



People. Providing. Strengthening. Securing.



Michigan Providing

Unprecedented and Unparalleled Natural Resource and Sustainable Agriculture Investment



- ✚ MPSC controls the only established and sustainable Potash reserve in the US
- ✚ The Reserve contains the world's highest-grade ore with over 150 years of production life
- ✚ Potash, a fertilizer with no substitute, is designated as one of only 35 “strategic & critical” minerals by the US Government and the only food-related mineral to receive the designation
- ✚ The US currently must import over 96% of its potash needs
- ✚ Formerly controlled by Mosaic, this Reserve has been successfully and profitably producing potash and high-grade salt by the MPSC team for over 25 years
- ✚ Strategically located in the US Corn Belt, MPSC will be the US’ only material MOP producer with significant advantages in transportation.

About Potash
A Need for Sustainable Agriculture

Potash is the Most Important Contribution to Sustainable Global Food Supply and Increasing Population

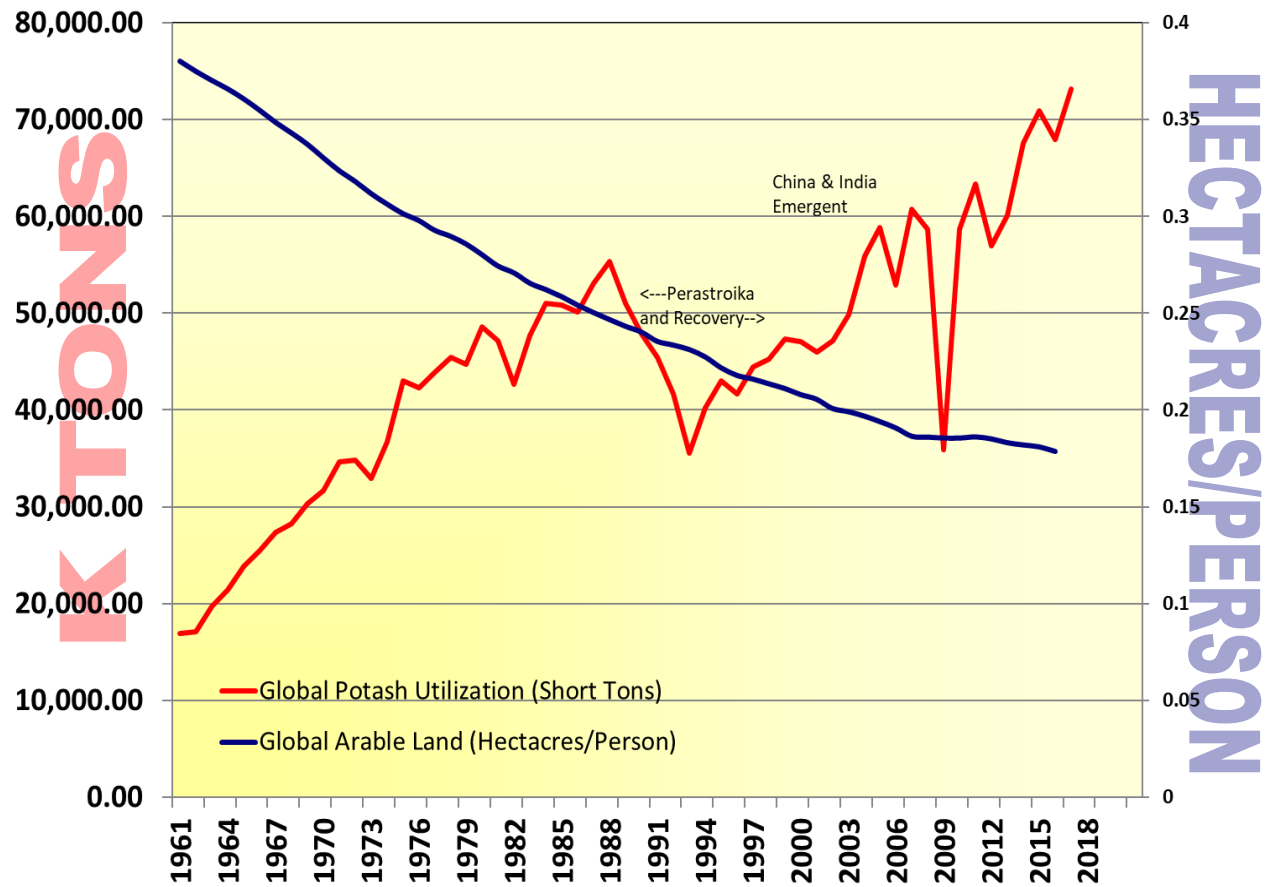


🚧 Global arable land per capita decreases each year; down 51% since 1961.

