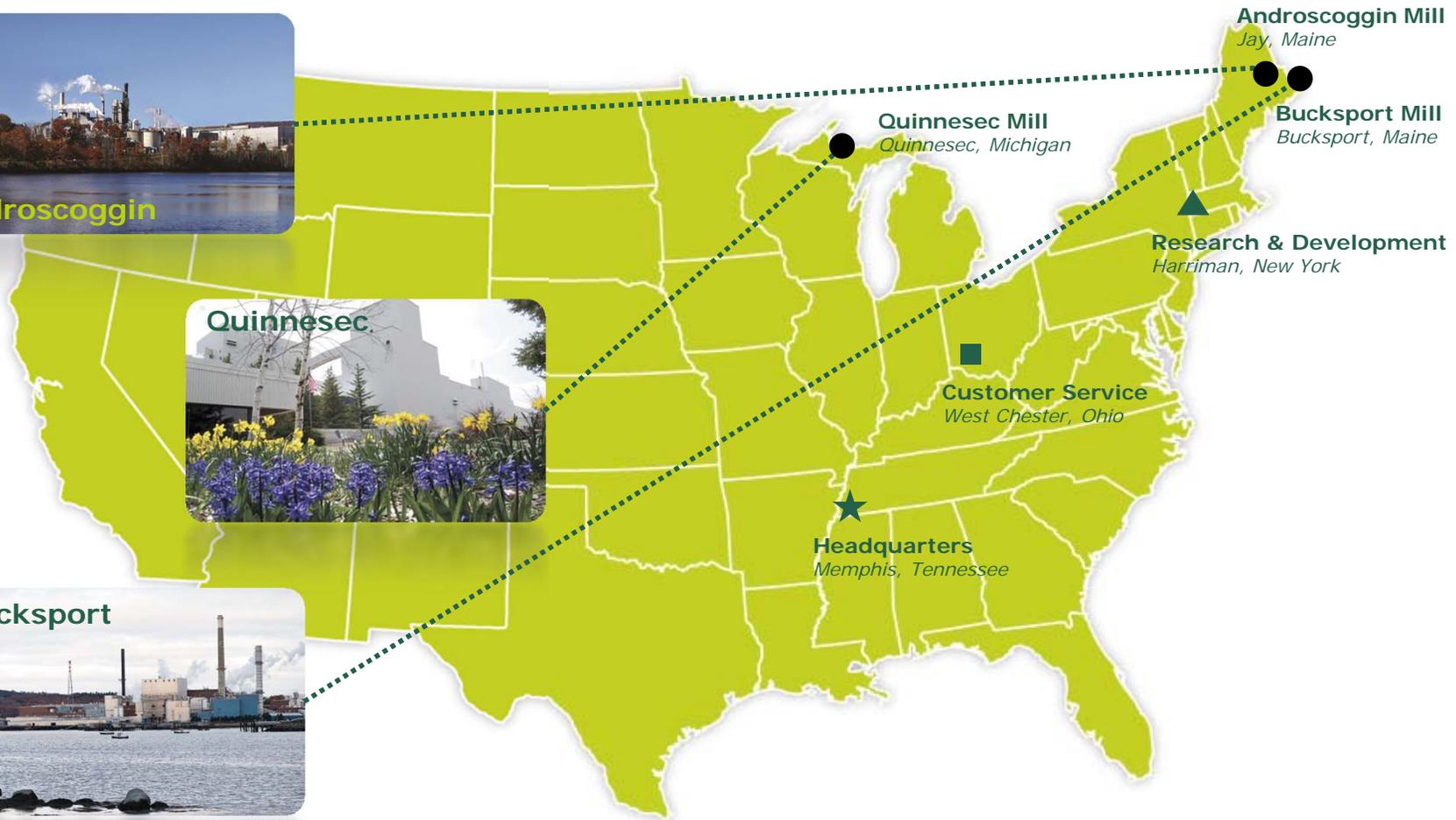
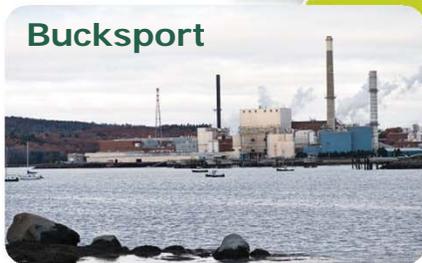


