



nexsteppe

DEDICATED TO SUSTAINABILITY

NexSteppe Vision

Be a leading provider of
scalable, reliable and
sustainable feedstock solutions
for the biofuels, biopower and
bioproduct industries

Biobased Feedstocks



Oils

Examples

- Soy
- Palm
- Jatropha

Features

- Most expensive
- Transportable (energy dense)
- Easily refined

Starches

- Corn
- Grain sorghum
- Cassava

- Moderately expensive
- Transportable & storable
- Easily converted to sugar

Sugars

- Sweet sorghum
- Sugarcane
- Sugar beet

- Less expensive
- Direct source of fermentable sugar
- Must be processed immediately

Biomass

- Biomass sorghum
- Perennial grasses
- SRWCs
- Wastes & residues

- Cheapest feedstock
- Transport limited (low bulk density)
- Storable
- Most difficult to process

Yield is THE Major Economic Lever

More gallons/BTUs/tons per acre means...

- Reduced land cost per ton
- Reduced labor & equipment cost per ton
- Reduced harvest cost per ton
- Reduced transport cost per ton (or reduced processing cost through a larger facility and greater economies of scale)
- Reduced land use footprint
- Reduced carbon footprint

Biobased Feedstocks

	Examples	Features
Oils	<ul style="list-style-type: none">• Soy• Palm• Jatropha	<ul style="list-style-type: none">• Most expensive• Transportable (energy dense)• Easily refined
Starches	<ul style="list-style-type: none">• Corn• Grain sorghum• Cassava	<ul style="list-style-type: none">• Moderately expensive• Transportable & storable• Easily converted to sugar
Sugars	<ul style="list-style-type: none">• Sweet sorghum• Sugarcane• Sugar beet	<ul style="list-style-type: none">• Less expensive• Direct source of fermentable sugar• Must be processed immediately
Biomass	<ul style="list-style-type: none">• Biomass sorghum• Perennial grasses• SRWCs• Wastes & residues	<ul style="list-style-type: none">• Cheapest feedstock• Transport limited (low bulk density)• Storable• Most difficult to process

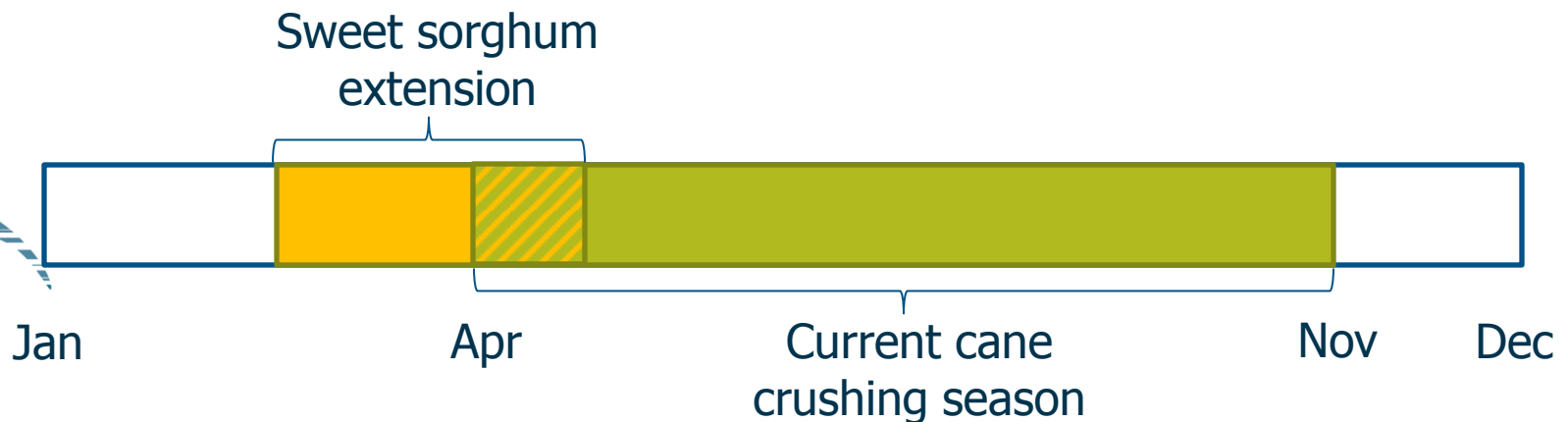
Our Products: Sweet Sorghum



- Annual sugar crop
- High sugars and juice
- Range of maturities

The First Market for Sweet Sorghum

Extending the Operating Season for Existing Brazilian Sugar to Ethanol Mills



- 5 yr cycle means 15-20% of cane land (9M ha) available
- Increases return on capital
- Allows production during peak ethanol-price season
- Increases cane yields

