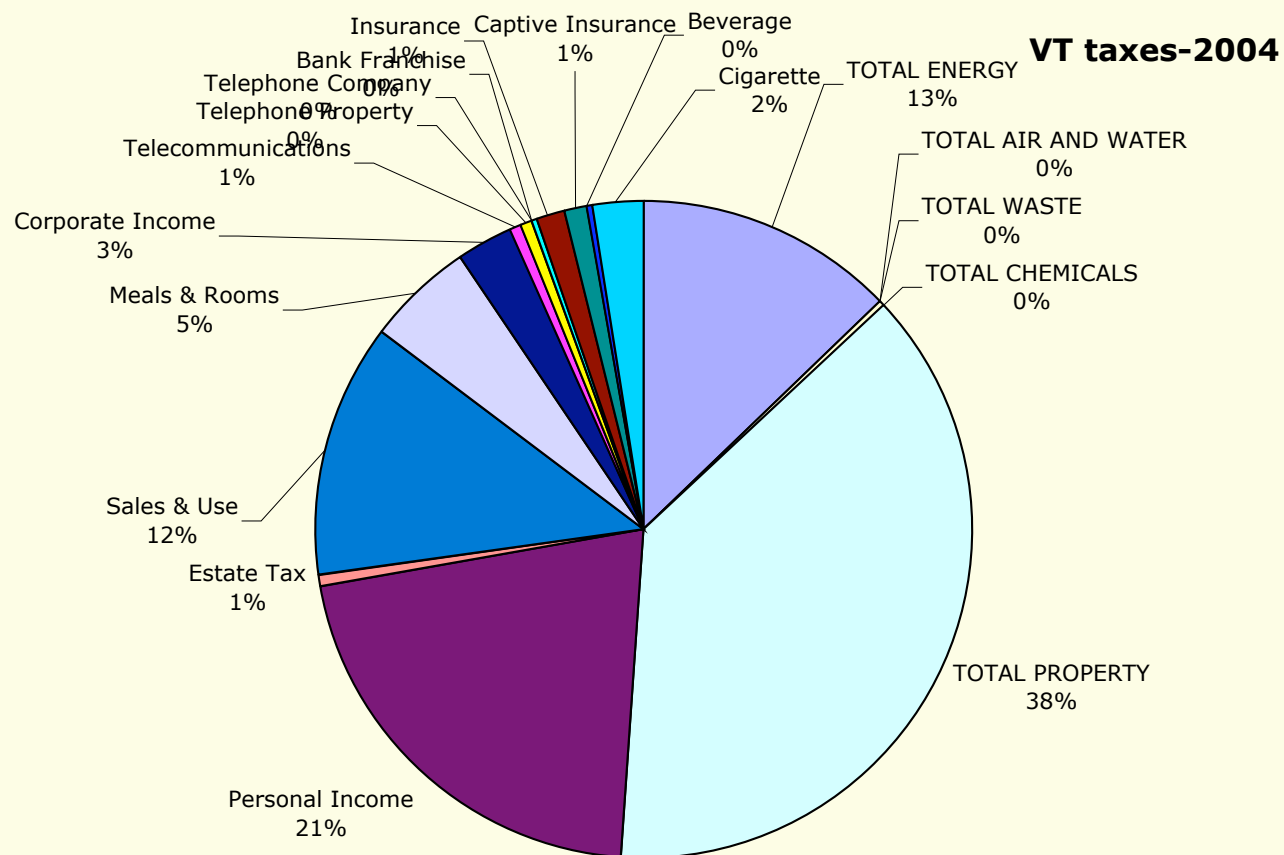
2008 VERMONT TAXES

VT Taxes-2008





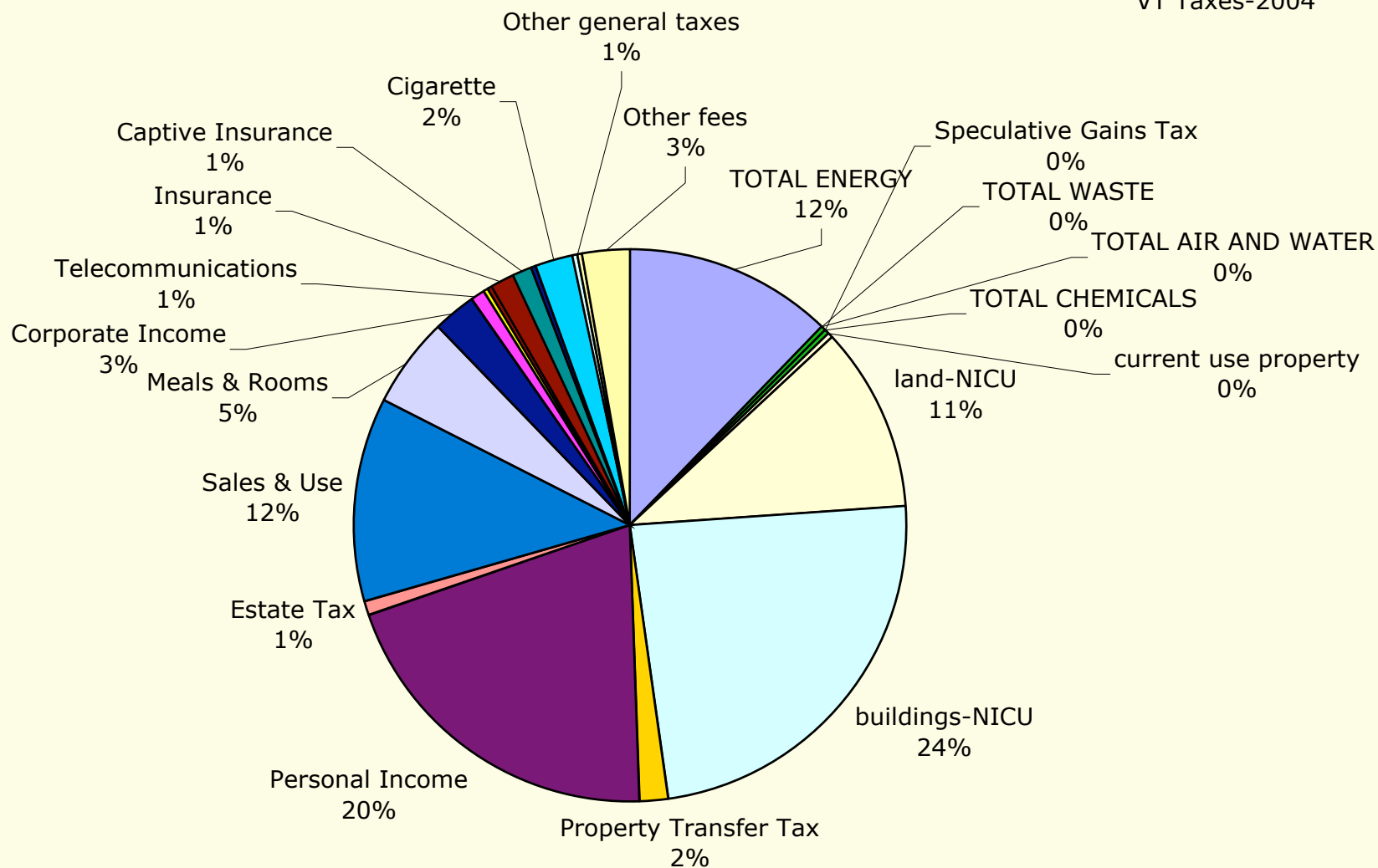
2004 VERMONT TAXES





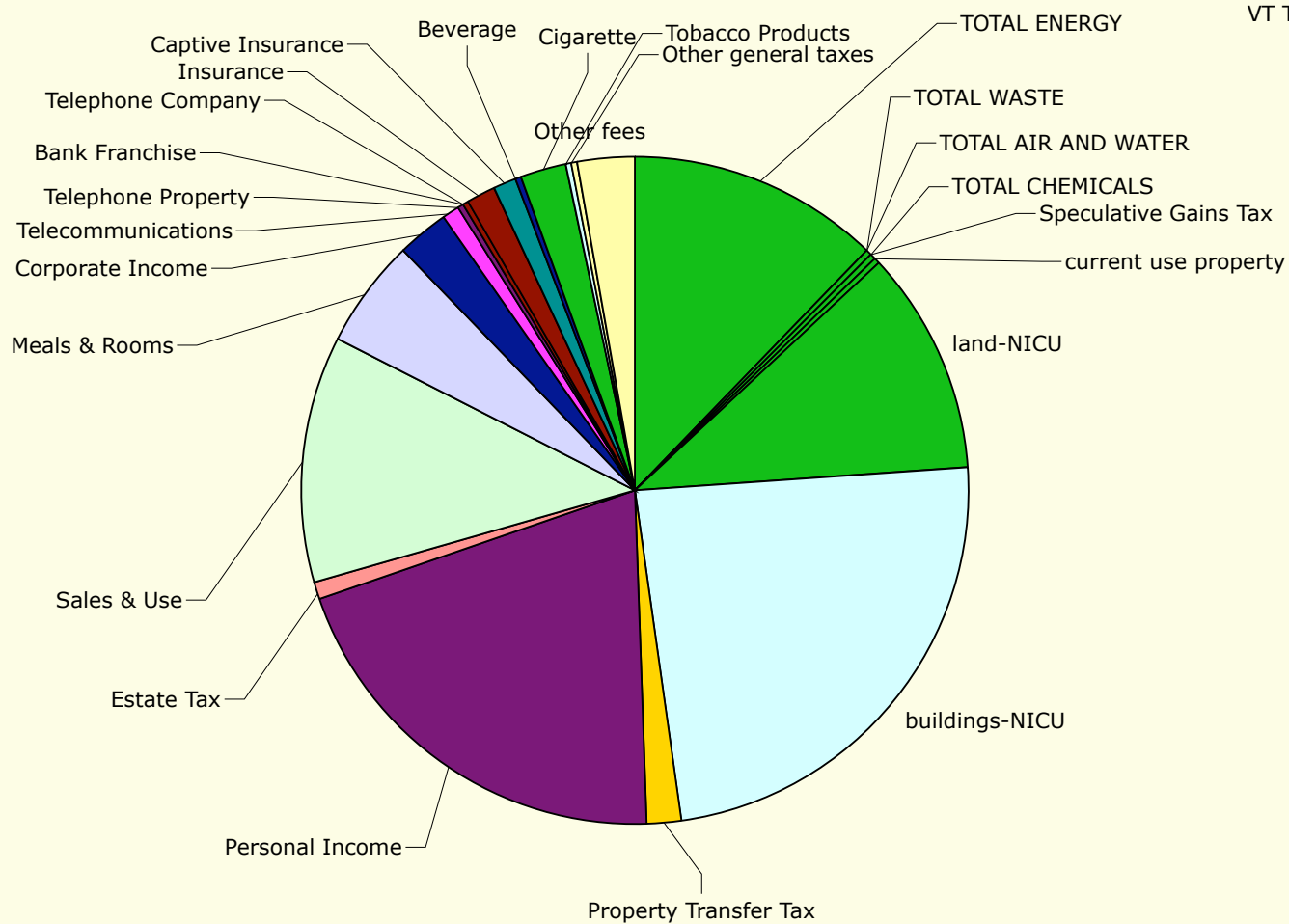
2004 VERMONT TAXES: LAND&BLDGS

VT Taxes-2004





2004 VERMONT GREEN TAXES





GREEN TAX CRITERIA

- 1.ECONOMIC EFFICIENCY**
- 2.DISTRIBUTIVE EQUITY**
- 3.ENVIRONMENTAL PROTECTION**
- 4.EASE OF ADMINISTRATION**



GREEN TAX NEW REVENUE

Topic	New Revenue Main Features	New 2004 Revenue	Old 2004 Revenue	Change
Energy	Carbon @ \$100/ton	\$521,540,000	\$259,269,147	+\$262,270,853
Property	2/3 on land, 1/3 on buildings	\$782,118,363	\$782,118,363	\$0
Waste	\$2/bag	\$155,005,344	5,901,672	+\$149,103,672
Air and Water	1c/gal >100gals	\$91,053,285	1,201,769	+\$89,851,516
Chemicals	\$300 pesticides fee	\$3,148,000	932,100	+\$2,215,900
General	same	\$1,012,614,704	\$1,012,614,704	\$0
Other fees	same	\$56,585,608	\$56,585,608	\$0
Total		\$2,622,065,304	\$2,118,623,363	+\$503,441,941



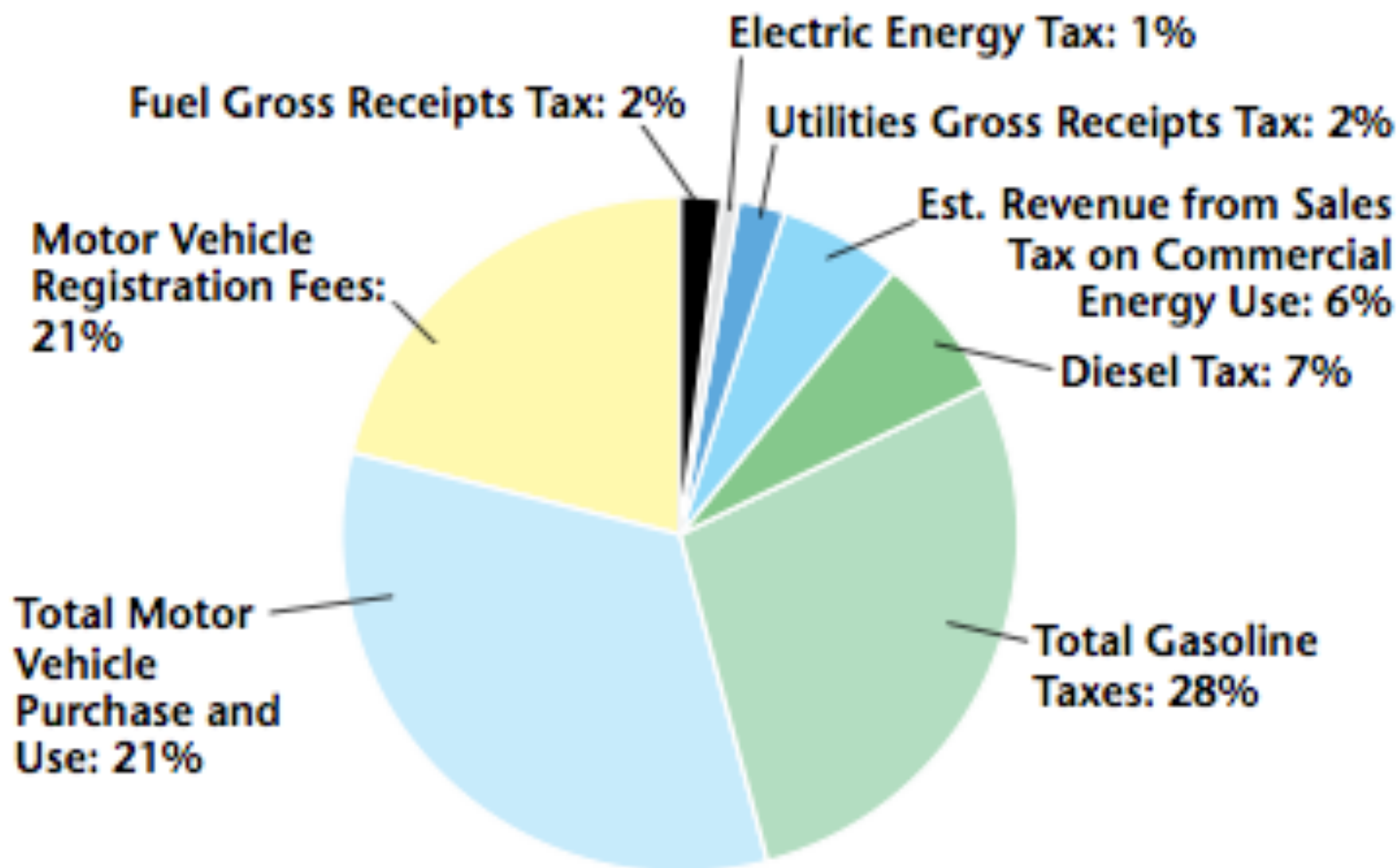
VT Energy Taxes

Energy Tax	Rate	'04 Revenue	New Rate	'04 Revised Revenue
Gasoline tax	\$.19 / gal	\$71,400,000	0.02	\$7,200,000
Diesel Tax	\$.17-.26 / gal	\$18,000,000	0.02	\$1,800,000
Sales Tax on Commercial Energy use	5% * (with exceptions)	\$15,000,000	0	\$0
Utilities Gross Receipts Tax	.3-.5% of gross operating revenue	\$5,669,316	0	\$0
Fuel Gross Receipts Tax	.5% on retail sales	\$5,532,603	0	\$0
Electric Energy Tax	2.75% of appraised value	\$2,767,228	0	\$0
Petroleum distributor license fee (clean-up)	Part of gasoline tax (.01)	(\$3,600,000)	0.02	\$7,200,000
Carbon tax	none	0	\$100/ton	\$216,200,000
Nuclear and large hydro tax	none	0	0.0084	\$148,300,000
Total Motor Vehicle Purchase and use tax	6% of purchase price of motor vehicle	\$86,200,000	same	\$86,200,000
Motor vehicle registration fees	based on type, size, weight, and purpose of vehicle	\$54,700,000	same	\$54,700,000
Total Energy Taxes		\$259,269,147		\$521,540,000