**Verso Paper Corp
Energy & Paper go together**

**Glenn S. Poole
Verso Energy Manager
Apr. 21, 2014**



Manufacturing Facilities

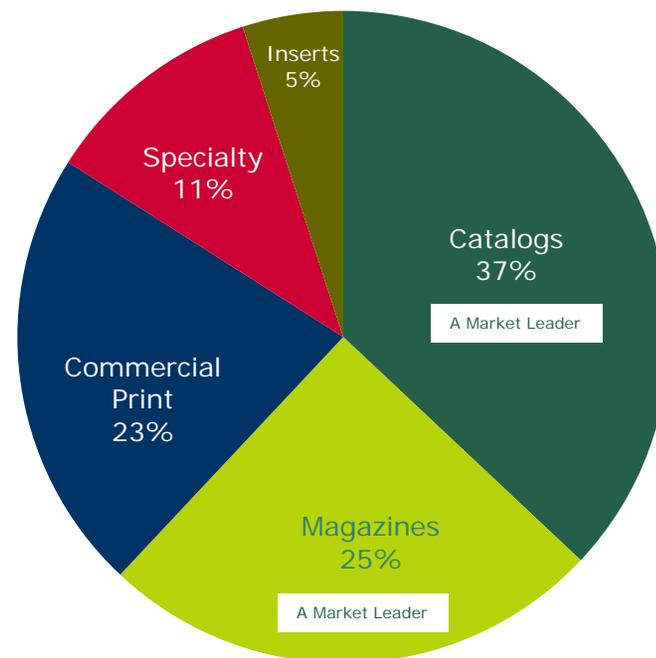


Turn to us for quality products...

Publication Papers, Specialty Papers, Market Pulp



Verso is a market leader in two key segments



*Excludes pulp sales
*End User Segment Breakdown as of December 31, 2012

Verso's full line of products allows for migration across a wide range of grades and basis weights with one supplier.

Verso's Maine Manufacturing Facilities



Androscoggin Mill



- Opened for business in 1965.