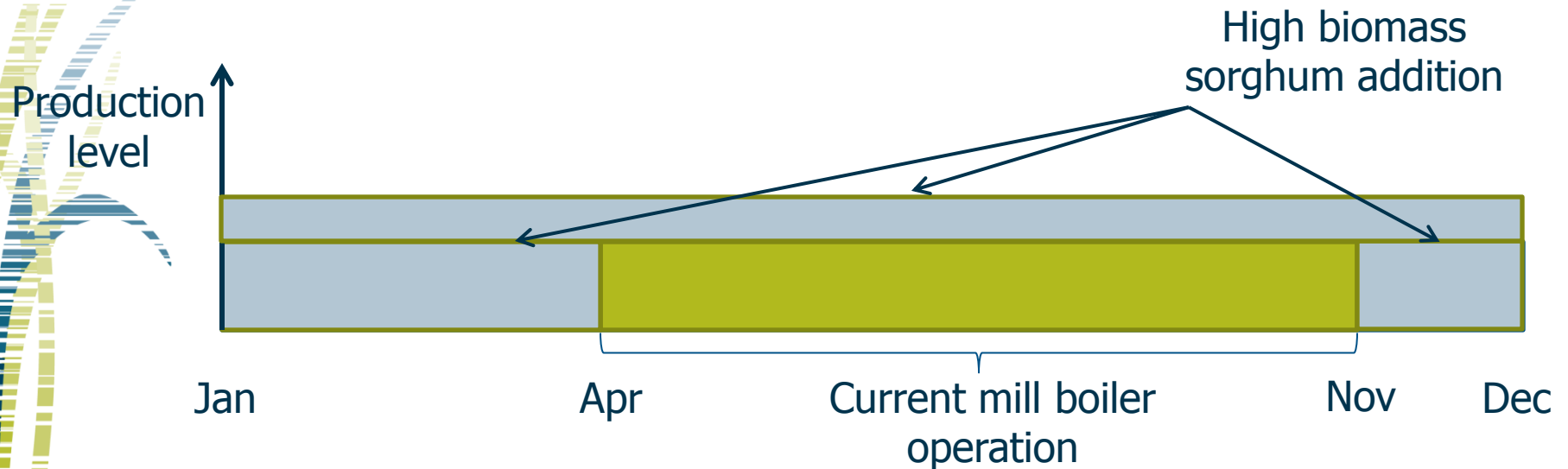
Our Products: High Biomass Sorghum



- Annual biomass crop
- High yield
- Low moisture at harvest

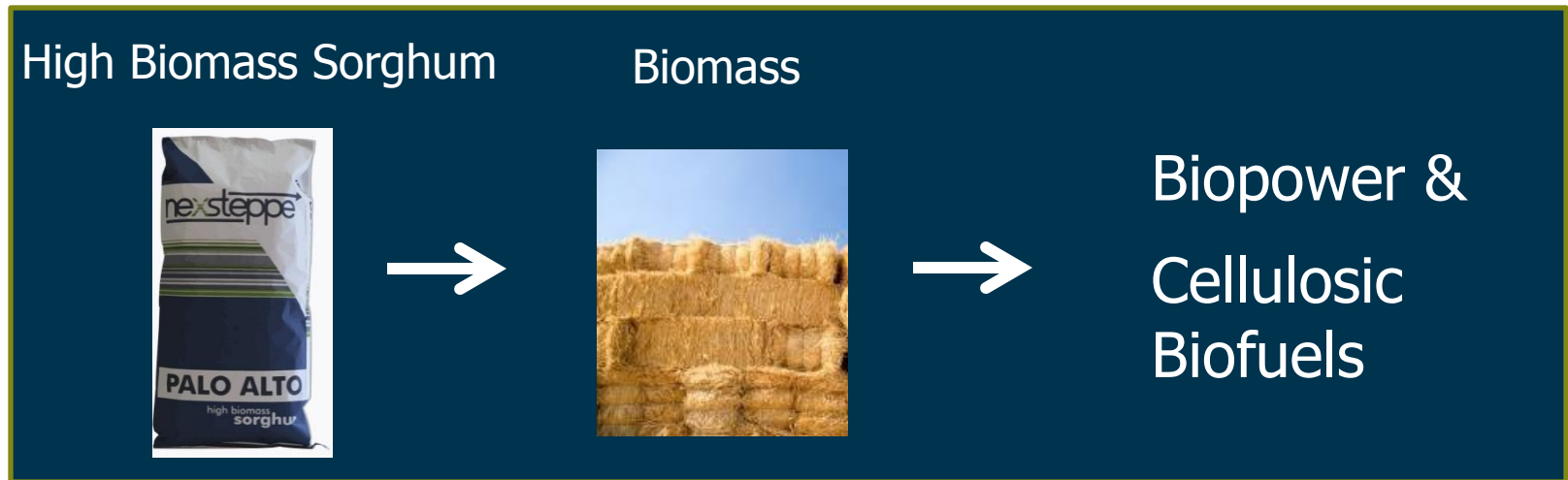
The First Market for High Biomass Sorghum

Existing Brazilian Industrial Biomass Boilers



- Energy demand increasing
- No cheap natural gas
- Existing dedicated crop supply chains

The Bigger Picture



A Sea of Sweet Sorghum at Leading Brazilian Sugar-to-Ethanol Mill





Thank You

Anna Rath

CEO, NexSteppe

arath@nexsteppe.com



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