🚧 Arable land must now yield ~3x as much crop as it did in 1961.

🚧 Land degradation is affecting one fifth of the earth's land area and the lives of 1 Billion People.
(Source:UN)

🚧 Amazon deforestation has increased 20% in the last 9 months over 2018 rates.
(Source: Amazon).



“over the next 40 years, we need to produce more food than the last 8,000 years combined,” – United Nations World Food Program



Essential for Sustainable Agriculture. Essential for Proper Stewardship by all farmers. Essential to Save Water.

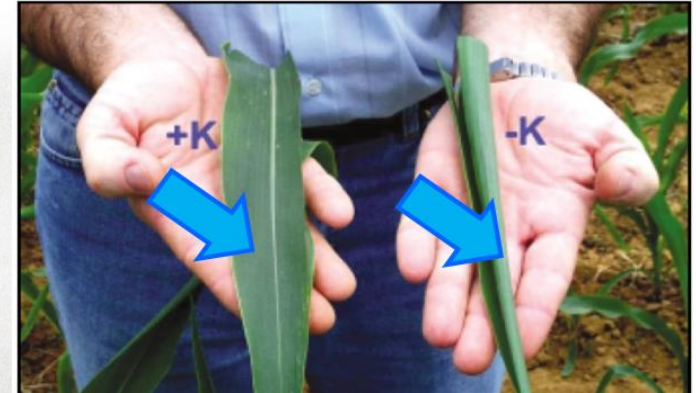


- ✚ Potash Improves Water Use by All Plants
- ✚ Increases Yields with Less Water
- ✚ Enables Dryland Farming
- ✚ Retains water in the soil
- ✚ Helps Crops in Warmer Climate
- ✚ Reduces over Irrigation
- ✚ Reduces new Irrigation
- ✚ Protects Plants From Disease
- ✚ Protects Plants During Drought
- ✚ Reduces Deforestation
- ✚ Feeds a Growing World
- ✚ SAVES WATER.
- ✚ Without Water, there is no Farm



1936 Dustbowl. Cimarron, OK

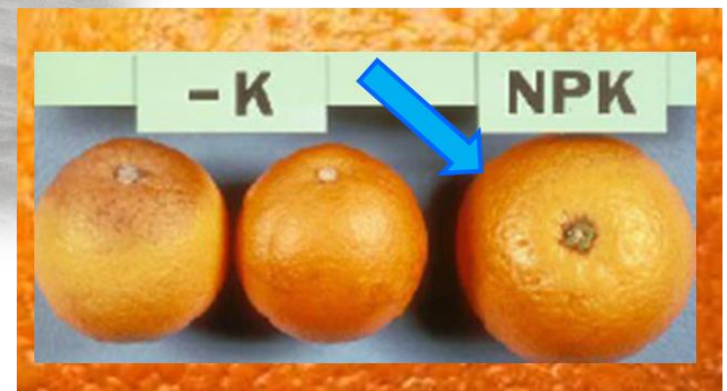
Corn, Same Soil, Same Amount of Water



Sugar beet, Same Soil, Same Amount of Water



Citrus, Same Soil, Same Amount of Water



All Natural Potash Reduces CO₂ Emissions in Farming



All Natural Potash Helps Protect and Capture Soil Organic Carbon

Soil Organic Carbon (SOC) found in the living matter in soils acts as a sink that **traps and stores CO₂** – a major contributor to global warming.



Soils represent the largest terrestrial pool of carbon: each hectare can store up to **50 - 300 tonnes of carbon¹**, which is equivalent to **180 - 1,100 tons of CO₂²**

By increasing crop yields and productivity on available arable land, fertilizers help protect carbon-rich forests, peatlands, wetlands and grasslands by minimizing land use changes.



Increased productivity through fertilizer use has spared **1 billion hectares** of virgin land from cultivation between 1961 and 2005 and saved the equivalent of **317 - 590 billion tonnes of CO₂ emissions** (the same as total global pre-1800 CO₂ emission levels)³.

Globally, the primary sources of greenhouse gas emissions are electricity and heat (31%), **agriculture (11%)**, transportation (15%), forestry (6%) and manufacturing (12%).

Effective and efficient fertilization is a vital part of the climate smart agricultural practices that could **reduce global emissions by 5.5 to 6 billion tonnes of CO₂ equivalent per year**: around the same as removing 1,500 coal-fired power plants from the energy sector⁶.