- Employees more than 960 people operating five paper machines.
- Capable of producing more than 1900 tons per day of coated groundwood and coated freesheet papers for offset and rotogravure printing on three coated machines. Also produces specialty grades on two other machines.

Bucksport Mill



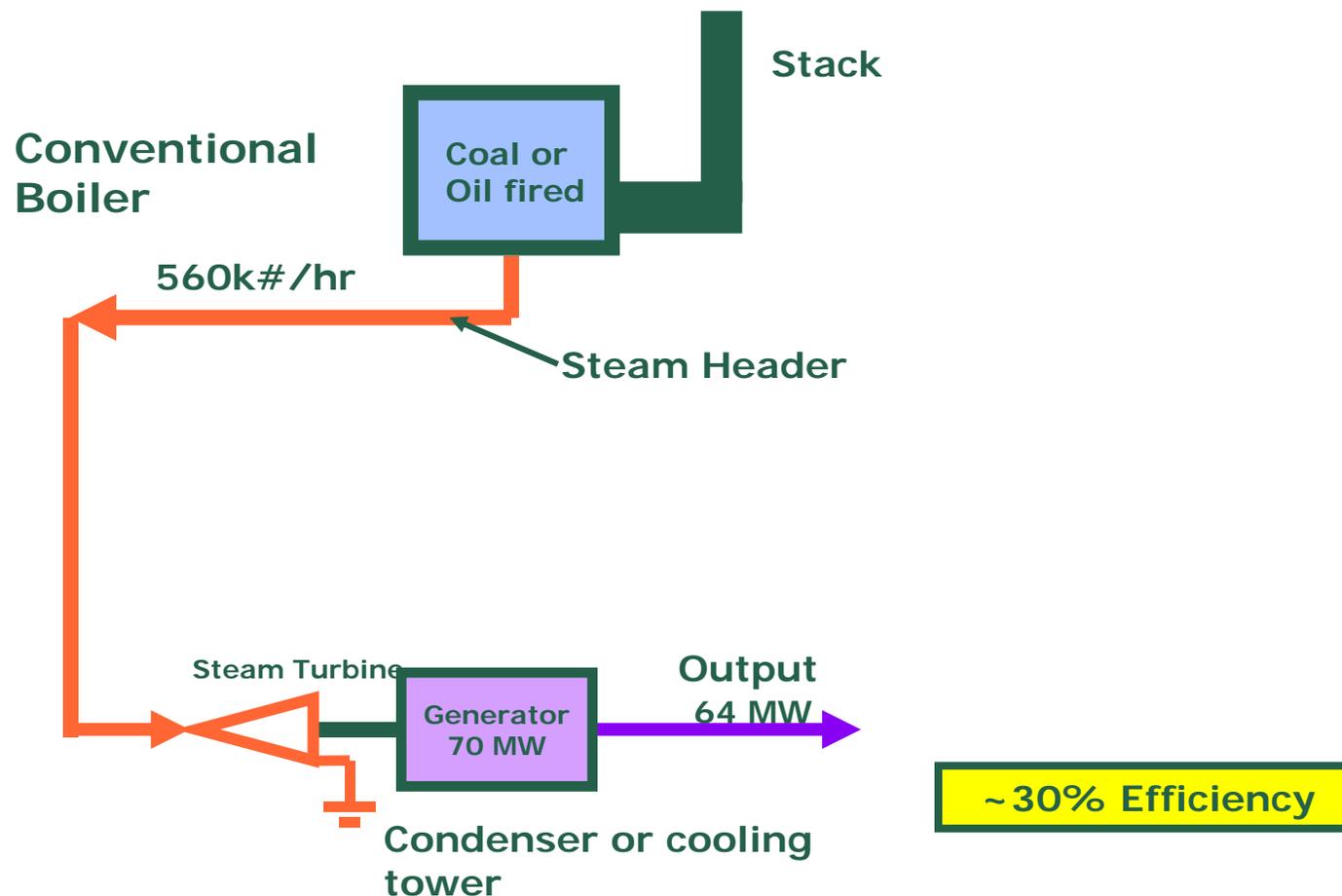
- Opened for business in 1930.
- Employees more than 580 people operating four paper machines.
- Capable of producing more than 1050 tons per day of lightweight coated groundwood papers for offset and rotogravure printing. Also produces specialty grades for packaging and printing.

