

# Jacksonville Environmental Protection Board Sustainability Symposium

Mike Templeton  
August 19, 2011



# Welcome to Renessenz

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# Our Mission and Vision

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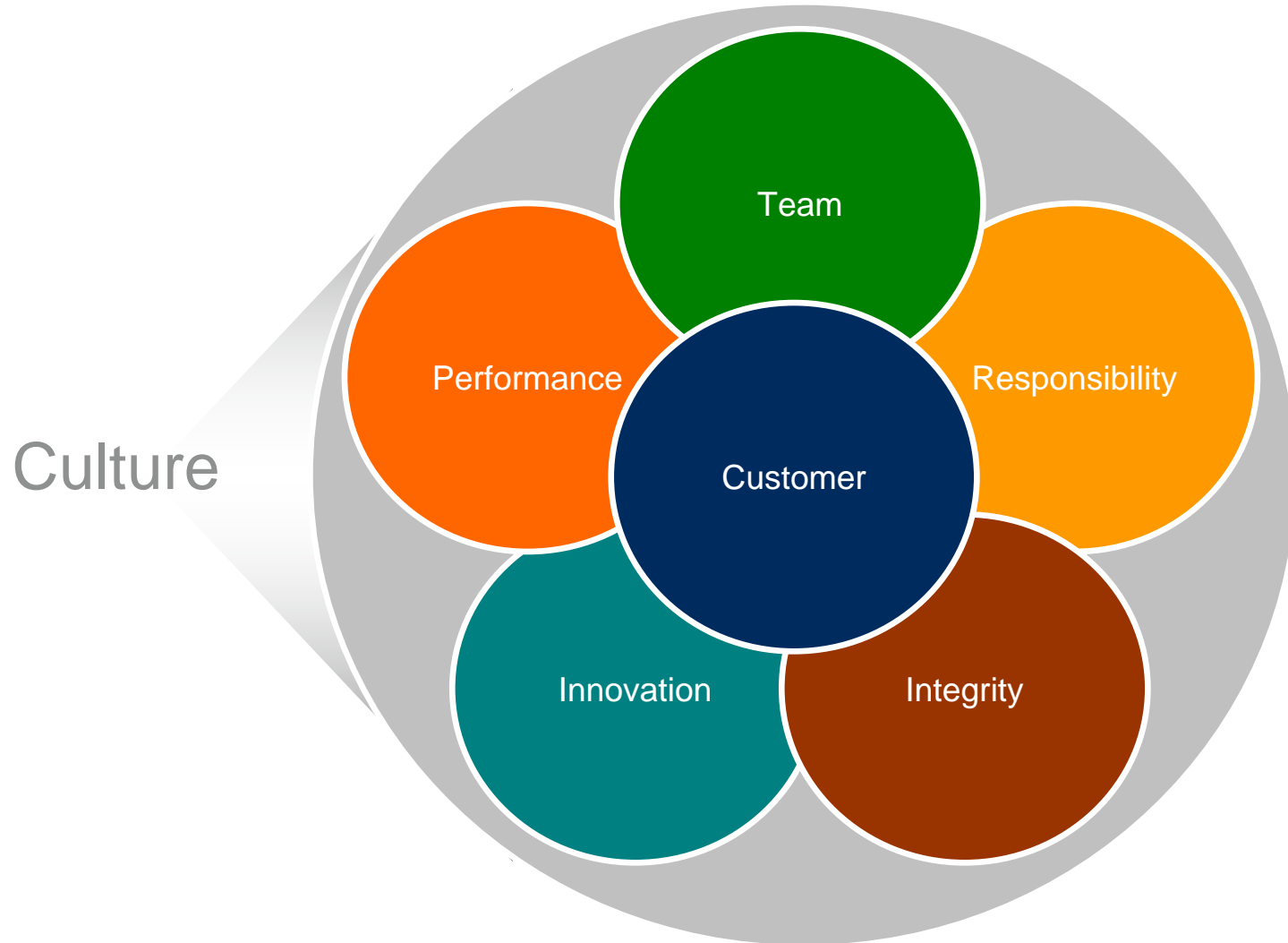
Building on over a century of success, the Renessenz team creates innovative chemistry and technology for our customers and stakeholders. We develop and supply high-quality, **renewable** products delivered with world-class service.