To help **fight climate change** we need to use **fertilizers globally to grow more crops on existing farmland** to protect carbon stored in wild ecosystems and **increase the carbon stored in our agricultural soils.**



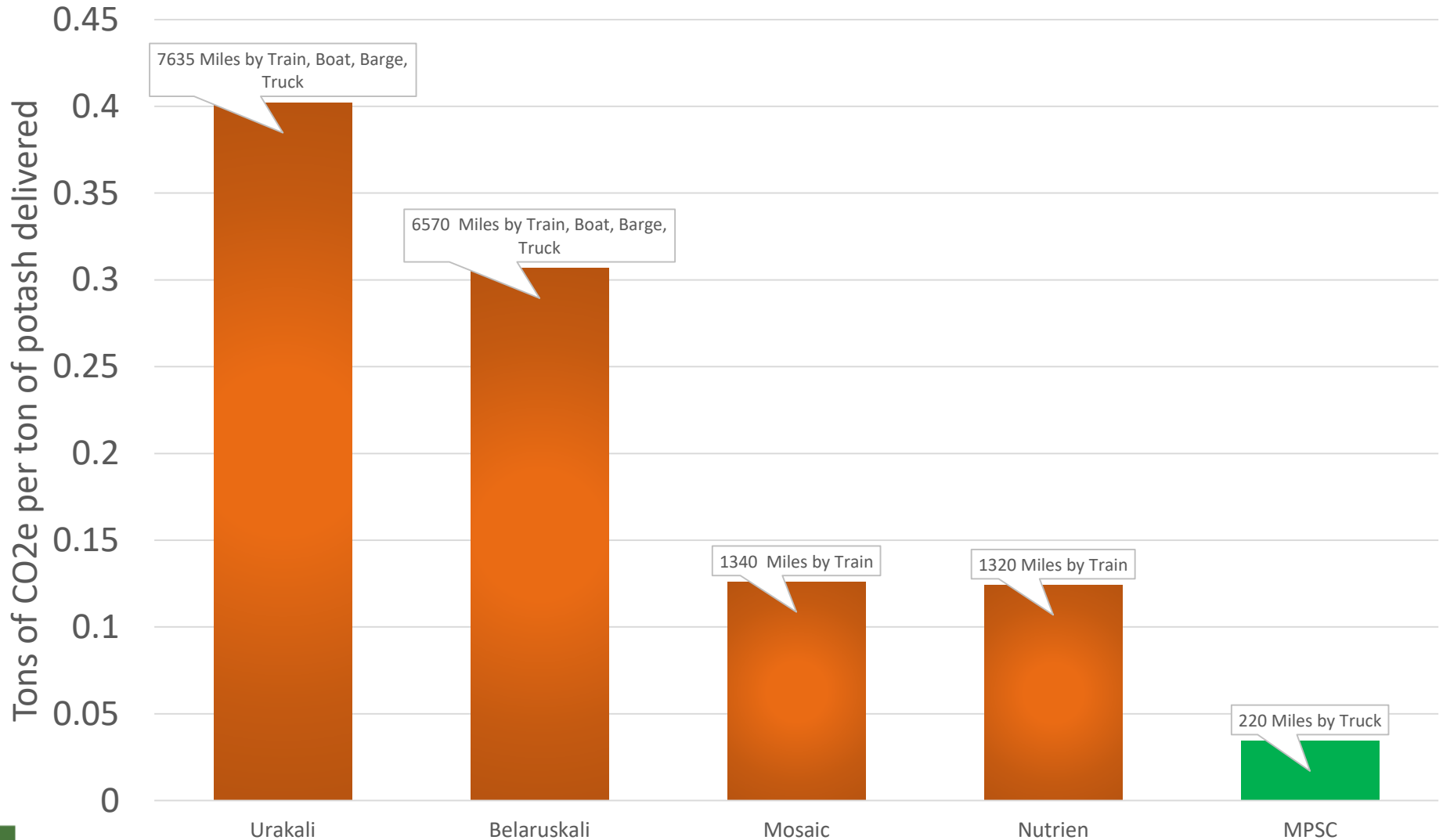
Source: IFA, World Resource Institute



Transportation CO₂e Reduction may be as High as 120,000 tpy



Estimated Transportation CO₂e per ton delivered



MPSC is Technologically Advanced and Environmentally Smart



MPSC utilizes a unique process.
No other facility in the United States utilizes this technology.