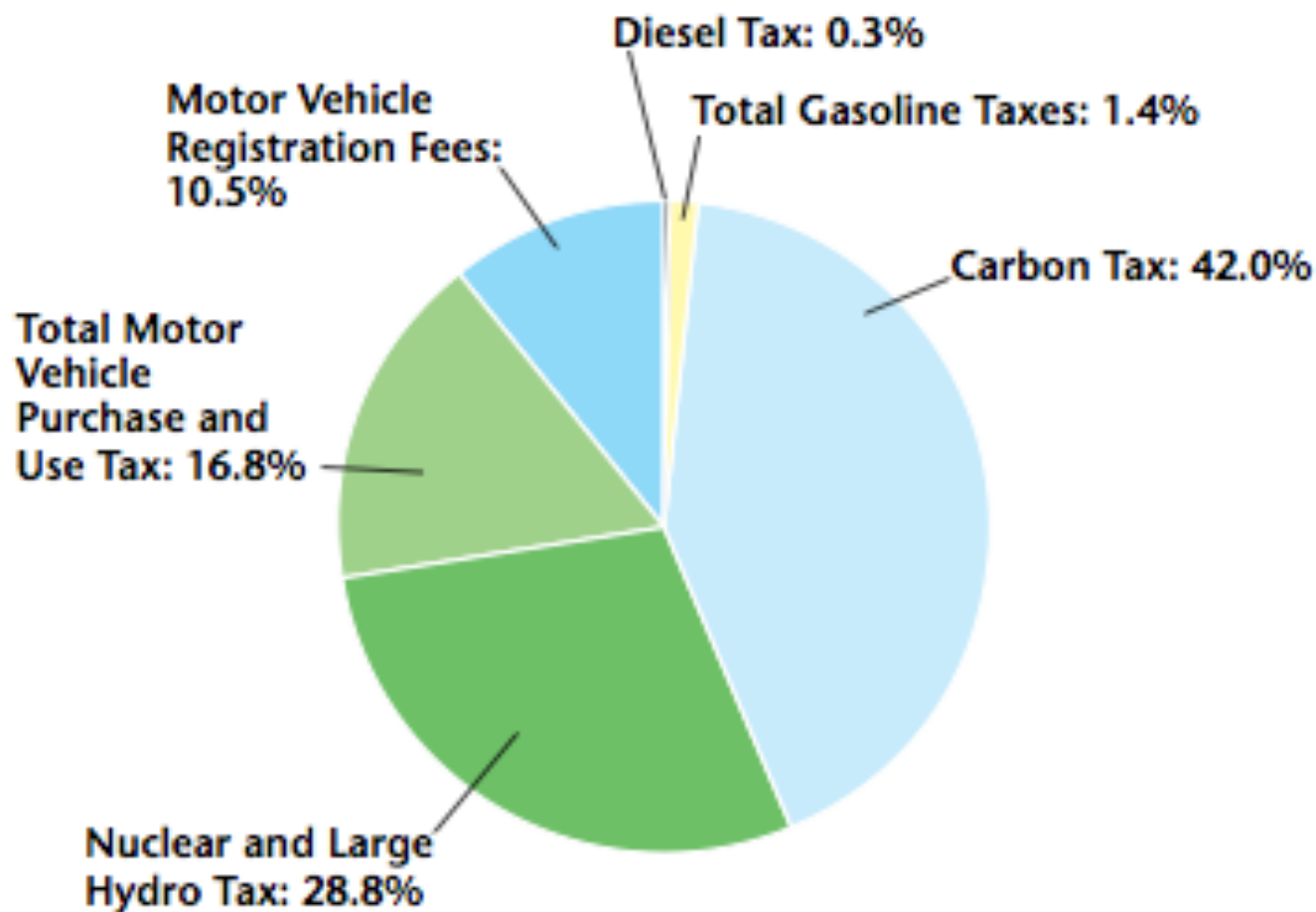
VT Energy Taxes

Vermont 2004 Energy Taxes



VT Energy Taxes

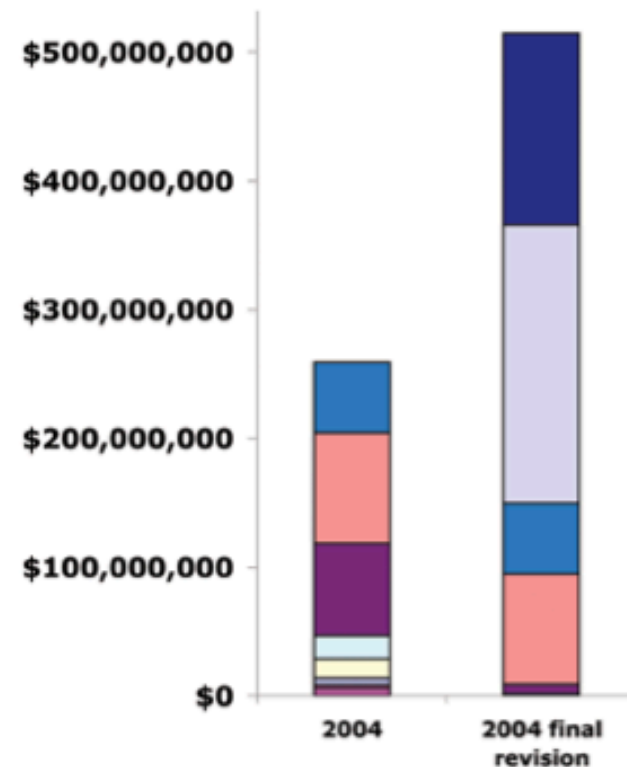
2004 Revised Energy Taxes





VT Energy Taxes

Vermont 2004 Energy Taxes

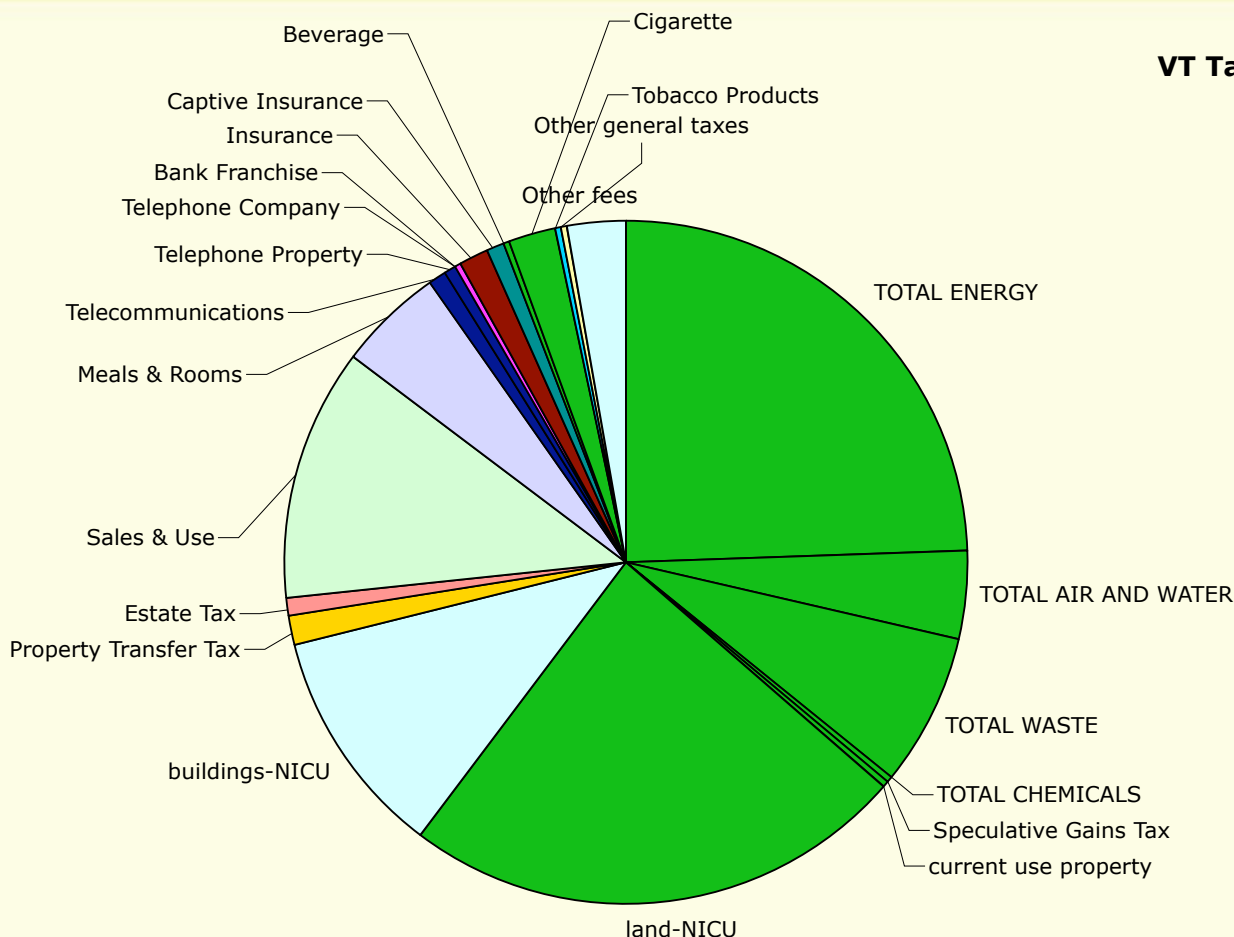


- Nuclear and large hydro tax
- carbon tax
- Motor vehicle registration fees
- Total Motor Vehicle Purchase and use tax
- Total gasoline taxes
- Diesel Tax
- Estimated Revenue from Sales Tax on Commercial Energy use
- Utilities Gross Receipts Tax
- Electric Energy Tax
- Fuel Gross Receipts Tax



GREEN TAX SHIFT OPTION 1

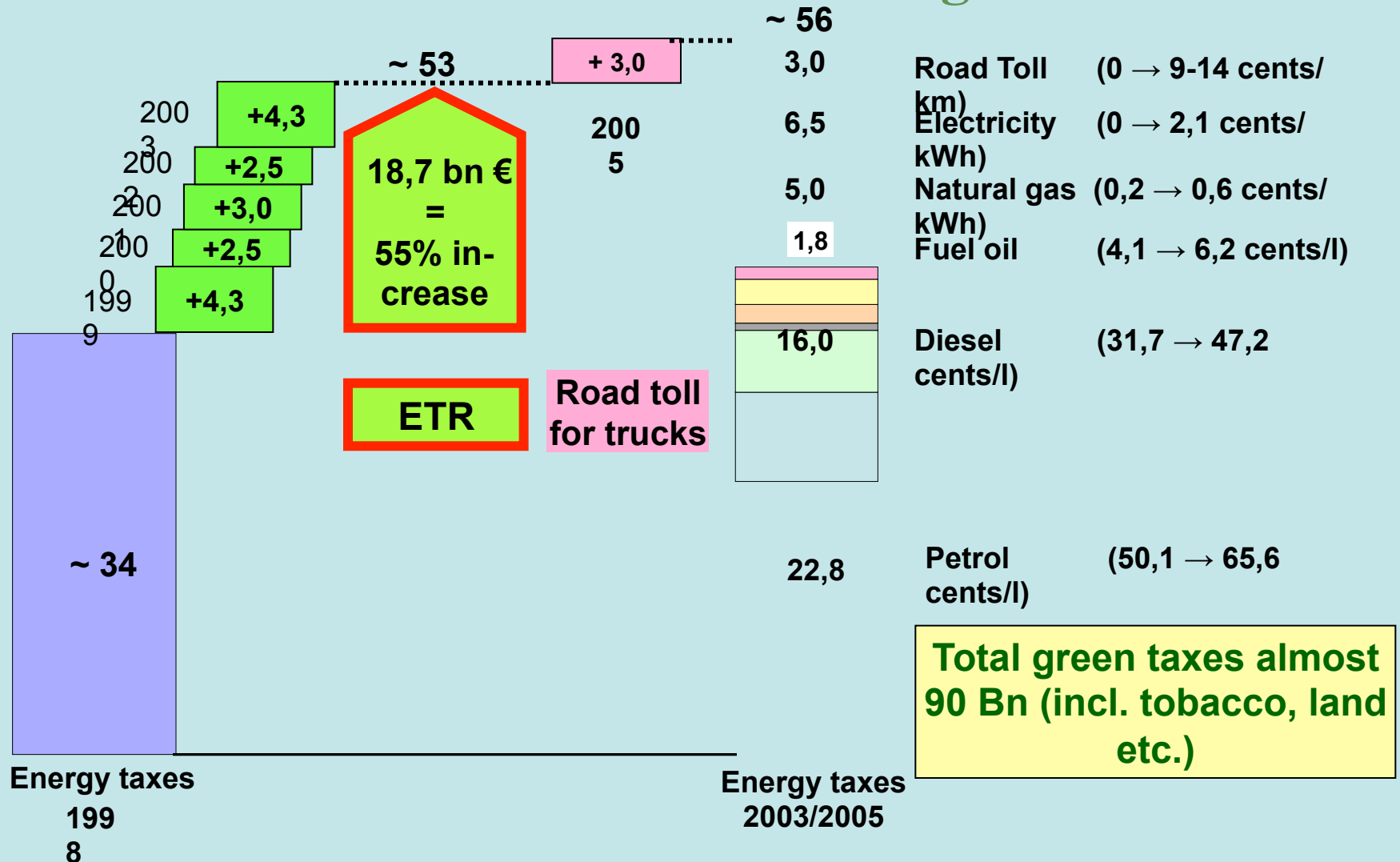
VT Taxes-2004 REVISED



- Offset Individual income tax -\$429.5M
- Offset Corporate/business income tax -\$55.5M
- Offset Telecommunications tax -\$15M

FINANCIAL EFFECTS OF 1999 ETR IN GERMANY (IN BILLION EURO)