Renessenz will add zest to the products that people use and consume every day – by making integral ingredients readily available through the innovative use of **natural, renewable resources**.



# Our Values

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# Our Values

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## **Responsibility** | do the right thing

We act responsibly in all aspects of our business and always “do the right thing”

- Our Health, Safety & Environmental standards are never negotiable
- We are committed stewards and act responsibly toward the community and our environment
- We are individually accountable for our actions and results
- We take our responsibility to stakeholders and our team seriously

# Jacksonville Site

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- Founded in 1910 by the Southern Mfg. Company and the Cummer family
- 54 acres
- Business headquarters
- Administration and R&D
- Customer service
- CST fractionation
- Batch specialty operations
- ISO-9001-2008
- Non-Union



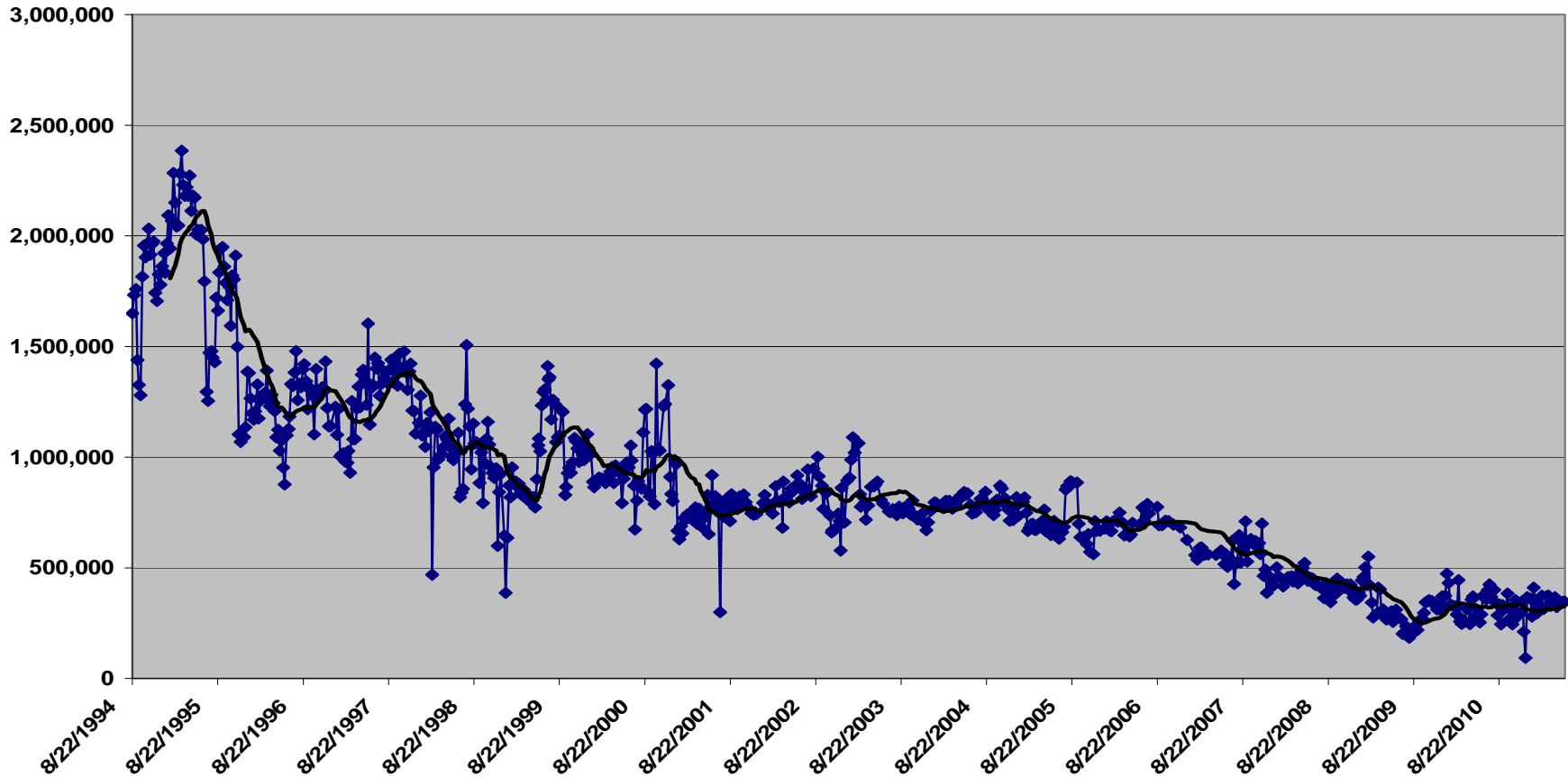
# A Demonstrated Commitment to Sustainability

