



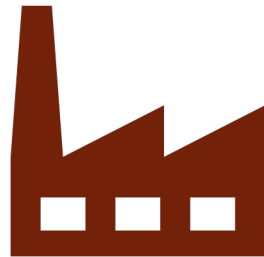
TDF OUTLOOK

**What is happening in
the TDF Markets?**

TDF MARKETS



Pulp &
Paper
Boilers



Industrial &
Utility
Boilers



Cement
Kilns



Electric Arc
Furnace
(EAF)



Export
Markets

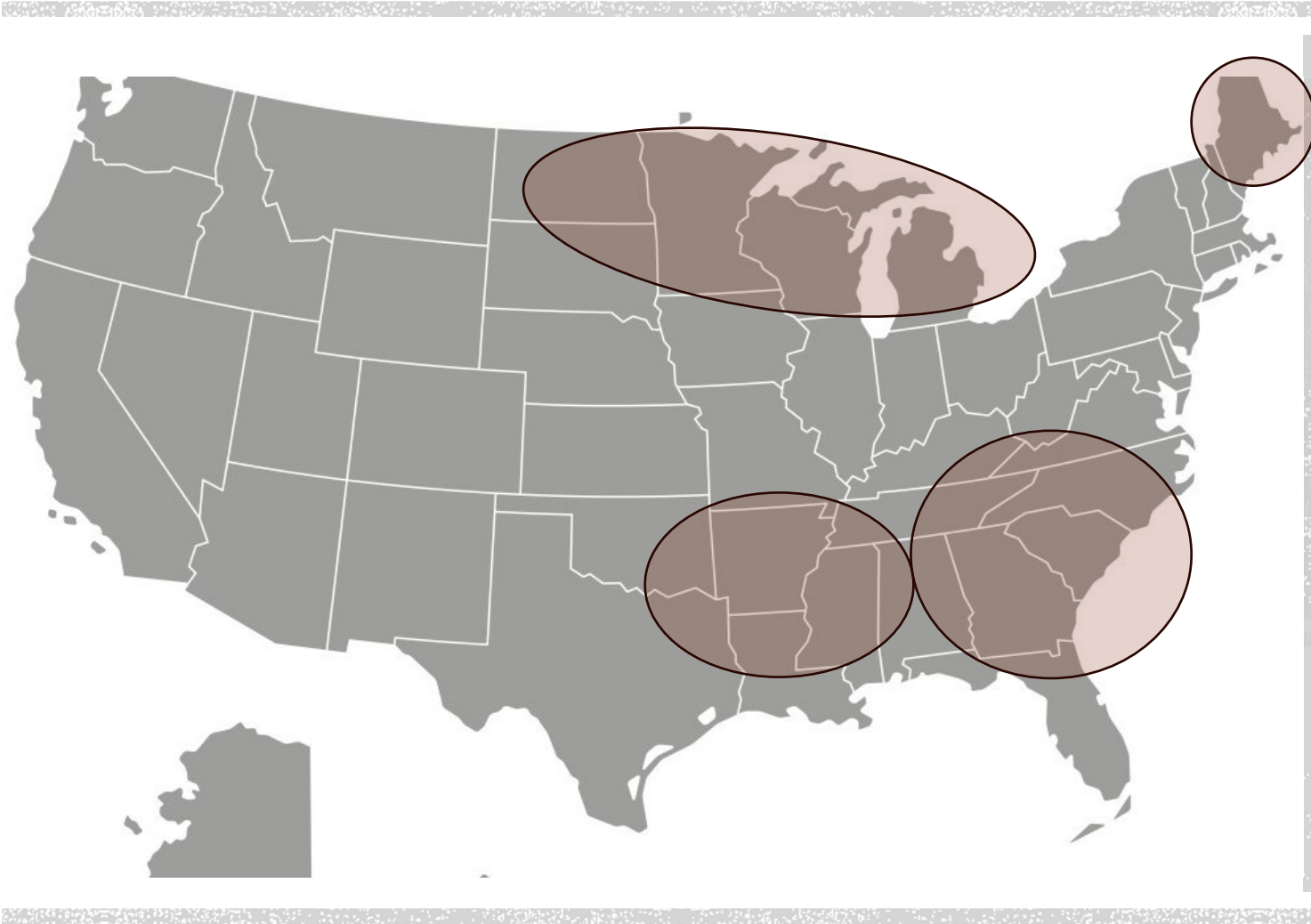
Cement Kilns



Boilers



TWO PRIMARY TDF MARKETS



**MARKET
REGIONS
FOR TDF IN
BOILERS**

EDF MARKETS

TDF contains
heat content,
steel content and
carbon content

Limited use to
specific plants in
certain regions
of the U.S.

Ocean Vessel - Bulk



Containers



Bales

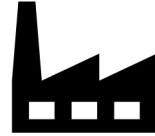


**EXPORT MARKETS:
BALED TIRES, LARGE SHRED AND SMALLER TDF**

TDF QUALITY – IMPACT ON MARKETS



Whole tires or
1.5” minus
(pneumatically
conveyed)



1.5” minus
(relatively wire
free)



Size
requirements
vary by plant



Bales, 6” or 12”
shred



TDF



SHRED



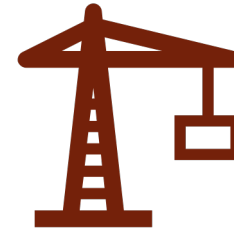
TDF DELIVERY & HANDLING CONSIDERATIONS



Distance



Size of Material



Loading & Unloading
constraints



RIVER BARGE

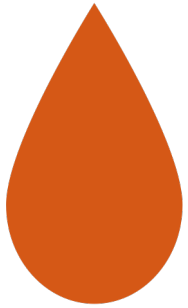


END DUMP - TRUCK DELIVERY



TDF METERING SYSTEMS

TDF END USER QUESTIONS



Regulatory (air & water) issues for end users.



Financial impact of Fuel Savings



Positive Environmental impact with emissions at the end user location?



Boilers previously permitted for TDF but not burning at the present time are potential targets for future use.

EXTERNAL FACTORS AFFECTING TDF MARKETS

- **Energy Prices – Natural Gas & Coal**
- **Biomass (i.e. pellets plants)**
- **Higher Value Rubber Market Demand**
- **Processor output fluctuates seasonally (i.e. mulch, asphalt, wire, TDF, etc.)**
- **Changing Export Markets**



THANK YOU!

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