

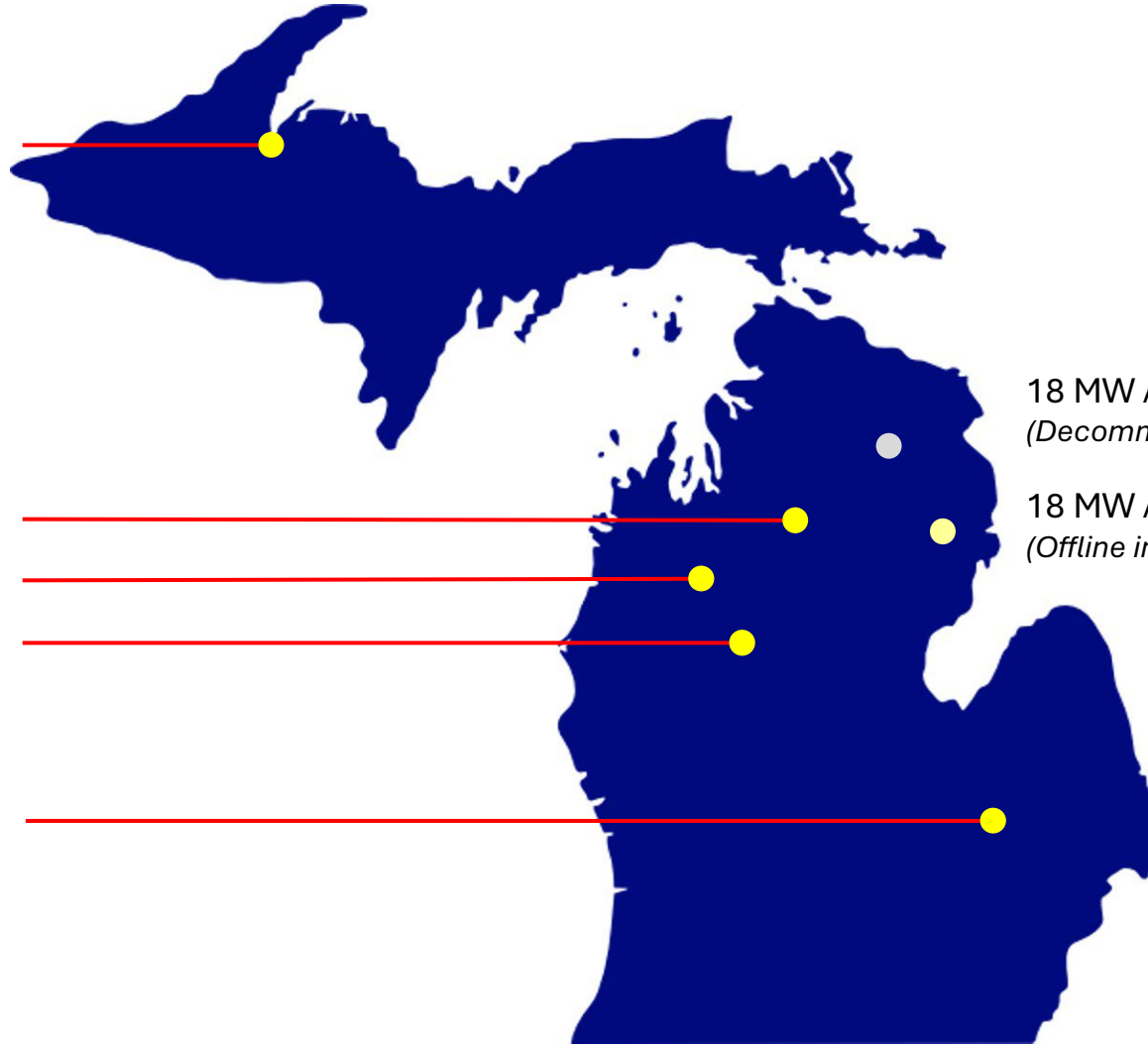


*Home grown, Michigan-made domestic energy*

20 MW / L'Anse Warden Electric\*

38 MW / Grayling Generating Station  
38 MW / Cadillac Renewable Energy  
18 MW / National Energy/McBain

38 MW / Genesee Power Station



18 MW / Hillman Power Co.  
*(Decomm. 2020)*

18 MW / National Energy/Lincoln  
*(Offline indefinitely 06/06/24)*

*\*Not a member of the Michigan Biomass coalition*

# Biomass & generation

## RENEWABLE PORTFOLIO STANDARDS

11% of 145 million total RECs

- 2009-2020

System benefits

- VARS
- Line-loss mitigation

## RELIABILITY & RESILIENCY

Dispatchability

Fuel diversity

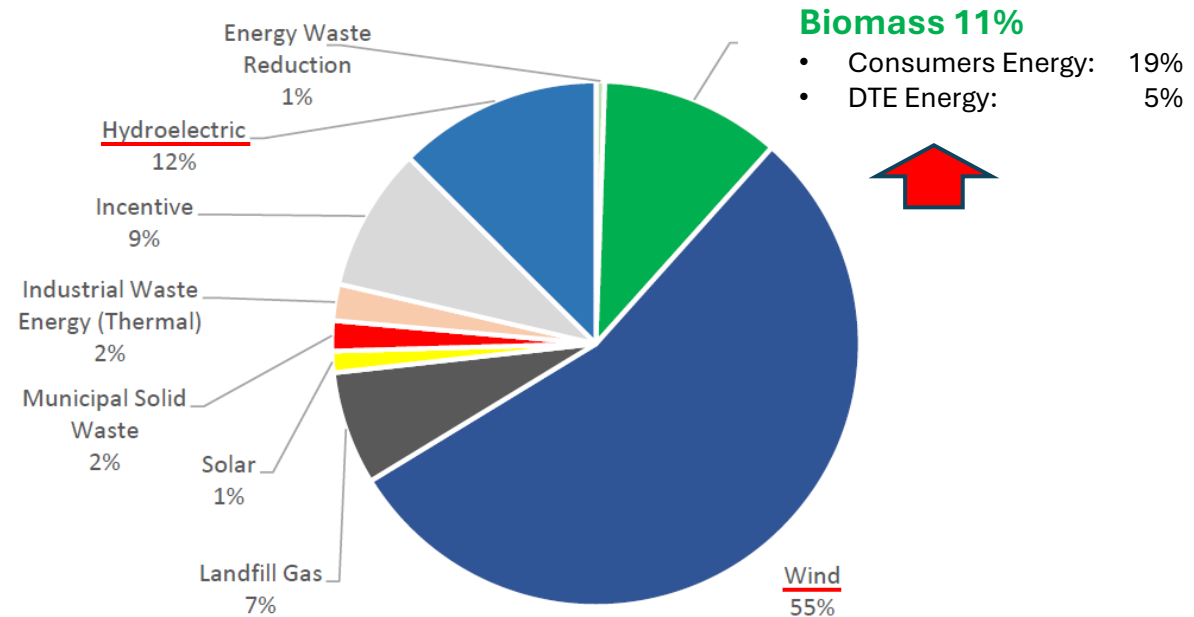
Weather “resistant”

Mitigates risk & uncertainty

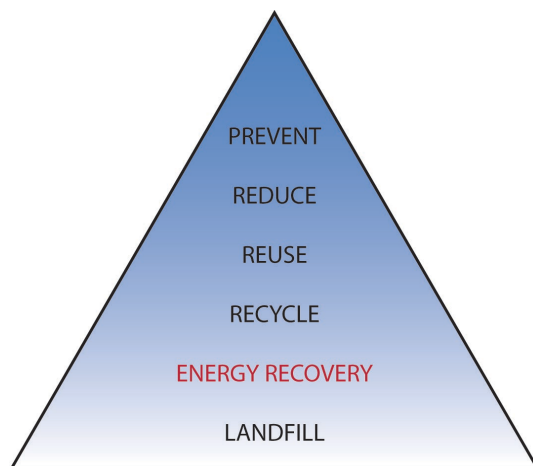
No “integration costs”

## All Electric Providers – 2020 Compliance RECs

12,491,756 Total RECs



# Biomass & the circular economy



## IN-FOREST

Forest stewardship

- Wildfire mitigation, health, climate

Salvage

- Fire, storms, disease, infestation

Habitat

Thinning

Commercial harvest

## FOREST PRODUCTS

Sawdust

Bark

Culls

Cutoffs

## LANDFILL DIVERSIONS

Tire-derived fuel (TDF)

Railroad ties

Recyclable wood

- Crates, pallets, dunnage
- New construction trimmings

## “URBAN” WOOD

Land clearing

Storm debris

Arboriculture

Landscape debris



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# *Biomass & economics*

## **LOCAL IMPACT**

120 direct, 658 indirect jobs

\$312 M rural economies

Taxes & utility revenues

Quality of life

## **ENERGY SERVICES**

Dispatchability

On-site fuel “storage”

Technical grid support

## **THE VALUE PROPOSITION**

Optimizes value of forest resources

Aids forest management

Beneficial reuse of materials

Locally sourced

Local transport

Non-commodity fuel

Geopolitically secure

Stable pricing, supply hedge



*Home grown, Michigan–  
made domestic energy*