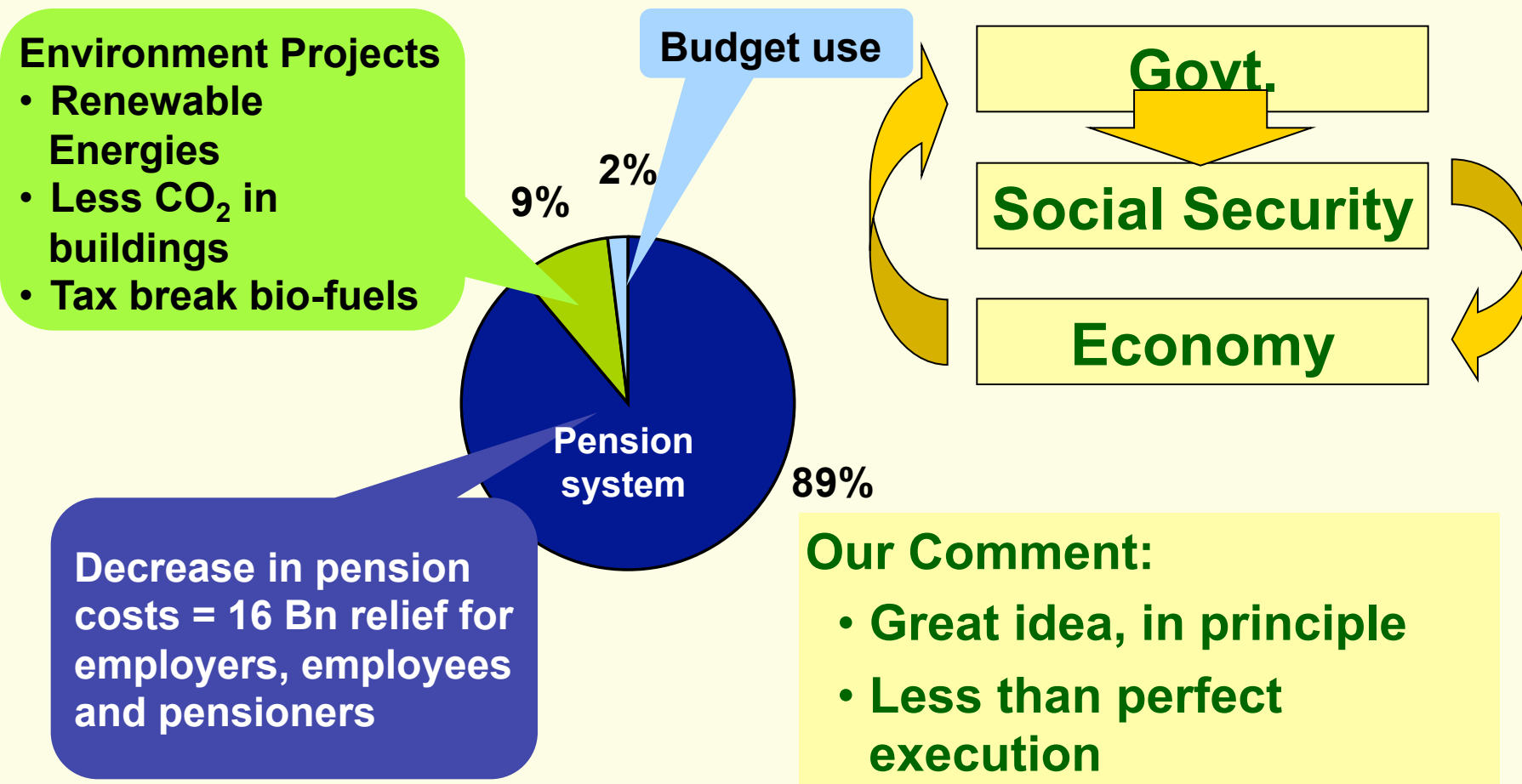
**Energy taxes in Germany increased by 55 percent,
additional increase in 2005 through truck toll**





GERMAN ETR: RECYCLING OF THE RETURNS

Almost 90 Percent was recycled to citizens in order to reduce labour cost





First Results of Ecological Tax Reform

- **Fuel consumption (-16%)**
- **CO₂-emissions (2-2,5%)**
- **Pension costs (-16 bn)**
- **Costs for industry (-1 bn)**
- **Empty truck travel**
- **Imported fossil fuels (-13%)**
- **Overall tax burden (-4 %)**

Less

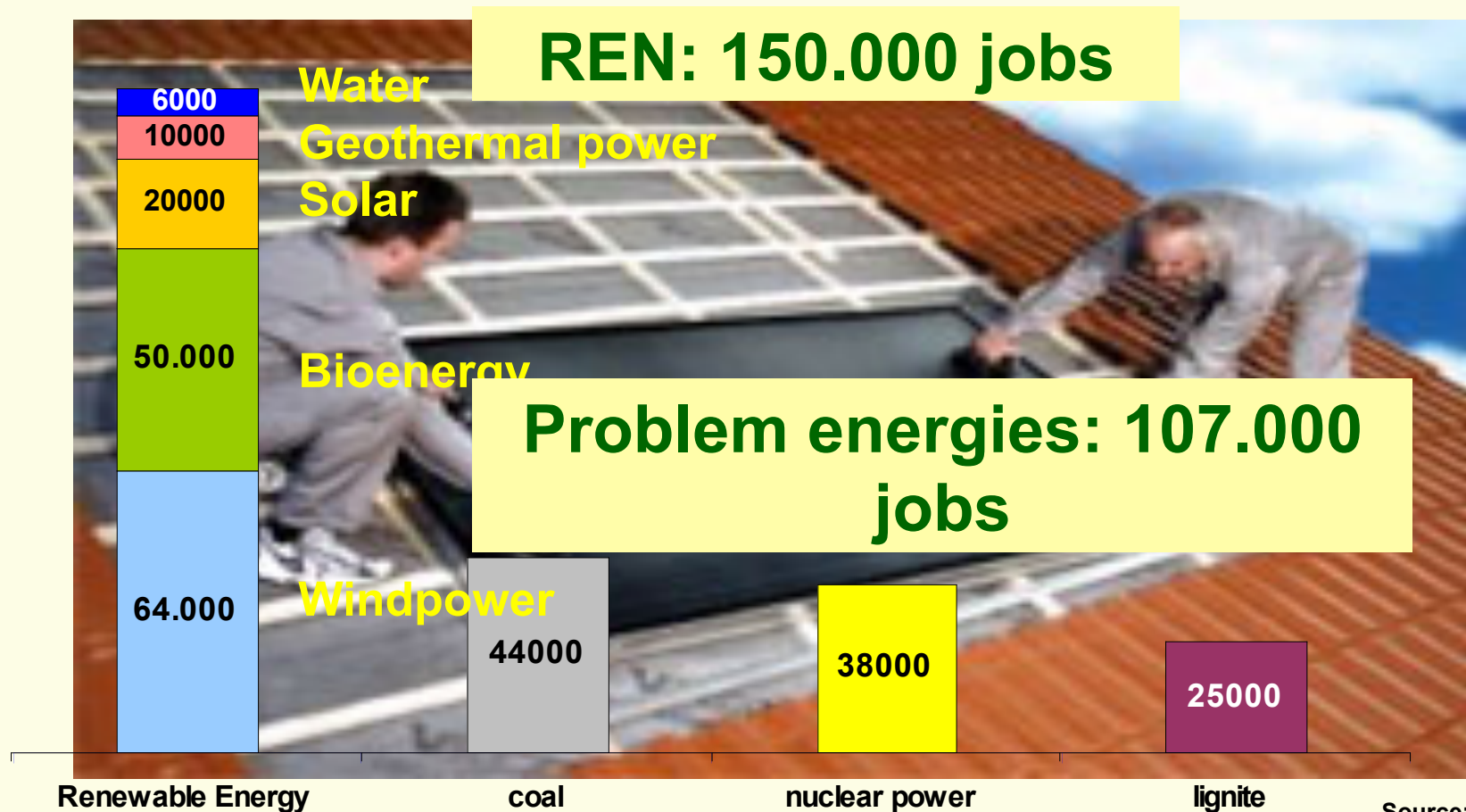
More

- **Tax share of Nature**
- **Car sharing (+70 %)**
- **Public transport (+5 %)**
- **Energy saving technologies**
- **Energy efficiency**
- **Gas-powered cars (x10)**
- **Bio-fuelled cars (x2)**
- **Job creation (≈ 250.000)**
- **Renewable energies**



JOBS IN THE ENERGY SECTOR IN GERMANY 2005

More jobs in RENs than in our heavily subsidized problem energies





PAYROLL vs INCOME TAX

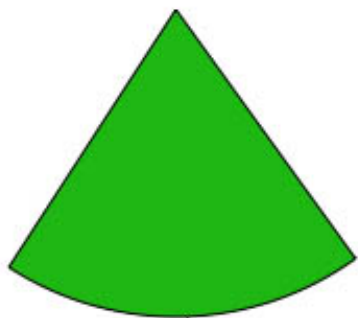
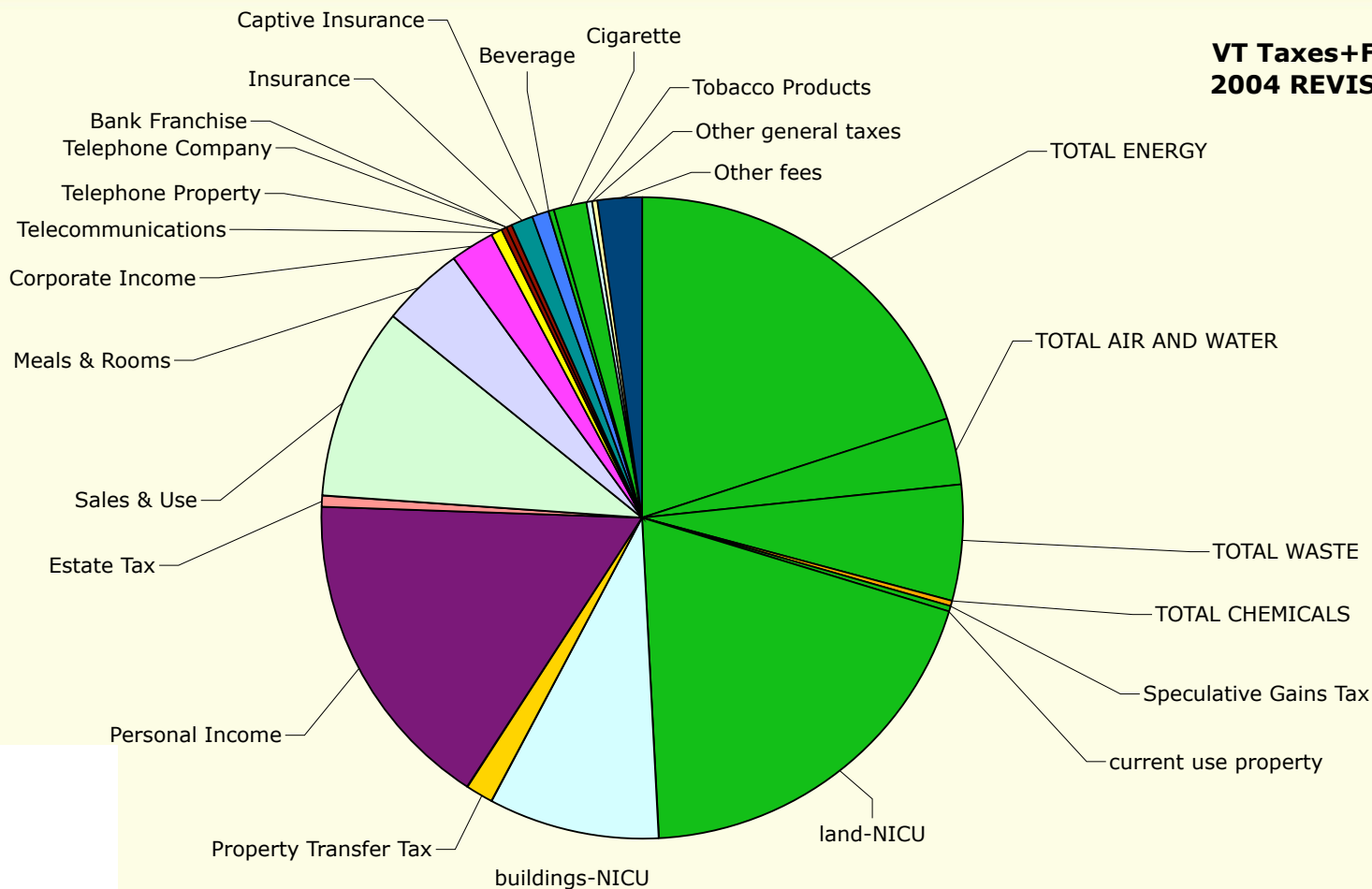
Income employee	VT income tax	FICA employee	FICA employer	Self-employed
\$10-\$15K	0	\$956	\$956	\$1912
\$15-\$20K	\$79	\$1340	\$1340	2680
\$25-\$30K	\$633	\$2486	\$2486	\$4972

