Chocolate Fuel \& By-Product to Co-Product Innovation

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August 23-24, 2022 Aurora, Colorado

## Summit for Recycling \& Rocky Mountain Composting Symposium

## Cocoa Butter Biofuel

Patent US 63/142,620
Methods \& Systems of Producing Low Cloud Point Biodiesel from Cocoa Butter
ASTM Certified Cold-Stable Biodiesel and Applicable Manufacturing Outfit System for Closed-Circuit Power Generation within Industrial Chocolate Manufacturing Facilities.

> ANSWERING THE QUESTION
> Can Renewables be Sexy?

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## "BACKYARD-ISH"

an understatement


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BERTHA THE '92 MERCEDES DIESEL G-CLASS
$2,000 \mathrm{~km}$ All-Female Off Road Rally Race
Run on 280 Gallons of B-100 Cocoa Butter Biodiesel
Biofuel Rating
B- meaning biofuel
100- meaning 100\%

A fuel blend containing $80 \%$ traditional petroleum (1,2) diesel and 20\% biofuel would be rated B-20


## EFFICACY TESTING ON A JET



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## GOAL

Take Manufacturing Off-Grid
In the US manufacturing accounts for almost a
quarter (23\%) of direct carbon emissions (EPA)

On-site Energy Generation Outfit
500,000 ft Manufacturing Facility
$\$ 2.10 / \mathrm{sq}$. ft utilities $=\$ 1.5 \mathrm{M}$ per Month
Max facility outfit costs $\$ 50 \mathrm{M}$
BEP 36 Months

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## By-Product

What existing economic inefficiencies can be remedied by repurposing waste output of a given industry? By giving value and use to a byproduct we are then treating it as a coproduct.

## Co-Product

## REGENERATIVE BIOMANUFACTURING



Campworks NS-1
Biocomposites \& Mycellium Insulates


Basking in mycelial growth at MycoLove Farm


## MOVING

to Compost Colorado