-
- **Total 2012 annual payroll:** \$165 million in wages and benefits for +1500 folks.
 - **Total 2012 annual purchases from in-state vendors:** \$450 million in goods and services purchased from 300 Maine companies in more than 250 Maine towns.

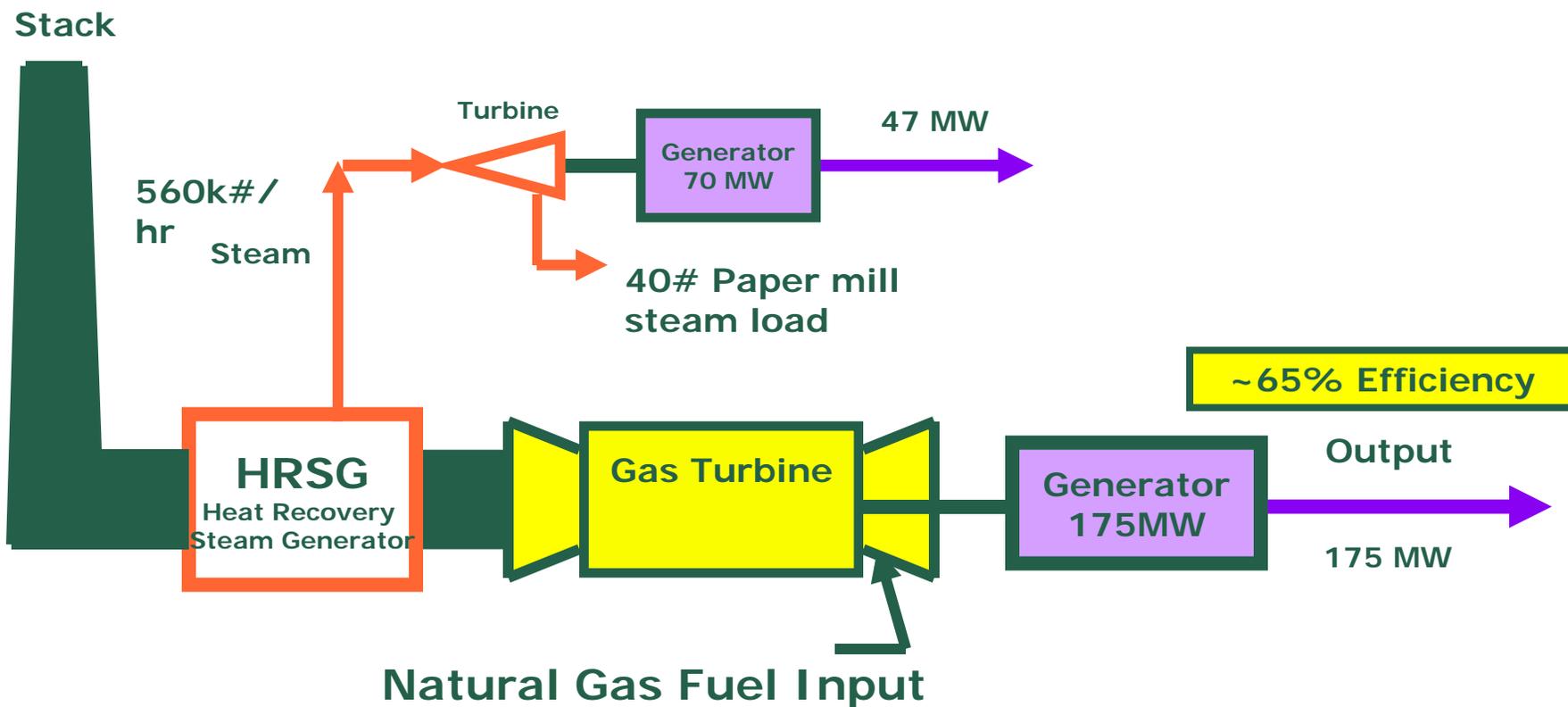
Verso's Energy Conversions

- Both Maine mills have converted to **Combined Cycle with Cogeneration**
 - Gas Turbine-HRSG-Steam turbine – cogeneration
 - Over \$250 million invested
 - Typical utility boiler-generation efficiency ~ 30%
 - CC w/Cogeneration efficiency ~ 70%
- **Substantial efficiency improvement while using a much cleaner fuel (natural gas)**

Conventional Utility Power Plant



Combined Cycle with Cogeneration



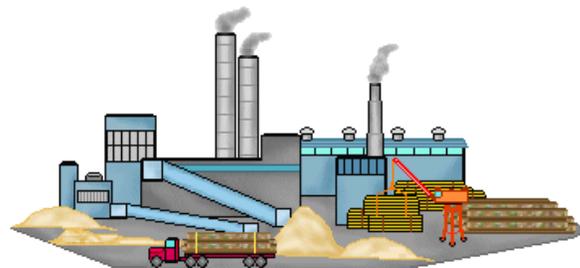
Mill Energy Configurations

- **Bucksport**
 - Generation – 290 MW
 - 175 MW Gas Turbine
 - 115 MW Steam Turbines (3)
 - Electrical Load ~ 90 MW
- **Androscoggin**
 - Generation – 275 MW
 - 150 MW Gas Turbines (3)
 - 95 MW Steam Turbines (3)
 - 30 MW Hydro
 - Electrical Load ~ 110 MW
- ~ 100 MW Demand Response