PAYROLL TAX MUCH MORE REGRESSIVE!



GREEN TAX SHIFT OPTION 2

**VT Taxes+FPT
2004 REVISED**



Fed Payroll tax

-\$500M Payroll tax <\$35K income and pro-rate above
Or cash refund

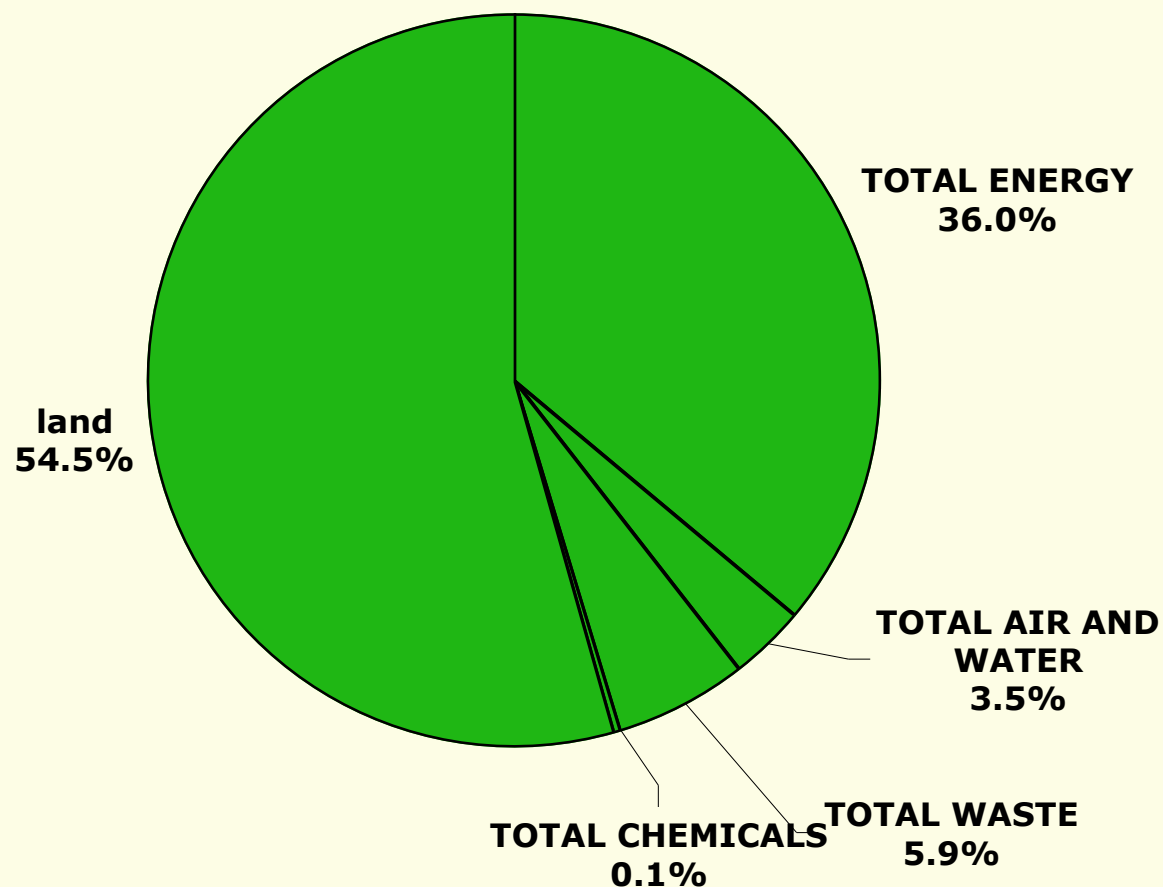


100% Green shift-OPTION 3

2004-100% GREEN

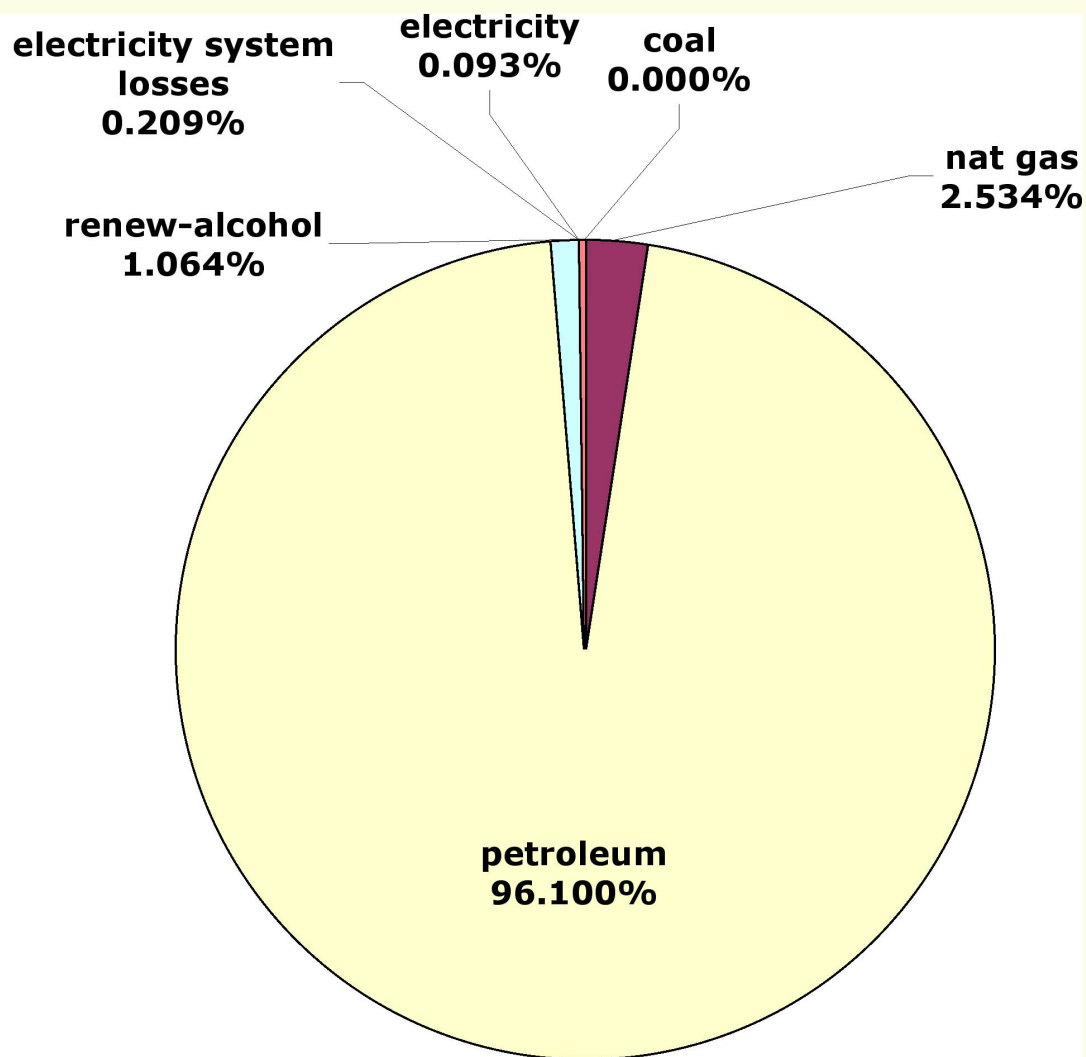
Carbon	\$300/ton
Land	9.6%
Waste	\$2/bag
Water	1c/gal >100gals
Chem product fee	\$300 on pesticides

\$2.6B revenue





Why should we?