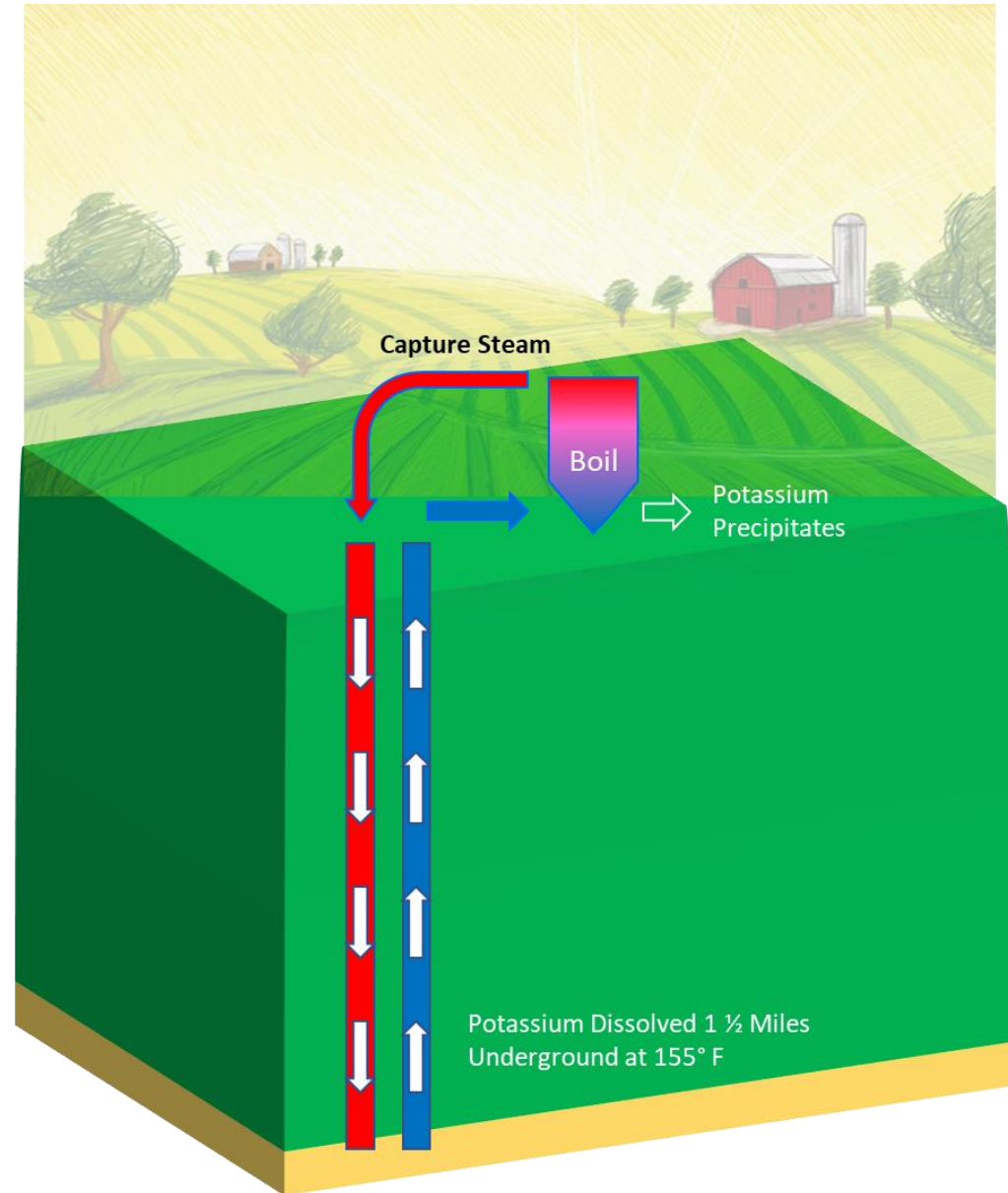
A CLOSED LOOP SYSTEM that utilizes natural geothermal energy,

to create **purified distilled water** from steam,

all natural potassium fertilizer, a strategic and critical mineral required for sustainable food production and security

81-90% of all water is recycled perpetually.

Site unseen: Less than 1% of surface is impacted, by limiting geothermal well locations.



Potash is Required for National Security



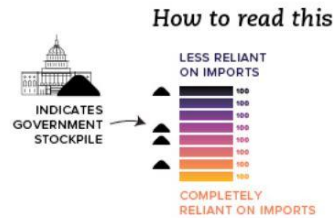
THE 35 MINERALS CRITICAL TO U.S. NATIONAL SECURITY

This draft list of minerals deemed essential to the economic and national security was released Feb 16, 2018



“...our nation’s mission [is] to reduce our vulnerability to disruptions in the supply of critical minerals. Any shortage of these resources constitutes a strategic vulnerability for the security and prosperity of the United States.”