Bucksport's Air Emissions

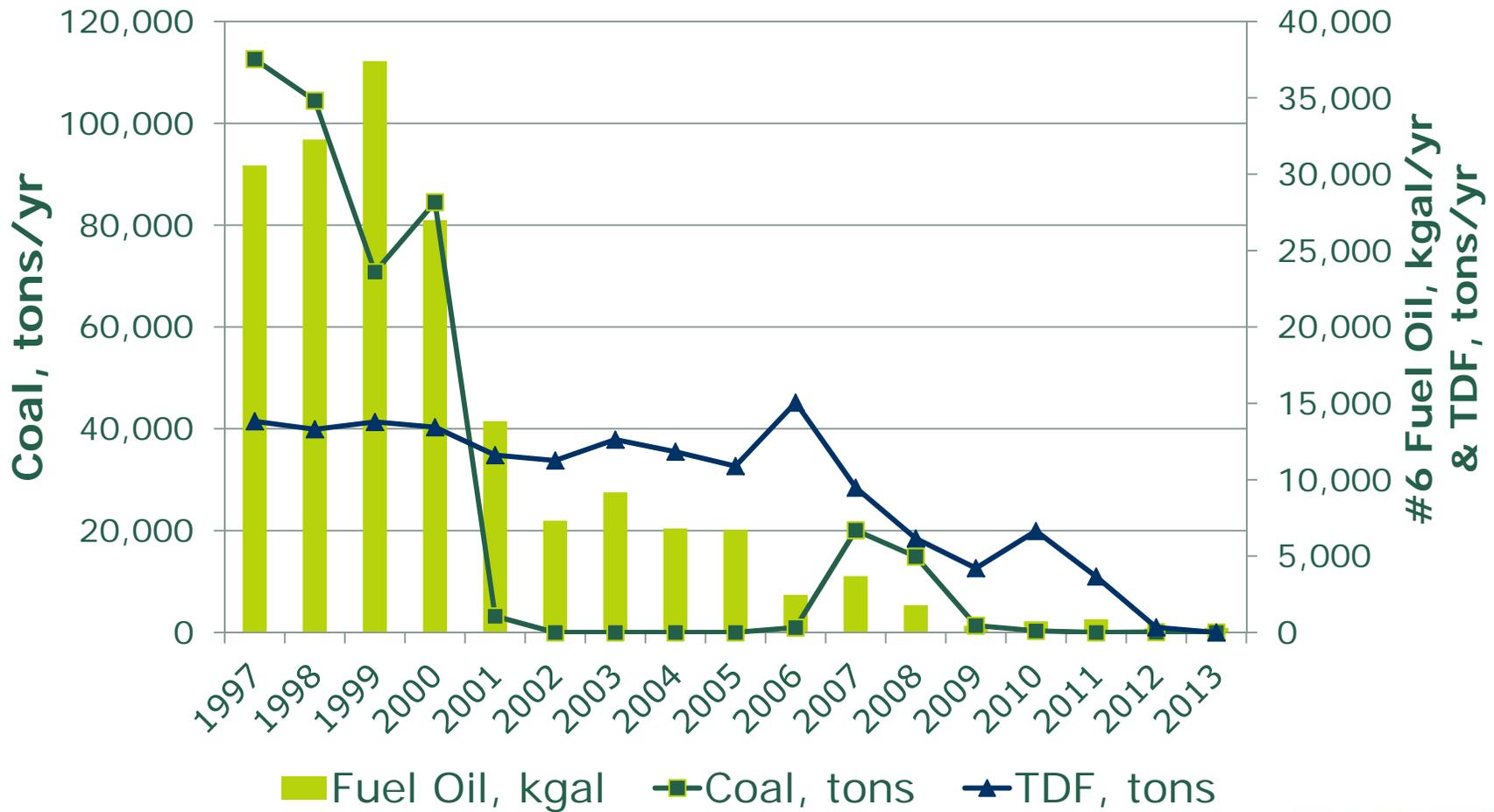
The results:

- Since 1994:
 - Reduced emissions of criteria pollutants (NO_x, SO₂, VOC, PM, and CO) by **87%**
 - Reduced NO_x and SO₂ emissions by **89%**
 - Reduced SARA 313 Emissions by **87%**
 - Increased electrical generation by **50%**
 - Increased boiler efficiency by **30%**



Continuous Improvement - Air

Fuel Usage



Verso Recent Strategic Energy Projects

DOE 44 Area 3 Grant

- DOE: \$9.3 million, Verso: \$10.7 million
- Projects across 3 Mills

Quinnesec Renewable Energy Projects

- \$45 million Capital investment for 28MW of Green Power
- Upgrade Biomass Delivery System
- Upgrade Combination Boiler
- New Turbine Generator

Bucksport Renewable Energy Projects

- \$42 million Capital Investment for 35MW of Green Power
- Upgrade Biomass Handling System
- Modify Combination Boiler
- New Turbine Generator