Transportation sector energy use 2004 (quadrillion BTU)



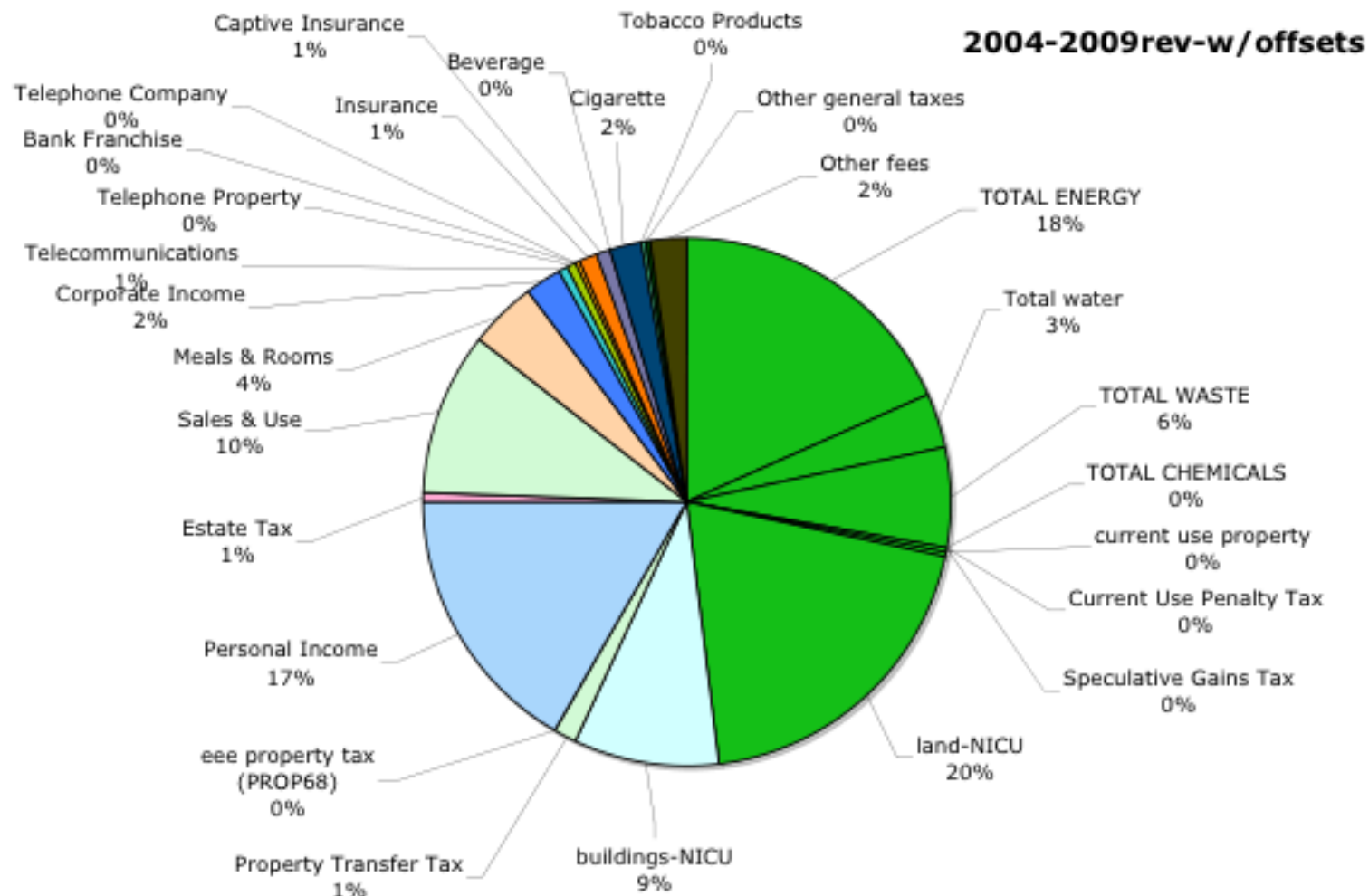
Tax Commission

Revised summary of Green Tax shift measures:

ITEM	New Revenue
Carbon tax \$20/ton	\$168,800,000
Pay as you Throw Solid Waste \$2/bag	\$149,103,672
Bottlers-groundwater rent	\$80,546,400
Property shift: 2/3 land, 1/3 buildings	0
Chemicals	\$2,215,900
Other new revenue	\$50,304,643.10
TOTAL NEW REVENUE	\$448,756,931
Carbon tax rebate	\$168,800,000
Payroll tax rebate	\$279,956,931