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- Renewable natural feedstocks—pine trees, oranges and mint
- +70% reduction in water consumption from the aquifer since 1994
- Water recycle to the First Tee golf course starting in 2002
- Significant improvement in odor emissions over the last 2-years
- 40% reduction in SO<sub>2</sub> air emissions since 2002
- Internally generated “green bio-fuel” represents ~50% of our energy required for steam production
- Significant improvement in multiple sustainability metrics since 2002

# Water Removal from Aquifer has Reduced Significantly

Well Water Withdrawal  
Daily Average 1994 - 2010

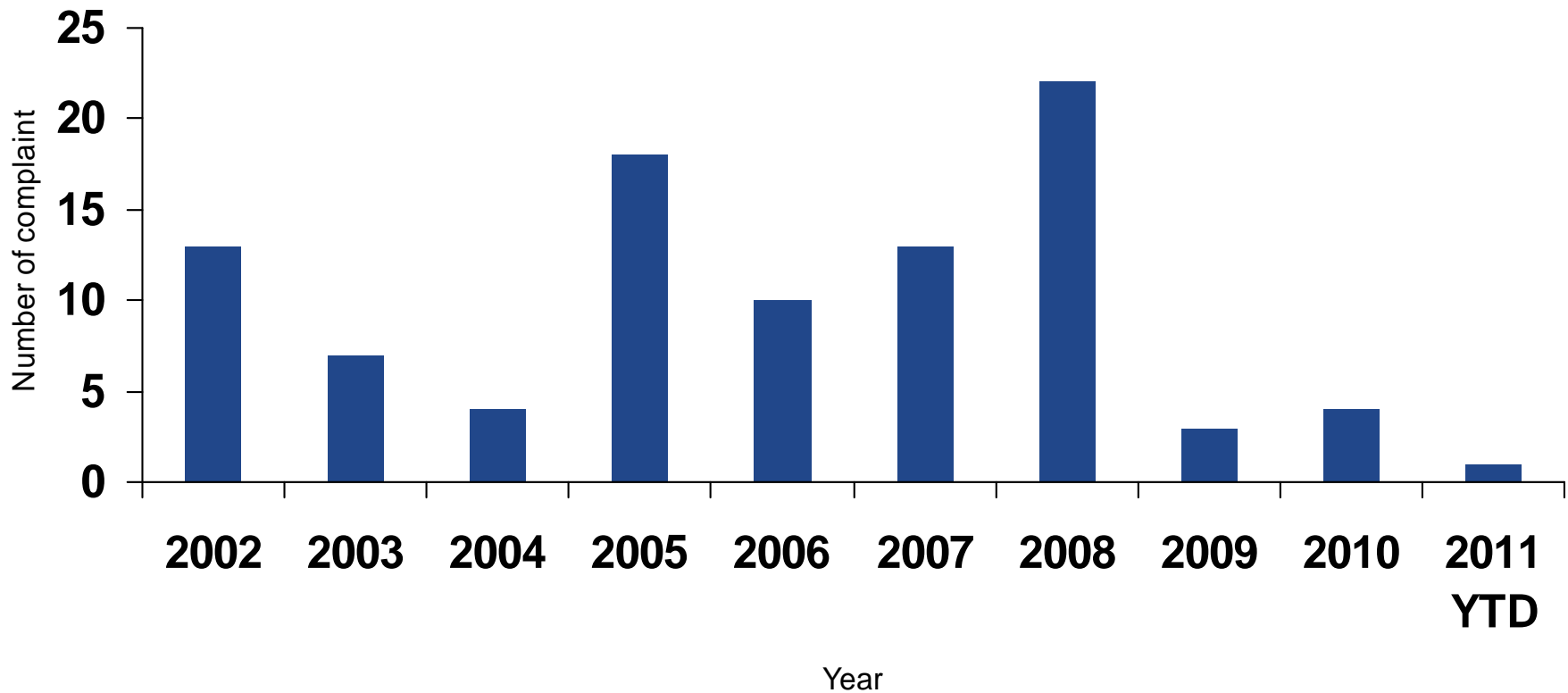




# Odor Complaints Have Reduced Significantly

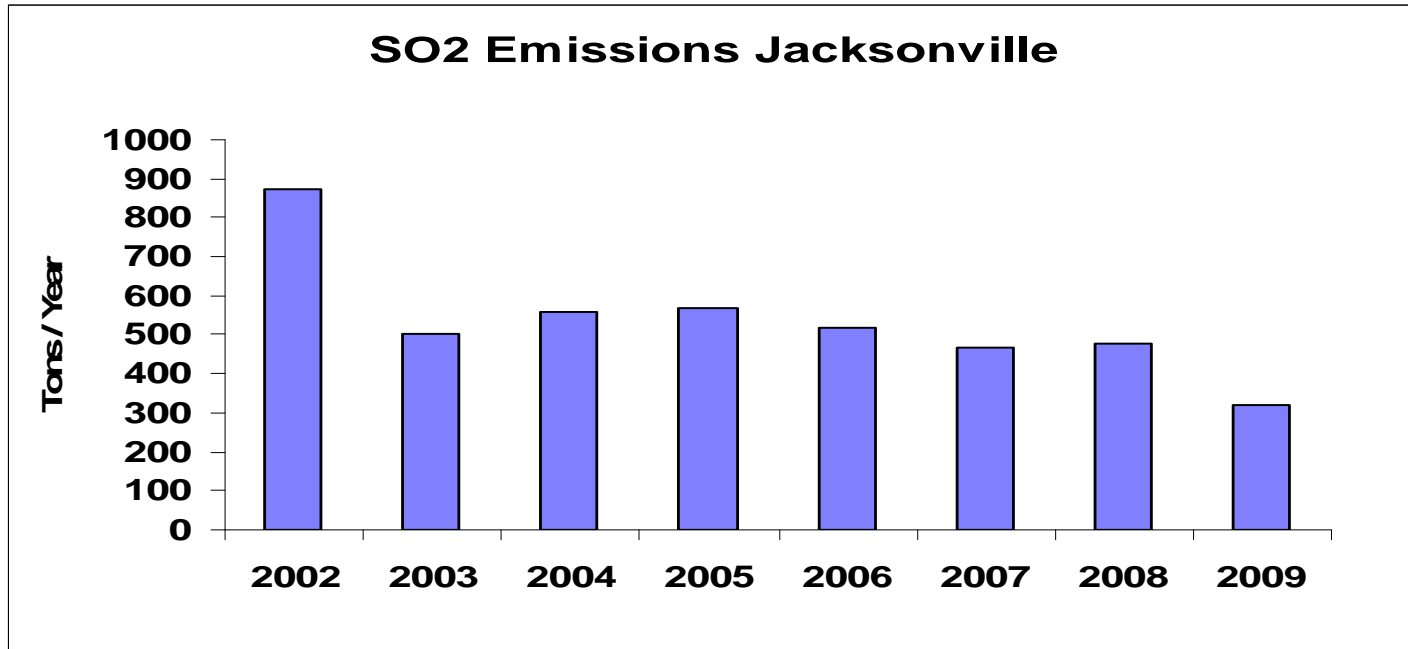
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## Odor Complaints Validation



# SO2 Emissions Have Reduced

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**~40% reduction in SO2 while increasing throughput +25%**