DOE – Took Better Plants Pledge

- Pledge 25% reduction in energy intensity within 10 yrs
- Goal met in 2013

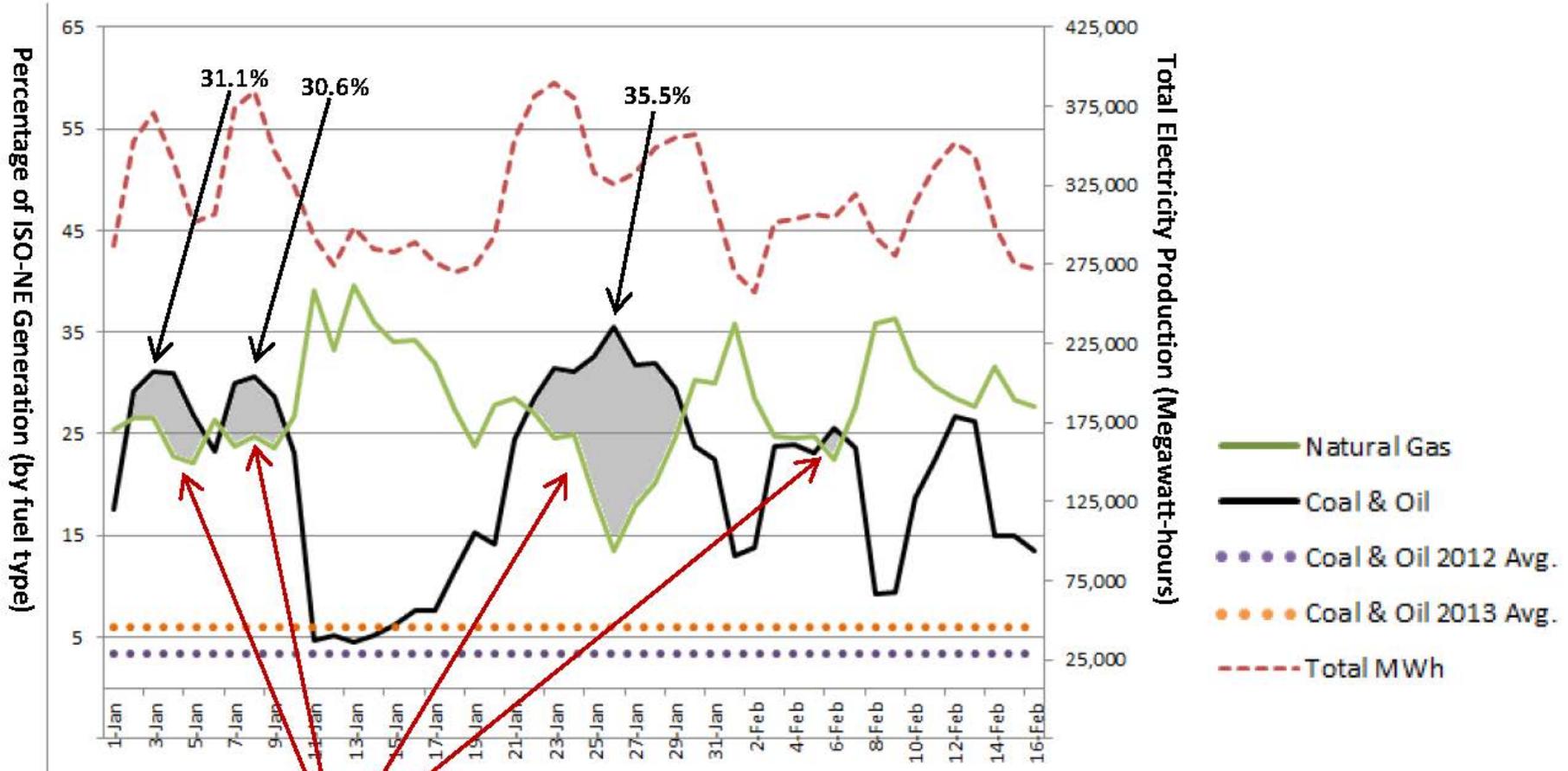
Where do we stand

- Last winter, First of Month gas prices DOUBLED from the prev. year
- ISO-NE instituted the “Winter Program” for this winter
 - Generators stocked up on oil
 - Verso committed to additional Demand Response
- This winter, FOM gas prices more than doubled again and were about \$22 with daily spikes up to \$75+
- New England significantly increased use of oil and coal as gas was often not available for power generation
- Natural gas prices drove the electric prices to historic highs this winter

WE'RE HEADED BACKWARDS...

New England's Generation Mix in 2014:

Oil Burned by Dual-Fuel Generators Attributed to Oil, not Natural Gas



Every time electricity usage spiked, the system switched to oil and coal, more expensive and less clean fuels.

Where do we stand

- **Verso could not revert to coal and oil but had to curtail paper production**
 - Bucksport Mill down for better part of January and February
 - ~500 people out of work for weeks this winter
- **Residential and commercial customers only starting to feel pain due to rolling 3-year standard offer contracts**
 - This pain will set in at the same time as enormous transmission increases which are scheduled over the next few years

In addition to Verso-Bucksport being Shut Down for Most of Two Months...

Because of High Gas Basis Differential in New England

SO DID:

- Groveton, N.H. (Paper) (200 Employees)
- Huhtamaki, ME (Fibre Products) (500 Employees)