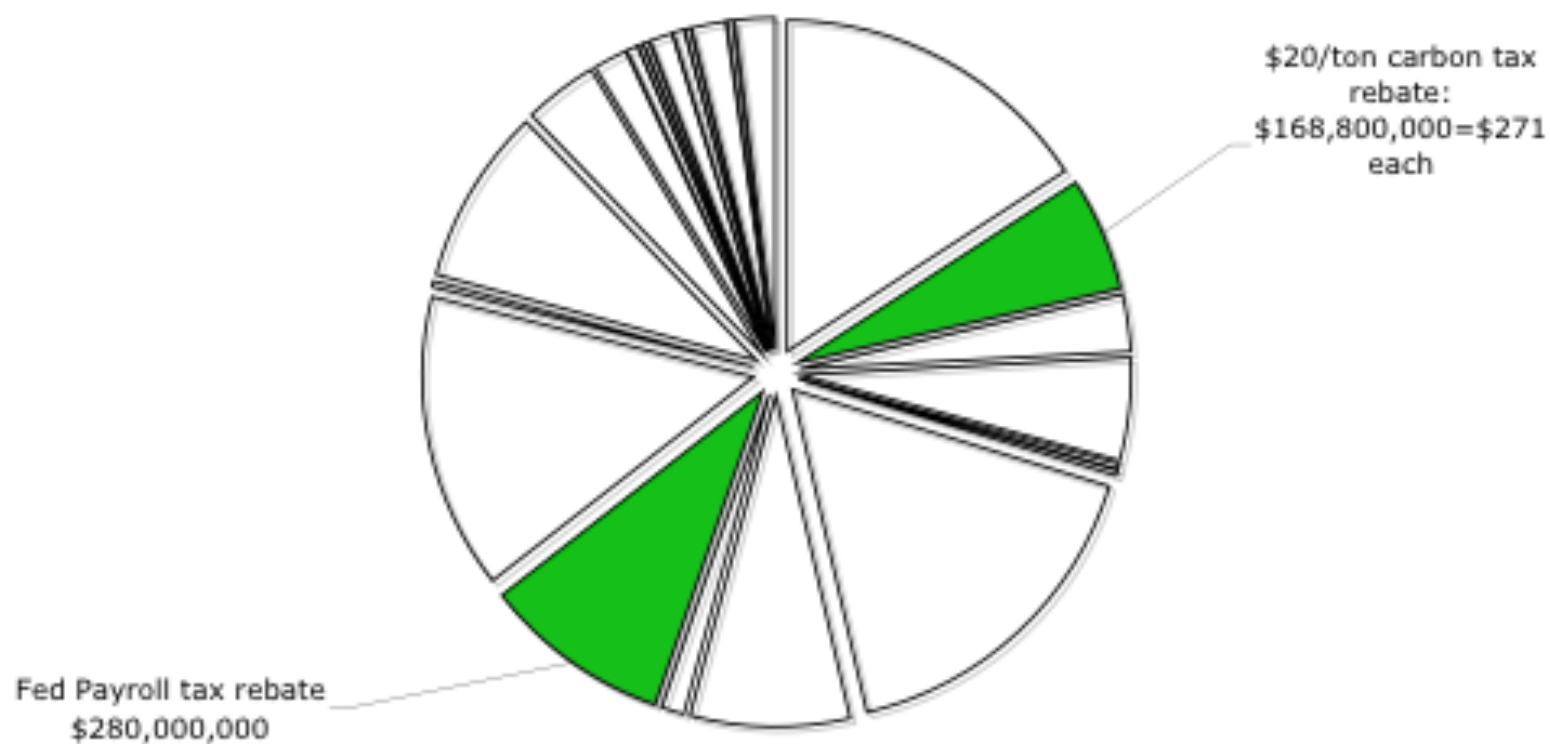


Tax Commission



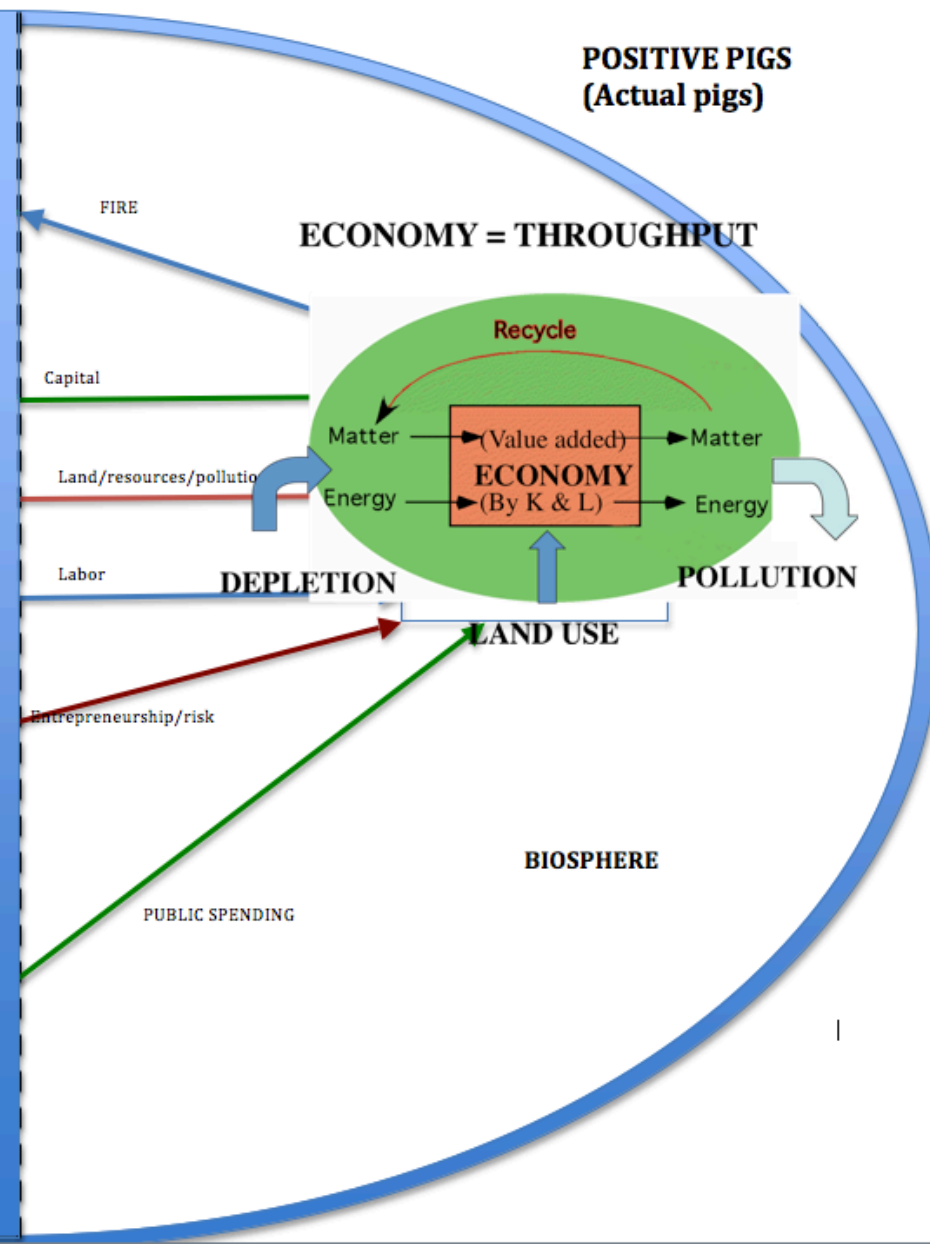
Tax Commission

2004-2009 rebates





FINANCIAL THROUGHPUT





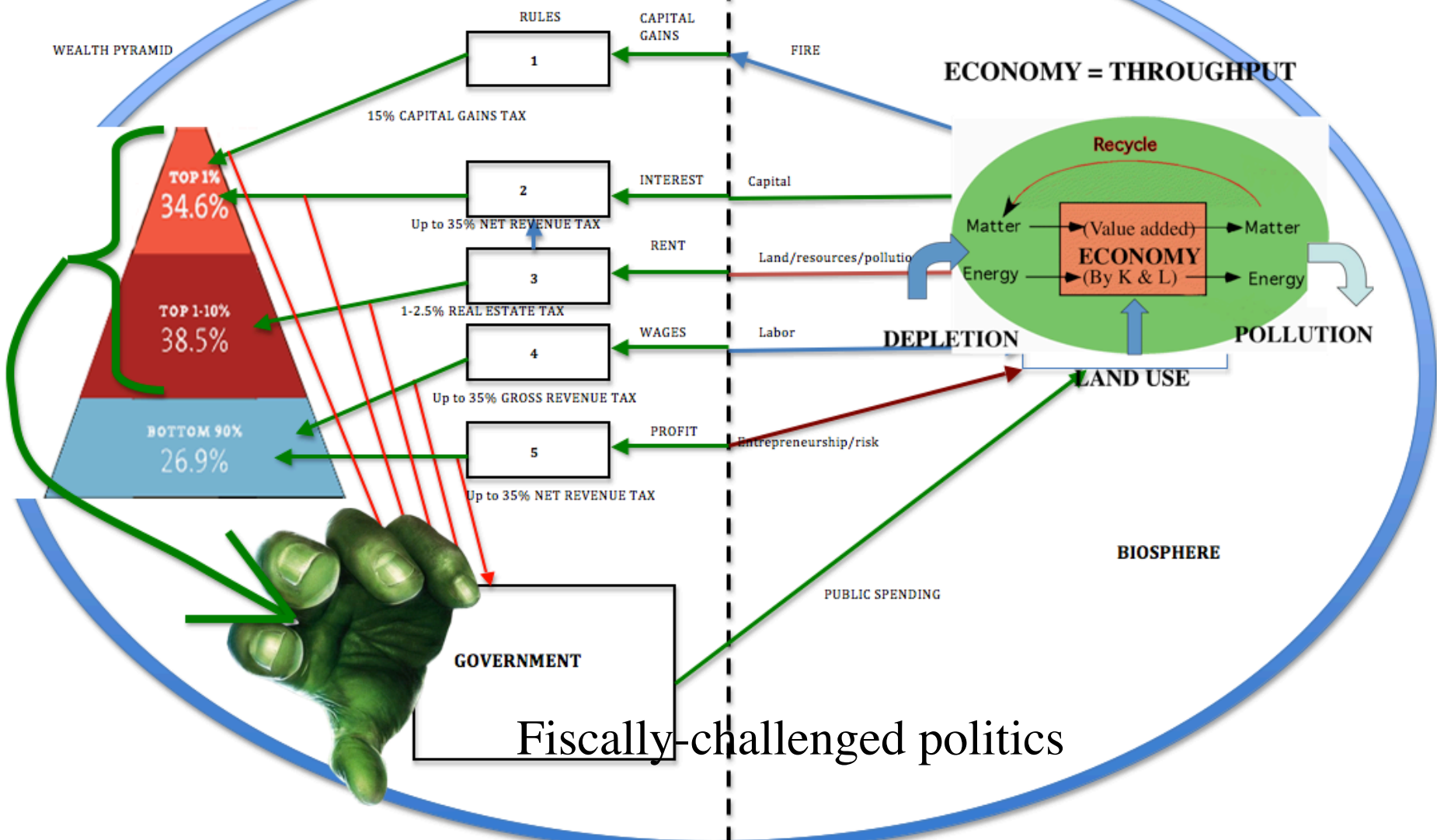
FINANCIAL THROUGHPUT

NEGATIVE PIGS (Claims on future pigs)

(Claims on future pigs)

POSITIVE PIGS (Actual pigs)

(Actual pigs)



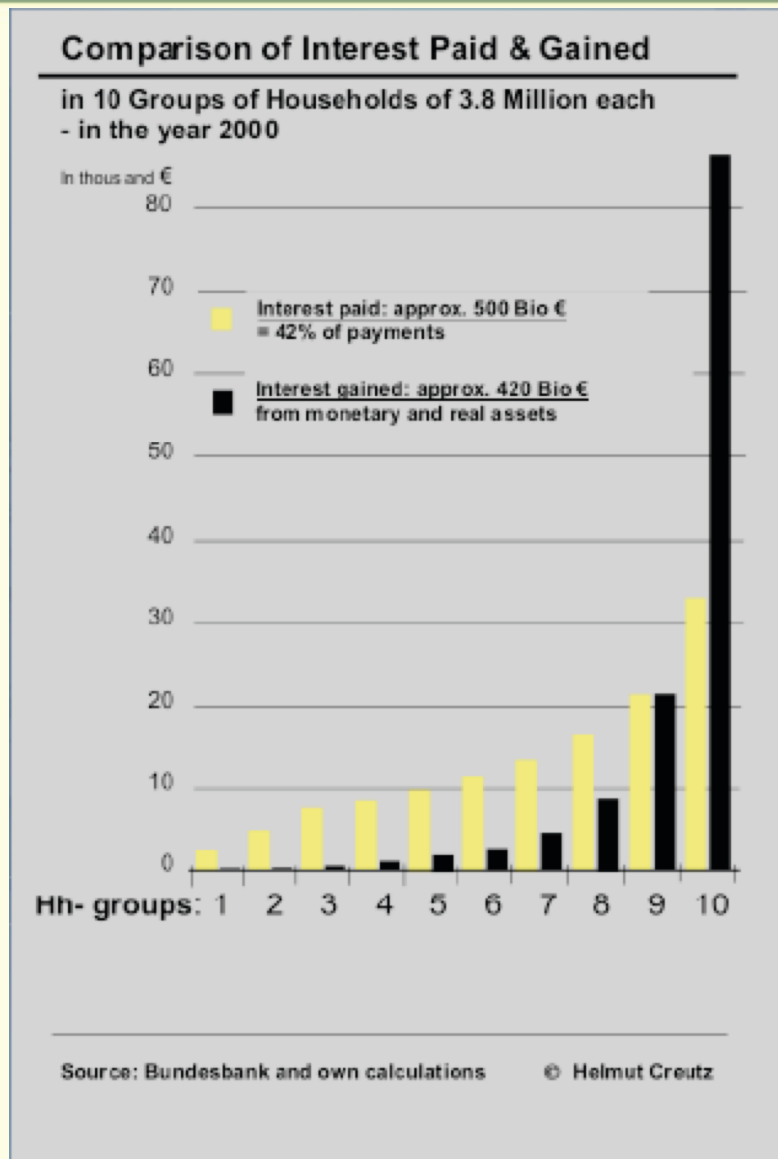


RULE #1:capital gains

- “FIRE” sector (Finance, Insurance, Real Estate) will get 20% of national income. Taxed at 15% or less. When they collapse the economy, they will be bailed out with federal reserve and taxpayer funds. No one will be indicted or held accountable for massive fraud and malfeasance.

RULE #2: interest

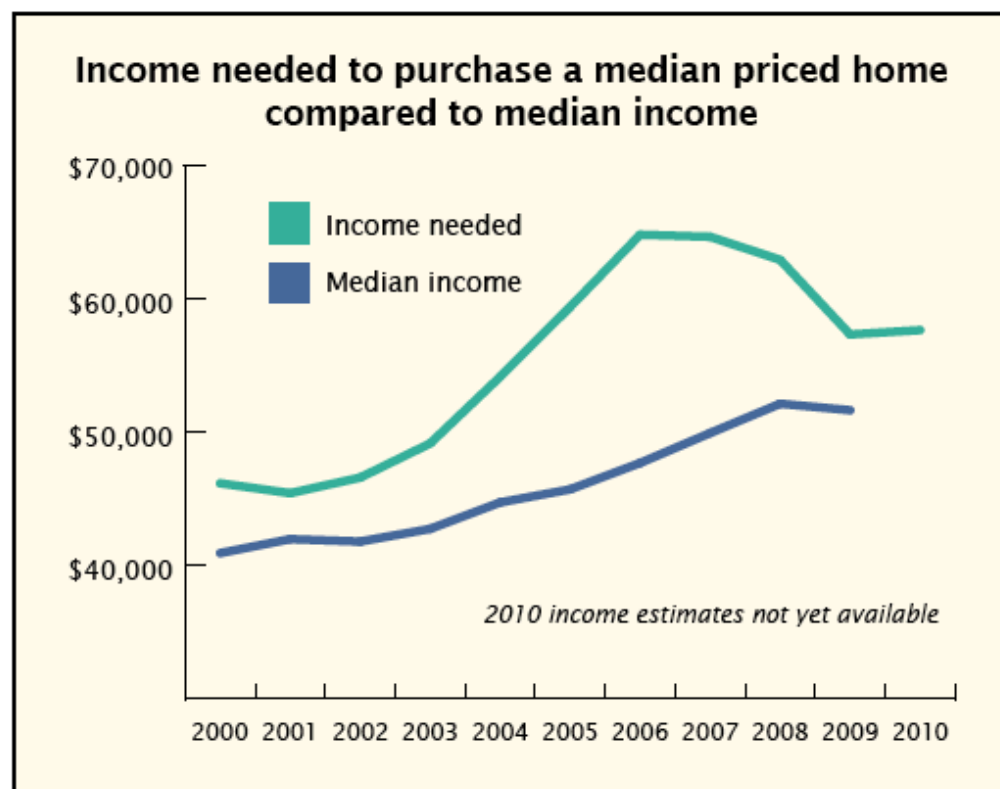
Top 10% will gain on interest. Bottom 90% will lose. Almost all money is created as interest bearing loans, so the entire money supply is a source of transfer of wealth from bottom 90% to top 10%.





Rule #3: land rent

Socially created land values will accrue to landowners. Most of real estate equity is held by banks. Landowners pay minimal land tax of 2-2.5%. Land rent absorbs most of social surplus driving wages to subsistence. Median income will be much less than needed for median house mortgage payment or median rent in many places.



SOURCE: "INCOME NEEDED" ESTIMATES ARE BASED ON VT PROPERTY TRANSFER TAX DATA AND AFFORDABILITY ASSUMPTIONS LISTED IN ENDNOTE 8. "MEDIAN INCOME" ESTIMATES ARE BASED ON DATA FROM THE 2000 CENSUS AND THE AMERICAN COMMUNITY SURVEY FROM THE U.S. CENSUS BUREAU AND ON VERMONT INCOME TAX SUMMARY DATA FROM THE VT DEPARTMENT OF TAXES.