# New Boiler Start-up Q3-2011

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- Replacing 2 old boilers (1964 and 1972 vintage) with 1 modern, high efficiency, low NOx boiler
  - \$3.5 MM investment
  - Improve thermal efficiency – less GHG emissions
  - Significant reduction in NOx emissions
  - Significant reduction in potential to emit
  - Improved burner system will have positive impact on odor emissions

	<u>Baseline</u>	<u>New Boiler</u>
Potential to emit SO2	2409.3	864
SO2 emissions	824	550**
NOx emissions	94	69**

\*\*2011 estimate

# Glidfuel is a bio-fuel product

- Glidfuel is a clean-burning substitute for fossil fuels
- It's derived from natural, renewable feedstocks and is composed of mono-terpenes, sesquiterpenes, terpene alcohols, and terpene polymers

**RENESENZ**

Product Information

## Glidfuel™

The clean-burning substitute for fossil fuels

Glidfuel is a clean-burning substitute for fossil fuels. It is derived from natural, renewable feedstocks and is composed of mono-terpenes, sesquiterpenes, terpene alcohols, and terpene polymers.

Glidfuel can be burned alone or in any mixture with residual fuel oils where its high degree of solvent activity greatly improves the handling characteristics of the mixture. The user will experience better atomization and flame development with less fouling of burner tips.

### Specifications:

Appearance:	Brown-to-black
Heating Value, BTU/USgal.:	120,000 - 140,000
Sulfur Content, weight %:	2.5 max.

### Typical Properties:

Specific Gravity, @ 25°C:	0.904
Flash Point (TCC):	107°F (41.7°C)
Water %:	1.5 max.

### Regulatory/Classifications:

Inventory Status:	US EPA
Toxic Substance Control Act:	Registered

### Transportation:

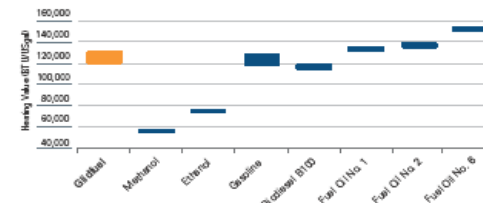
US DOT:	UN1993, Flammable liquids n.o.s. (Terpene Hydrocarbons), 3, PGIII, NAERG 12B, Marine Pollutant (Limonene, para-Cymene)
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IMDG:	UN1993, Flammable liquids n.o.s. (Terpene Hydrocarbons), 3, PGIII, Marine Pollutant (Limonene, para-Cymene)
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ADR:	UN1993, Flammable liquids n.o.s. (Terpene Hydrocarbons), 3, PGIII, Marine Pollutant (Limonene, para-Cymene)
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### Shipping Information:

Containers:	Available in bulk only; tank cars/tank trucks
Shipping Point:	Jacksonville, FL USA



You can find out more about us by visiting our website at: [recessenz.com](http://recessenz.com)

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# Sustainability Scorecard

MEASURE	UNIT OF MEASURE	2002	2010	IMPROVEMENT
(Electric) Energy Usage	GJ / MT of Product	4.687	3.209	31%
(Fuel) Energy Usage	GJ / MT of Product	40.867	26.049	36%
Water Usage	M3 / MT of Product	32.834	16.226	50%
Water Discharge	M3 / MT of Product	24.428	12.634	48%
Hazardous Waste Disposal	MT / MT of Product	0.0020	0.0017	13%
Non-Hazardous Waste Disposal	MT / MT of Product	0.048	0.030	37%
Kyoto Emissions Direct	MT of CO2e / MT of Product	1.250	0.824	34%
Kyoto Emissions Indirect	MT of CO2e / MT of Product	0.704	0.546	22%
Potential Waste Material Recycled, Reused, Recovered	MT / MT of Product	0.196	0.372	90%

# Summary

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- Renewable feedstocks and sustainability are core to our business.
- We are very proud of our performance, our commitment to the environment and the improvements that our employees have made:
  - Water usage reductions
  - SO<sub>2</sub> and NO<sub>x</sub> emissions reductions
  - Reduction in odor complaints from neighbors
  - Excellent improvement in best-practices sustainability metrics
  - Use of green bio-fuels
- And, as we state in our mission, vision and values, we are committed to continuing those efforts!