—Dr. Tim Petty, Assistant Secretary of the Interior for Water and Science



POTASH

HOW MICHIGAN POTASH & SALT COMPANY WILL HELP

Michigan could be the nation’s leading source for a critical agricultural resource that is also in demand internationally. Potash is an essential plant nutrient and critical ingredient in fertilizer for the economy’s agricultural industry. Currently supplies are running out and there is no known substitute for potash. The U.S. is 96% import reliant, as potash is only found in a few places in the world.

Ted Pagano of Michigan Potash estimates an initial demand for more than 300 workers employed in an enterprise that will produce more than a million tons of potash annually. “It’s our responsibility to develop this wisely and in a way that moves Michigan forward,” Pagano says. Bringing Michigan potash to market, Pagano says, will provide a domestic source of the element at reduced cost to Midwest farmers as well as to the national agriculture industry. It will reduce imports, improve the nation’s trade balance, create jobs and increase the state’s tax base.

United Nations World Food Program

Over the next 40 years, we need to produce more food than the last 8,000 years combined

96% Import Reliant

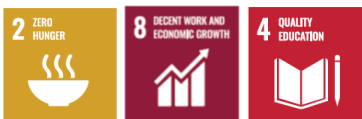
The United States is one of the World’s largest consumers of potash and is over 96% import reliant. Principle supply coming from only 4 global producers, which includes 1 in Russia and 1 in Belarus, who at times are antagonistic to our nation.

Strategic Reserve of Potash

The United States Strategic Reserve of Potash in New Mexico ceased material production in 2016. United States’ farms require 10 Million tons every year. We produce 300,000 tons domestically.

Required to Grow our Food

Potash is the tightest controlled commodity in the world, yet it is required to grow our food. It is required to support our corn and soybean farmers. Especially now, when competitive demand for potash and food exports are coming from China, Brazil, and India.



MPSC is High Impact and Sustainable.



<p>2 ZERO HUNGER</p>	<p>END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE</p>
<p>4 QUALITY EDUCATION</p>	<p>ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL</p>
<p>6 CLEAN WATER AND SANITATION</p>	<p>ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL</p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL</p>
<p>10 REDUCED INEQUALITIES</p>	<p>REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES</p>
<p>13 CLIMATE ACTION</p>	<p>TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS</p>
<p>15 LIFE ON LAND</p>	<p>PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS</p>

MPSC's essential purpose, is to improve global food yields by increasing sustainable farming sophistication and to help farmers improve yields to provide food security for a growing global population. Salt, is one of the worlds oldest food preservatives. Potash is designated as necessary for food security and salt is one of the world's oldest and most necessary natural food preservatives.

The MPSC project is expected to triple the Industrial Tax base of Osceola County, the primary beneficiary being Evart and Reed City K-12 School, which are desperately underfunded. MPSC provides 150 high paying trade skill jobs, where every employee is taught, on rotation, 3 trades that are lifelong skills.

Potassium is the essential nutrient responsible for improved water use efficiency in all crops, retaining water in soils, reducing irrigation, and encourages sustainable water for food production. MPSC's industry leading manufacturing technology is the most water efficient in the world, creating its own fresh water from deep non-potable sources and is over 90% water recycling efficient.

MPSC's leading technology utilizes deep natural geothermal energy and combined heat and power technology, which is a EPA US energy efficient designated initiative, to efficiently create fertilizer while self generating its own electricity, and excess electricity for rural communities, while reducing CO2 footprints.

MPSC resides in a desperately disadvantaged community, where average income is near or below poverty level, homes are trailers, and children can't afford extra curricular activities. The MPSC project creates upwards of 350 Million dollars of brand new GDP per year, infusing 100 Million per year back into the community for over 100 years. It is a generationally transformative project.

Potash, which is needed for food growth by the entire globe, is controlled by 10 principle producers, and 4 Principle producers control upwards of 80% of the worlds supply. The control of such a critical product needed by people, creates a natural inequality. In addition, MPSC's founder and CEO is Native American, and was a BIA Indian Fellow.

Agriculture is responsible for over 11% of global CO2 production, and proper fertilization has the ability to reduce Global CO2 emissions by 6 Billion tons per year, the same as 1500 coal fired power plants. Potash keeps CO2 in the soil, and reduces deforestation and land degradation needed to remove CO2 from the atmosphere. MPSC displaces imports traveling from 1200 to 7800 miles away, quantifiably reducing freight CO2e by ~120,000 tons per year.

MPSC produces potash by impacting less than 1% of the surface, the most efficient means of potash production globally, and the end product prevents deforestation, encourages and halts efficient farming and food production by substantially improving yields and farmer sophistication.