

EIC 25 BY 25 PLAN

SPRING GREEN'S PATH TO
ENERGY INDEPENDENCE

DECEMBER 17, 2009

We CAN increase our renewable energy by 100% by 2025

2009

0

2025

564 MMBtus

Plus Alliant Energy

416.7 MMBtus

TOTAL

981 MMBtus

PATH TO 25 X 25

	<u>Offset</u>	
Pool Solar H ₂ O	33%	2010
Library Solar PV	50%	2015
Bio-Diesel	5%	2020
RV School Spring Green campus Solar PV		
Elementary	4.5%	Depends on referendums and budget shortfalls
Middle	3%	
High	1.4%	
High School Solar H ₂ O	<1%	
Bio-diesel	5%	2020

WHAT WE MEASURED

- energy usage - '06, '07' and '08
- 6 renewable site assessments
- 1 informal opinion from Larry Krom
- 13 walk-thru audits-"conditioned" bldgs.
- 1 cost feasibility study

CONSIDERED--not selected

- WWT Plant anaerobic conversion
- Maximum capacity installations of Solar PV at River Valley Spring Green campus:

HS	4.9%	<input type="checkbox"/>	<input type="checkbox"/>
ES	20.1%		
MS	32.0%		
- Solar H₂O at Middle School

WHY?

- Too small
- Cost is “outta sight”
- High school used more hot water

UNKNOWN--next 15 years

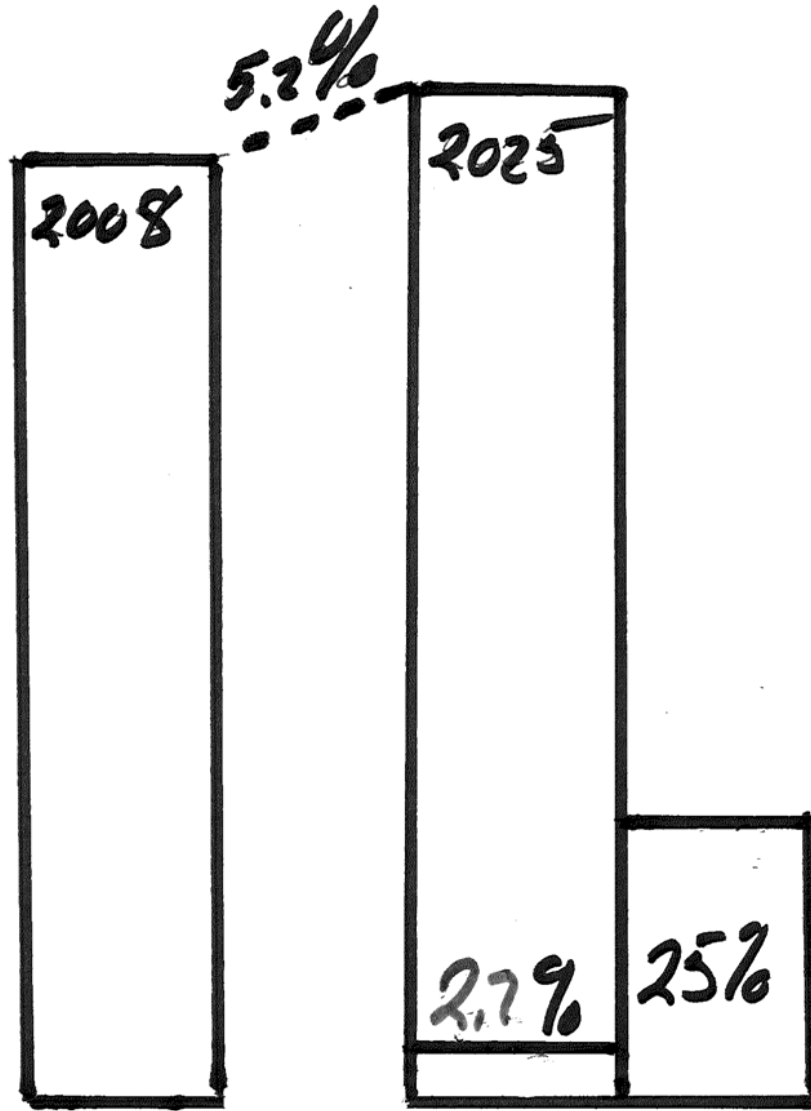
- Village Hall
- RV School District declining enrollment-
? of remote elementary schools
- Economic activity: Cardinal Glass and
Furthermore Brewery

