



# Making Butanol “Greener”

Major Energy Reductions through  
Strategic Product Management

Sharon Nolen, P.E., CEM

Manager, Global Natural Resource Management



- Fortune 500 specialty materials company with 2018 revenue of ~\$10B
- Global manufacturer and marketer of advanced materials and specialty additives
- Operates four business segments
- Global team of ~14,500
- Serving customers in >100 countries

**A global industry leader**

# Sustainability matters.

*The value we create as a company must vastly exceed the resources we use.*

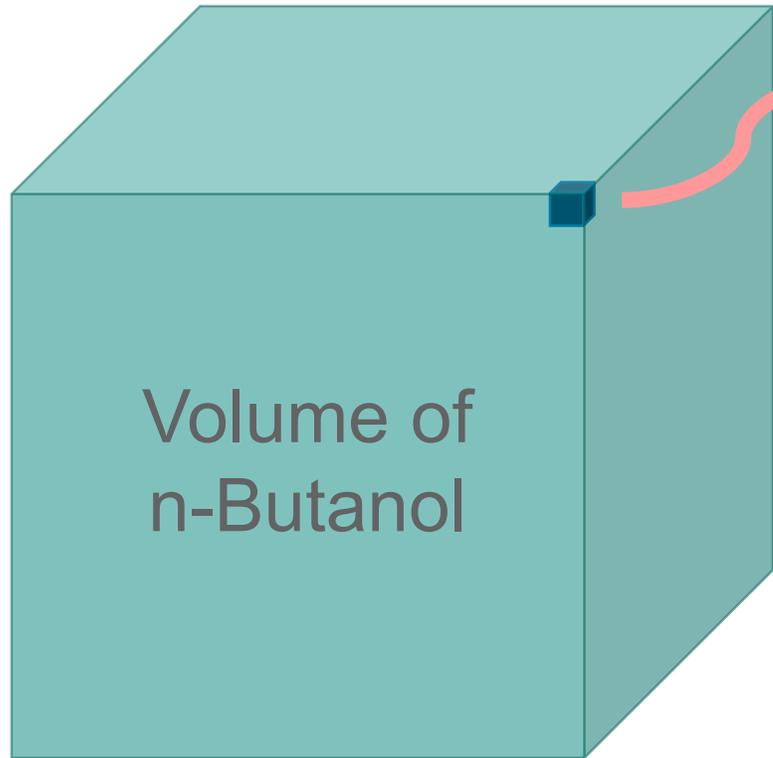


***“Sustainability matters. The world faces enormous challenges, but I’m confident in Eastman’s ability to address them through strategic collaboration, responsible resource management and persistent innovation.”***

– David A. Golden,  
Senior Vice President, Chief Legal & Sustainability Officer, and Corporate Secretary