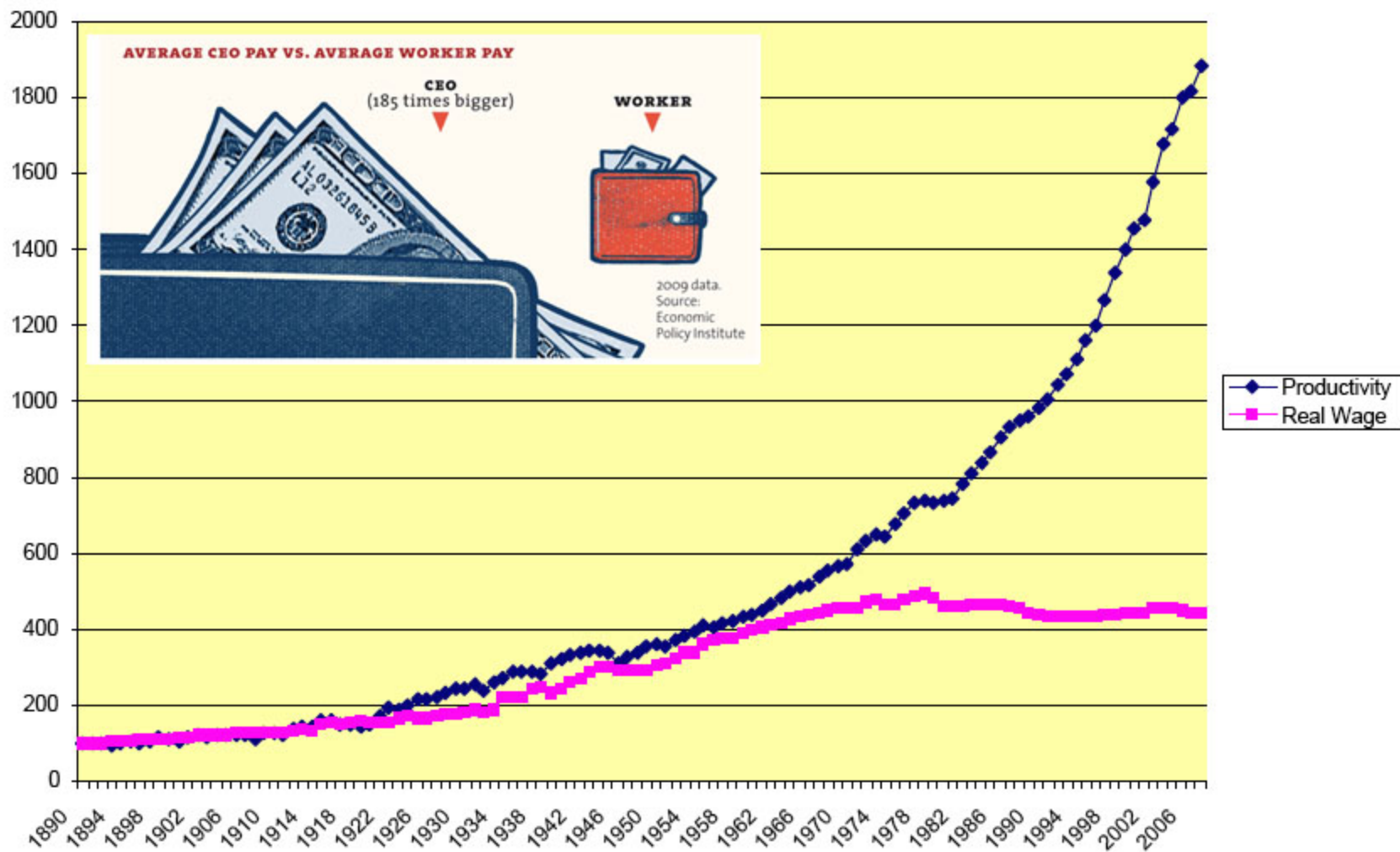
Rule #4: wages

Labor will get nothing from increased productivity after 1975. Real Wages will remain constant from 1975 on. Productivity gains will all go to rent, interest, and profit.



YEAR	Minimum Wage	Real Wage (inflation-adjusted)
1968	\$1.60	\$10.42
2001	\$7.25	\$7.25

Indexes of Output and Real Wage per Hour, Manufacturing, 1890 to 2007, Index 1890=100





REMEMBER BACK IN THE '50's WE LOOKED FORWARD TO
THE DAYS WHEN MACHINES WOULD BE DOING ALL THE WORK?

AND HERE THEY ARE!

I KNOW. NOW
REMIND ME WHY WE
THOUGHT WE'D STILL
BE GETTING PAID.

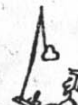


TUES

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HOW ELSE WOULD WE ALL BE ABLE TO
BUY OUR OWN PERSONAL AIRPLANES?





Rule #5: Income tax

- Business will be taxed on NET income, while individuals are taxed on GROSS income.
Many corporations offshore their income, pay no taxes, or get a refund.
- Both are persons: Equal protection violation?



MK Hubbert's Third Prophecy: Cultural Crisis

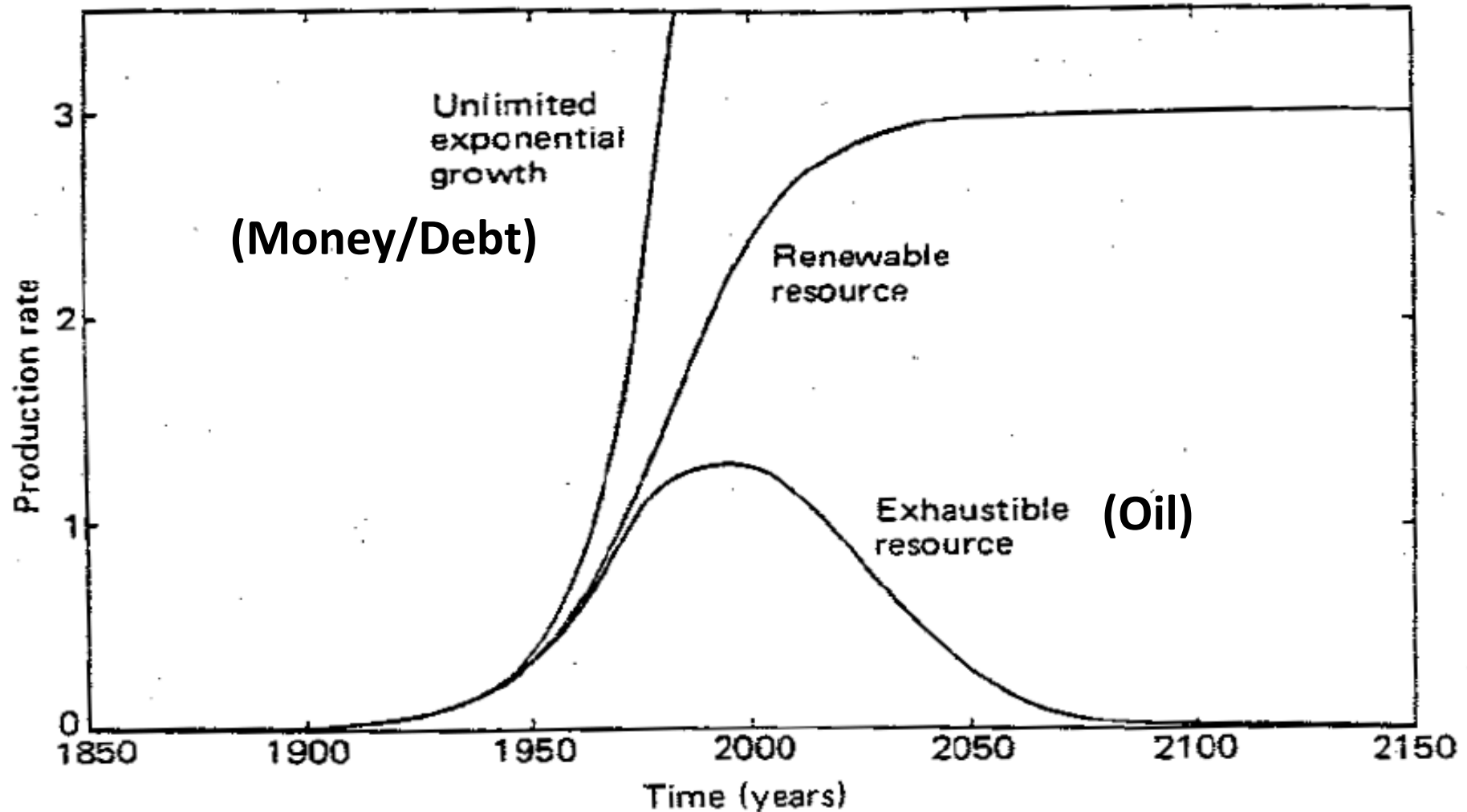


Figure 5.9
Three types of growth (Hubbert, 1974b, fig. 1).



Steady-State Econ Collaboratory

Fiscal and Monetary Policy for a Steady-State Economy

100% reserve requirements

Speculation taxes

Land rent

Common asset payments

Etc.

Please join us!



.25% Financial speculation tax

(A NO BRAINER)

Credit default swaps

Mortgage backed
securities
currency

hedges options

derivatives

Land
bubble

95% Speculation

Exemptions

IPOs, new stock

Venture Capital

Angel Investors

Small business loans

Etc.

\$269 Million



ASSET	CURRENT REVENUE	NEW REVENUE	INCREASE	
	MILLION \$	MILLION \$	MILLION \$	SOURCE
Air/transport	209	7-153	7-153	carbon permits
Air/heating	17	4-93.6	4-93.6	carbon permits
Air (total)		25.9	25.9	carbon permits
Fish and wildlife	14.7	10.4	10.4	fees
Forests	Net loss	3.2	3.2	depletion fees
Ground water	~0	107.9	107.9	bottlers
Internet	~0	30	30	ISPs & domains
Spectrum	~0	375	375	Auction
Minerals	3.7	9.7	6	Royalties
Surface Water	~0	31.2	31.2	user fee
Land	741	1071	330	land rent
Wind	0.75	5.5	4.75	progressive rent
Speculation *	(capital gains?)	269	269	.25% Tobin tax
Seignorage *	~0	35.7	35.7	1% of loans
Total new revenue			\$1.229 billion/year	
Per capita Dividend			\$1973 each/year	

Common Assets (depletion fees)



VERMONT COMMON ASSETS TRUST FUND

623,000

Date: 2009

Pay to the order of: **Every Vermont Citizen**

\$1,972.00

One thousand, nine hundred seventy-two and 00/100 Dollars

For: **Payment for use of common assets**

Treasurer of Common Asset Fund