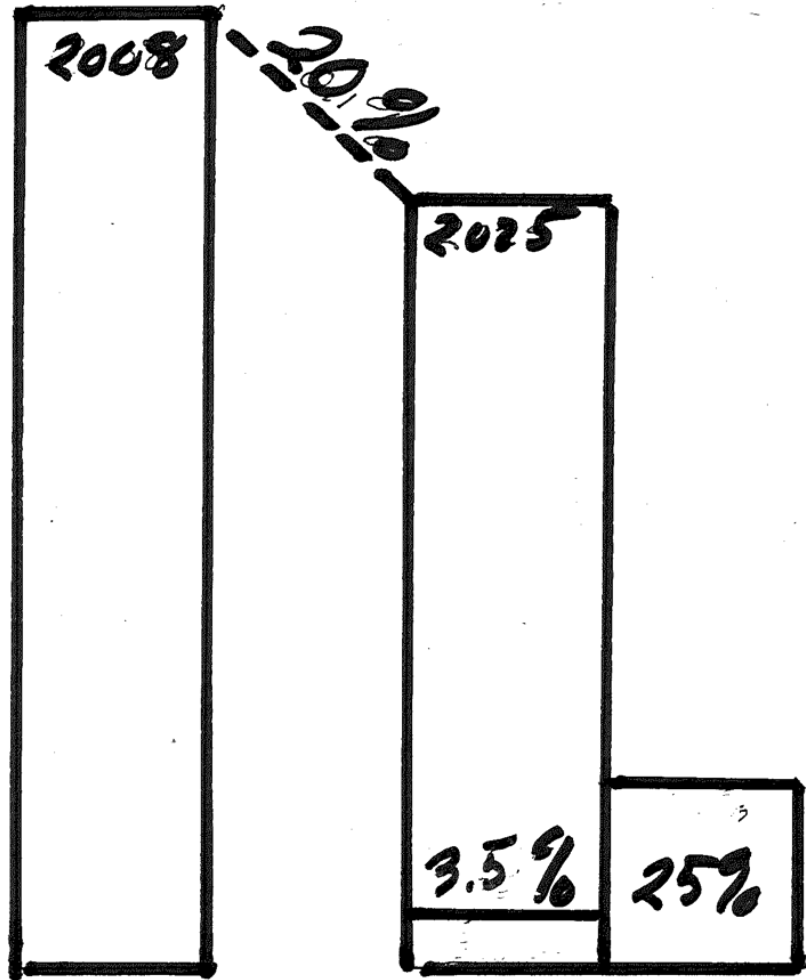
ARE THERE LIMITS TO RENEWABLES in Spring Green?

- Feedstocks?
 - woodchips-Muscoda too far
 - TimberGrowers-too small
 - Hanour manure to WWT-ag demand
- Thermal for school heating?
- Solar- PV's on all roofs and ground mount available land?

WHY ENERGY REDUCTIONS?

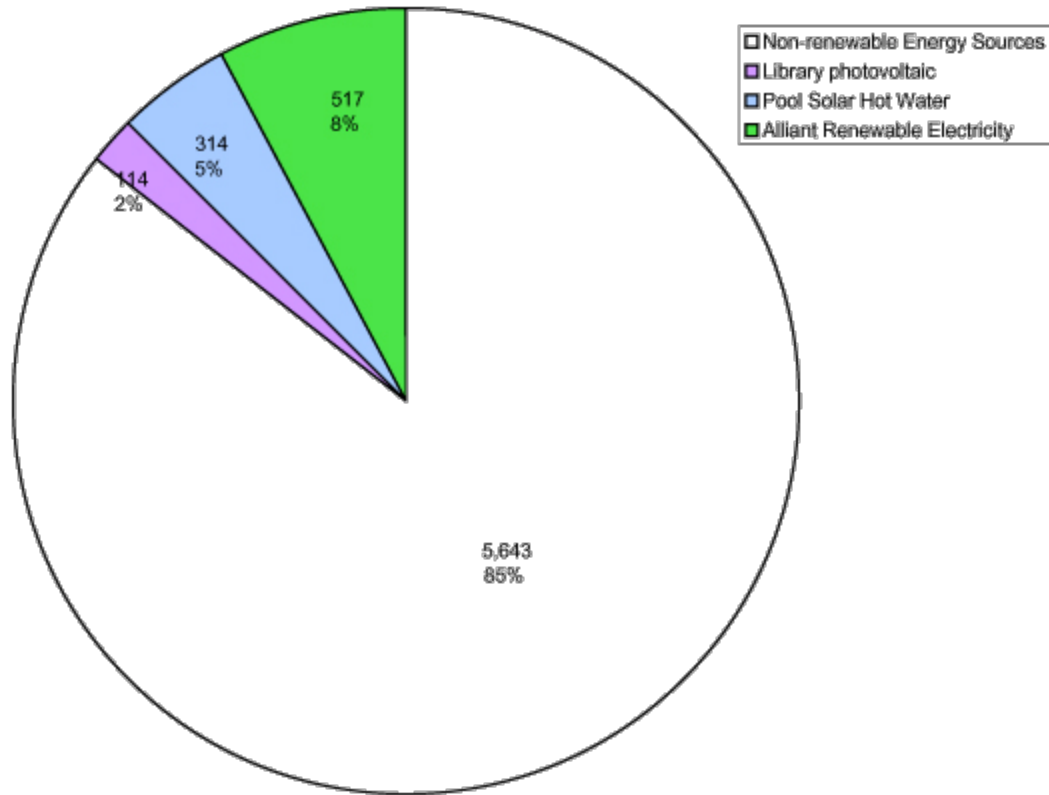
2008	<u>Annual</u> Rates of Growth	2025
34,486 MMBtus	0.3%	36,228 MMBtus
Actual 06-08	14.5%	
\$258,535 Htg.	7.8%	? !!!!
\$376,249 Elec.	5.95%	? !!!!