**EASTMAN**

# Relentlessly Engaging the Market

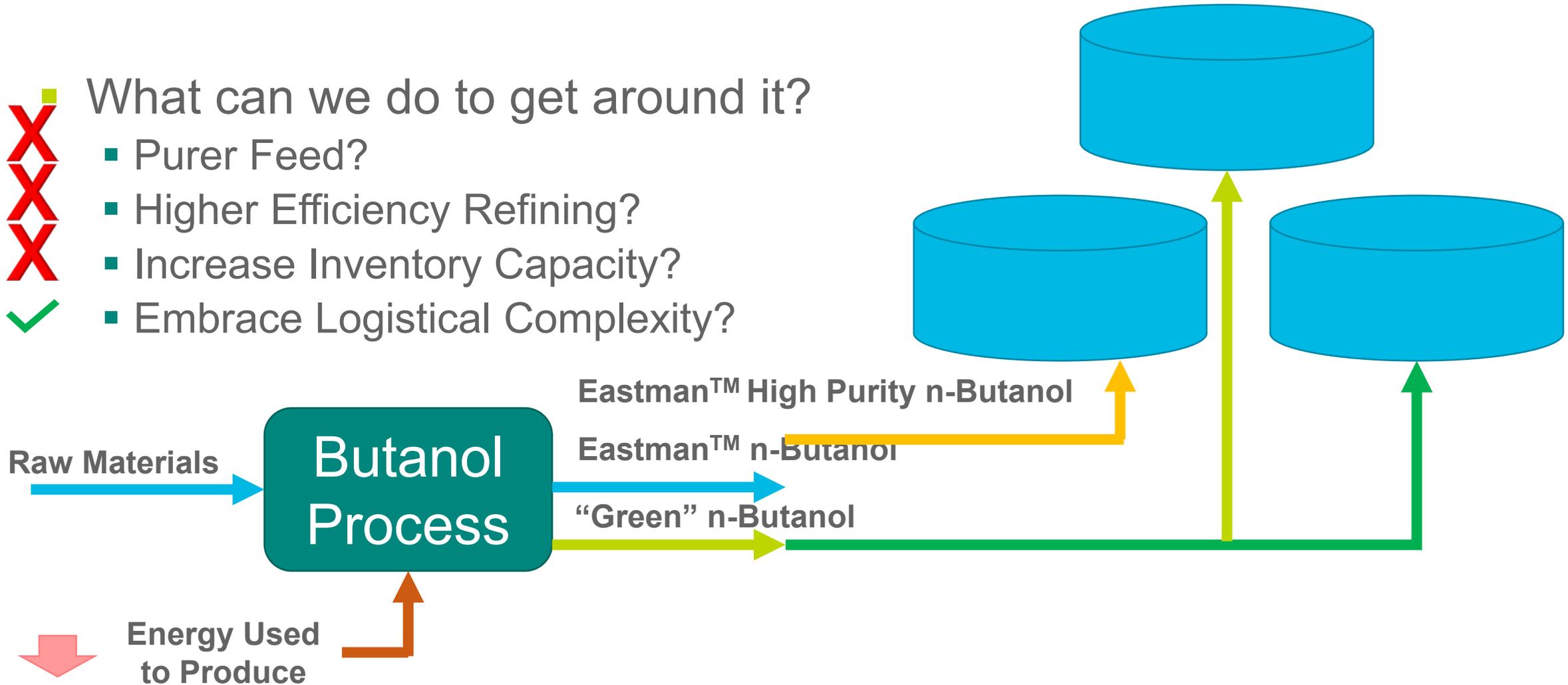


Further purification requires **211% more energy!!**

Only 11% of the customers  
required the higher purity  
product.

# How we got there – Embracing Complexity

- What can we do to get around it?
- ~~✗~~ Purer Feed?
  - ~~✗~~ Higher Efficiency Refining?
  - ~~✗~~ Increase Inventory Capacity?
  - ✓ Embrace Logistical Complexity?

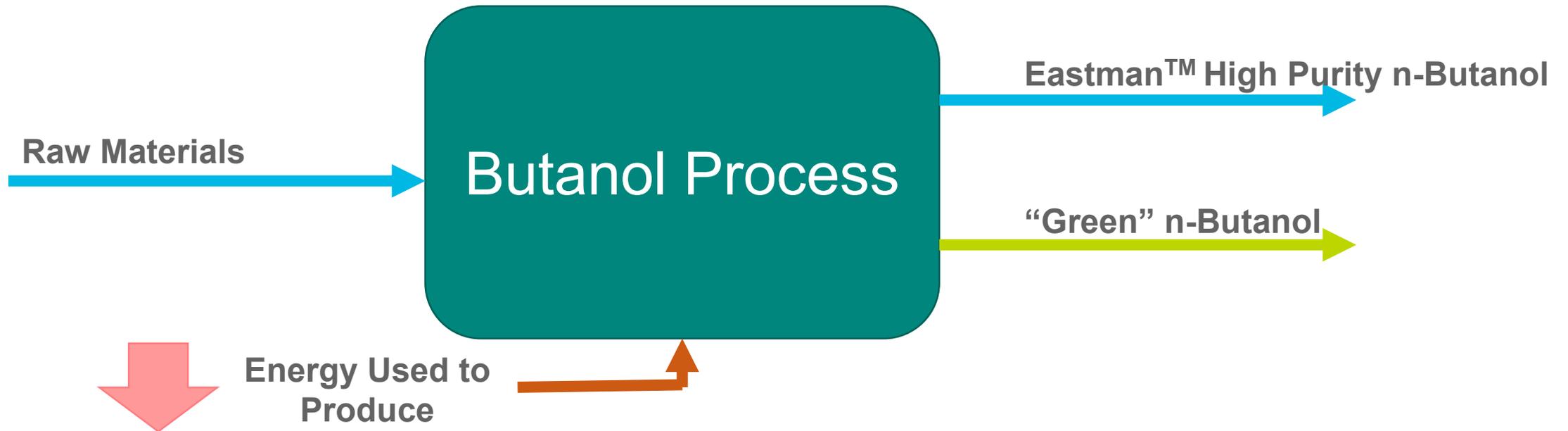


# Conclusion

- *Relentlessly Engaging the Market* led to an understanding of Butanol demand
- *Embracing Complexity* led to us being value oriented as opposed to veering from the difficult path



- *Bypassing* the final refining column to *create a new product*
- Cost Savings of *\$709k / year*
- *Total Energy Savings: -42%*



**Questions?**