And Others

Each for Different Periods

Where do we stand

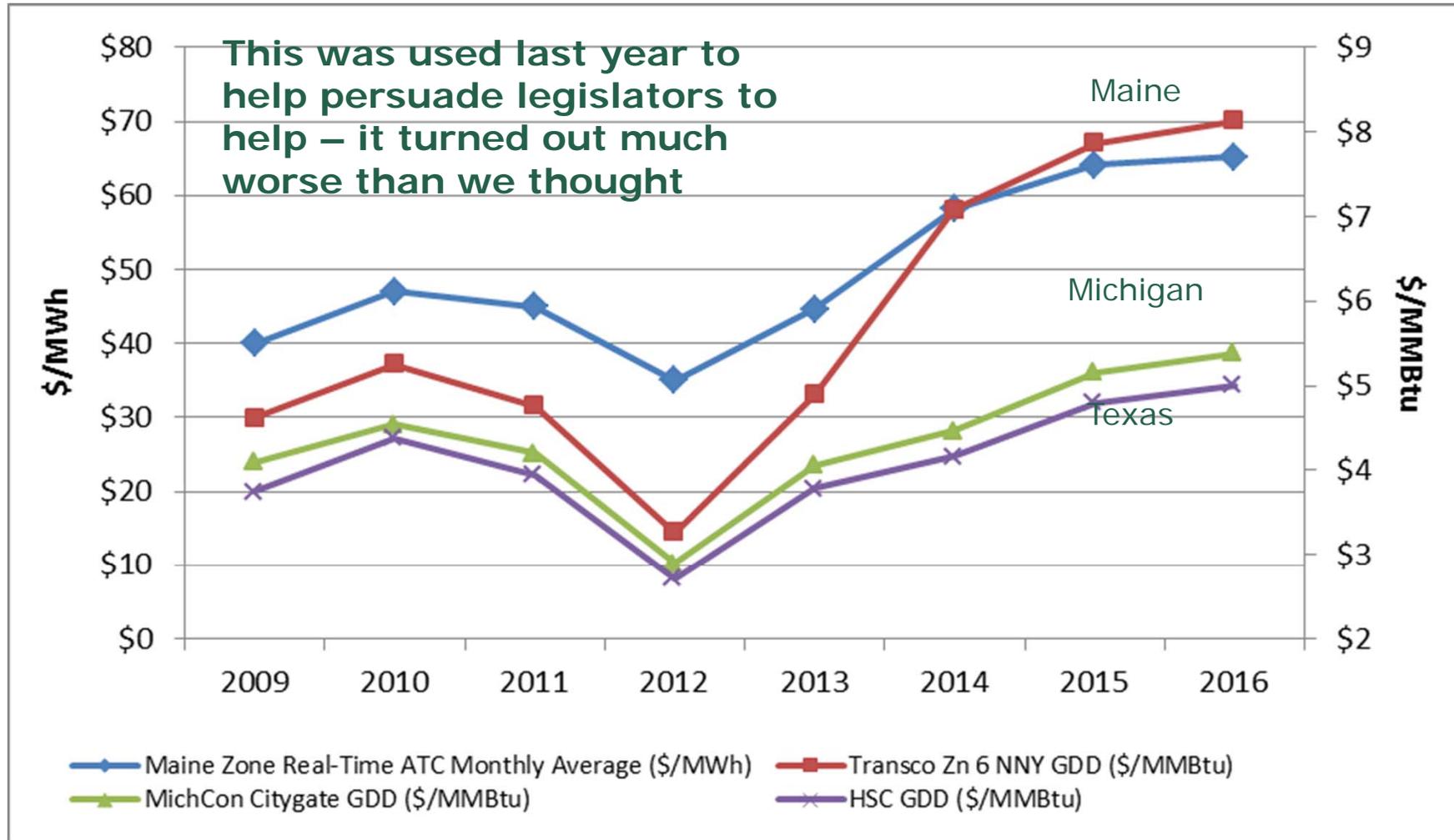
- **No relief in the near future**
- **Many manufacturers bleeding severely**
- **Security of NE Electrical System at stake**

What has been done

- **Verso and Industrial Energy Consumer Group a driving force behind precedential legislation in Maine**
 - **Authorizing MPUC to purchase 200,000 mcf pipeline capacity**
- **NESCOE leading effort to install more pipeline capacity into New England**
- **Competitive Energy Services Study funded by IECG indicates 2 bcf of pipeline capacity is needed.**

Manufacturing Competitiveness

- **Maine natural gas price is highest in nation**
 - **Difference forecast to increase**



What **MUST** be done

- **EVERYONE KNOWS WHAT MUST BE DONE**
- **NEW ENGLAND IS PERCHED RIGHT BESIDE THE MOST INEXPENSIVE NATURAL GAS IN THE WORLD**
- **PIPE AND MORE PIPE IS THE ONLY REALISTIC SOLUTION**
- **WE CANNOT SOLVE THIS PROBLEM OURSELVES**
- **FERC MUST STEP IN AND INSURE THIS HAPPENS**
- **DOE CAN HELP PERSUADE FERC TO ACT**

Questions?