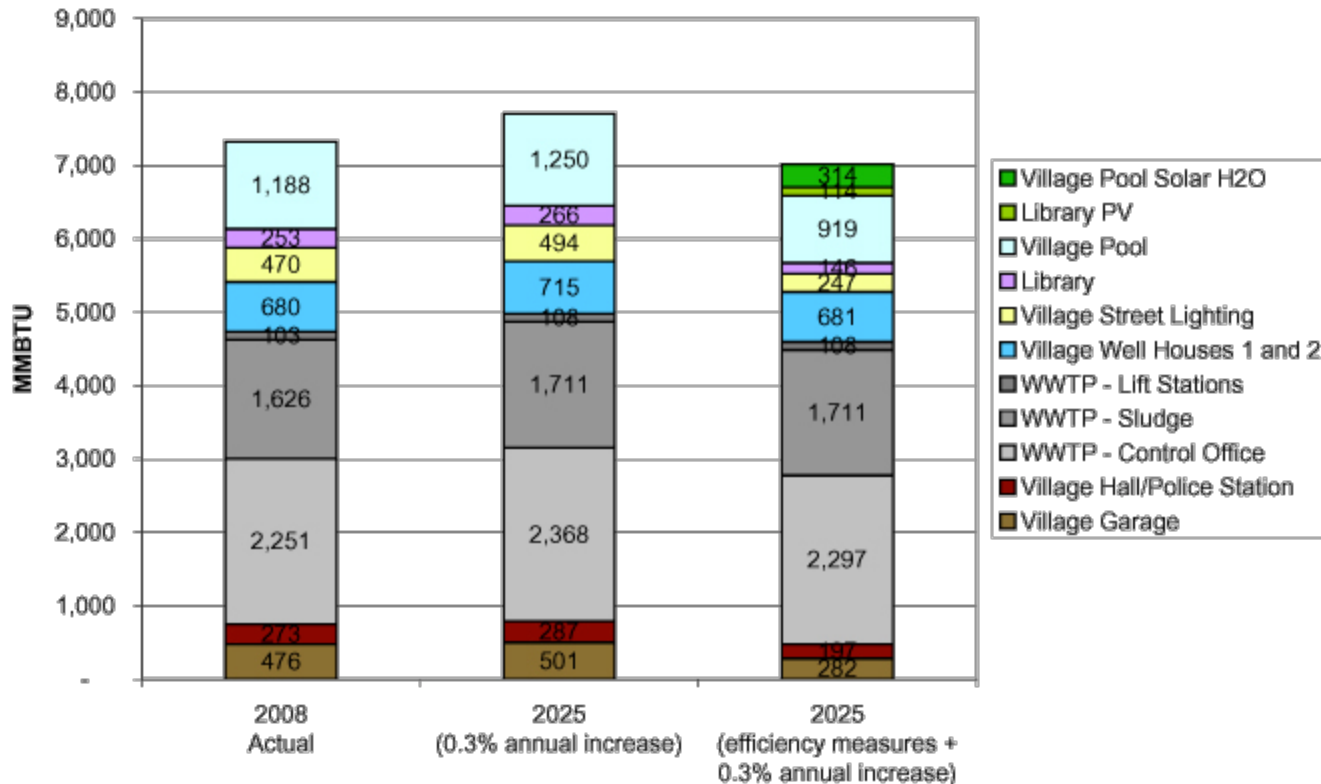
Interesting Discoveries

2025 Predicted
MMBTU



Interesting Discoveries

Village of Spring Green Anticipated Energy Use



OTHER

Phase solar electric installations up to maximum

Establish Energy Savings Account

Obtain site assessments for other buildings: well houses WWT, park shelters, public works

WHAT'S NEXT?

- Develop school occupant behavior and operations policies.
- Train and set up EPA Portfolio Manager
- Pursue a bio-fuel supply AND do more education
- Street lights
- Continue EIC Teams
- Woodchips to heat Spring Green Campus

NONE OF THIS WOULD HAVE HAPPENED IF...

- Governor, OEI and Brian Driscoll
- Paul and Julie Kardatzke, architects
- Ed Lilla, village engineer
- Doug Feiner, village board
- Carl Hayek, school business manager
- John McKenna, Doug Jones, Brad Haas, SG Town EIC Team members