Presenter – Glenn S. Poole

Glenn.Poole@versopaper.com

- **From Monson, Maine**
- **UMO-EE (1971)**
- **Bangor Hydro Electric Co.**
- **Bucksport Paper Mill (42yrs)**
- **Verso Energy Manager (3 mills)**
 - **Bucksport ME, Jay ME, Quinnesec MI**

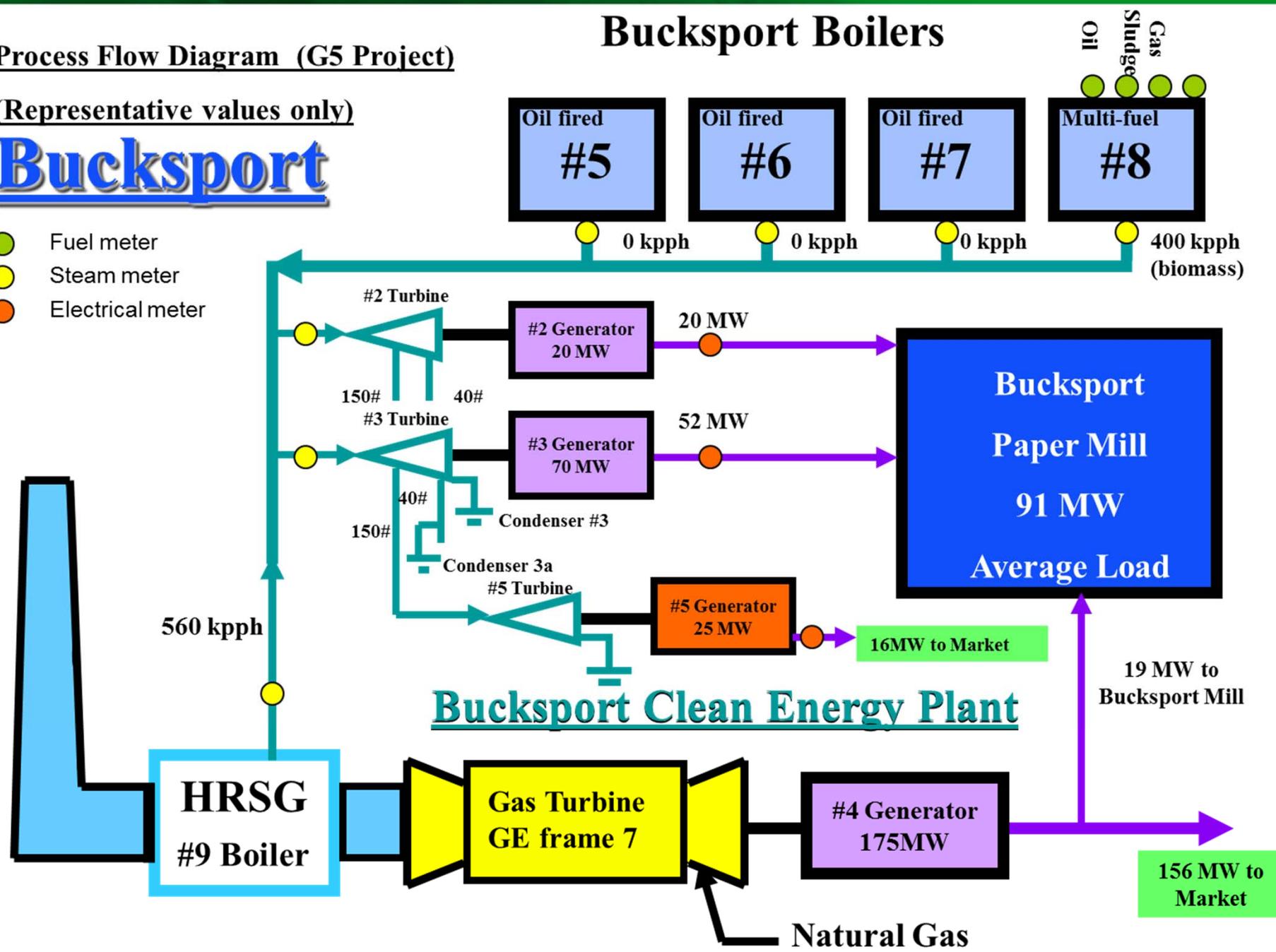
Bucksport Boilers

Process Flow Diagram (G5 Project)

(Representative values only)

Bucksport

- Fuel meter
- Steam meter
- Electrical meter



Process Flow Diagram

Androscoggin Boilers

Androscoggin

- Fuel meter
- Steam meter
- Electrical meter

