



HEALING THE PLANET TODAY WITH THE TECHNOLOGY OF TOMORROW

BIOFUELS

INTRO

Phireon Global Partners Specializes in new and emerging technology in various sectors designed to heal the planet, better lives, and generate profits. We develop extraordinary technology and exclusively represent a number of advanced IP, including recently declassified technologies. We Heal the Planet Today, With the Technology of Tomorrow.

OUR FOOTPRINT IN BIOFUELS:

- BIOFUEL
- CLEAN ENERGY
- GREEN POWER
- AGRICULTURAL SYSTEMS
- WATER FILTRATION
- SOIL REMEDIATION
- PURE GENETICS



39 COUNTRIES







BASICS

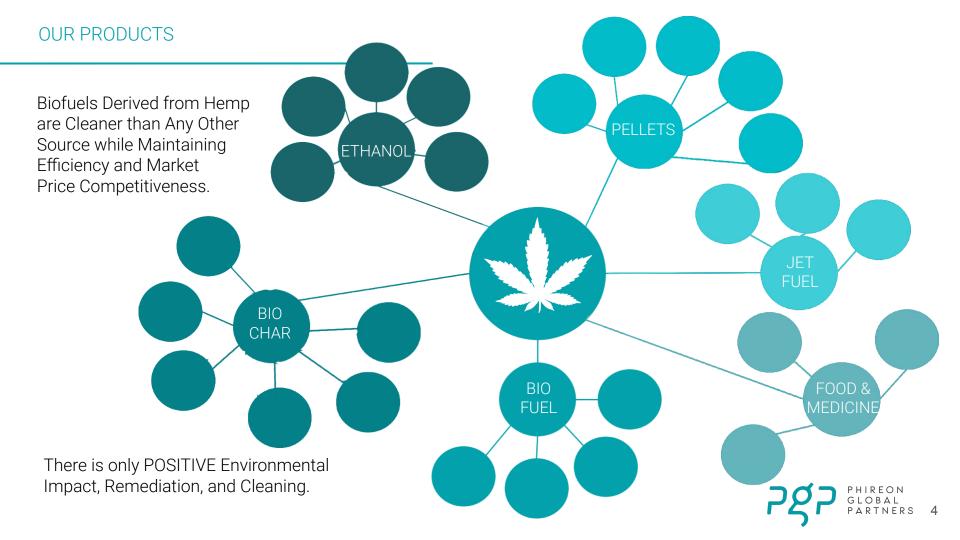
Phireon Global Partners utilizes only those technologies that clean the air, water, food, and soil.

OUR FUELS:

- Sequester CO₂ Better
- Create Healthy Agriculture
- Produce ZERO Waste
- Produce ZERO Industrial Waste
- Use Only Pure Genetics
- Remediate the Soil
- Clean the water
- Remove Environmental Pollutants



Our Reliance on Fossil Fuels is not just an Issue of Environmental Concern but also National Security. Now, Poor Prior Legislation is no longer an issue.

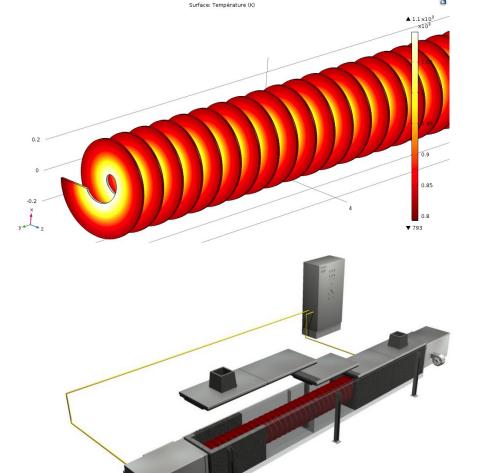


HEATED ELECTRICAL CONVEYOR SCREW

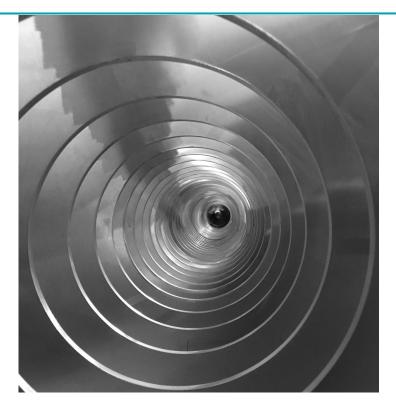
- Simple \rightarrow Easy to operate
- Robust → very low maintenance
- No electrical heater → No sensible element
- No double jacket → No hot fluid or gas needed
- Plug flow process → FIFO reactor

PROVEN INDUSTRIAL TECHNOLOGY

- 20 years experience
- 10 worldwide patents
- ✓ Treatment of bulk materials of any shape, wet and dry
- ✓ Capacities from 30 up to 4000 l/hr
- ✓ Process temperature up to 850 deg. C
- ✓ We Control PERFECTLY The Process Temp
- ✓ We Control PERFECTLY the Residence Time of Product



THE TECHNOLOGY - "HECS"



POWER INSTALLED UP TO 300 kW per reactor



Industrial series

- Heating
- Low temperature drying



Food processing series

- Pasteurisation
- Steam sterilization
- Toasting / roasting



High Temperature series

- Carbonization
- Torrefaction
- Pyrolysis



PYROLYSIS PLANTS

Bio-coal production from PKS





Liquid smoke production from red-beech tree

Biochar and steam production from tobacco



ENERGY PELLETS

- We have done **20+ years** of analytics on hemp biomass turning it into a high energy output clean burning renewable energy pellet that is 100% torrified making it hydrophobic (*Crucial to energy production and storage*).
- IT CAN STORE INDEFINITELY WHEREAS OTHER PELLETS' SHELF LIFE IS 30 DAYS (Less if humid).
- These 20 years of crop data has led us to the point of being able to create the highest energy production rate per ton of energy pellets in the entire industry
- IT ALL SATISFIES THE 2016 PARIS ACCORDS OF CONVERTING THE GLOBAL COAL FIRE FACILITIES TO BURN RENEWABLE ENERGY PELLETS
- Our pellets can be used in <u>ALL</u> coal plants <u>NOW</u> with <u>ZERO</u> retrofitting, enabling the us to meet the global clean fuel standards <u>TODAY</u>

ENERGY PELLETS

- We create 3 tons of pellets per every acres of Hemp.
- Our Pellets generate ~22-23 Gigajoules per ton (no other bio pellets achieve this level of efficiency)
- We have access to scale to 2 Million Acres of Dedicated Hemp Growth by year two.
- We sell each ton for ~\$300 Per Ton
- 2M Acres of hemp = \$1.8B dollars a year in Bio Pellets Sales ALONE.
- As a byproduct of our Bio Pellets Manufacturing we are able to clean millions of gallons of water a day predicated on flow rates of the waterways.

GASIFICATION PLANTS IN OPERATION



Substitution of fossil fuel by syngas





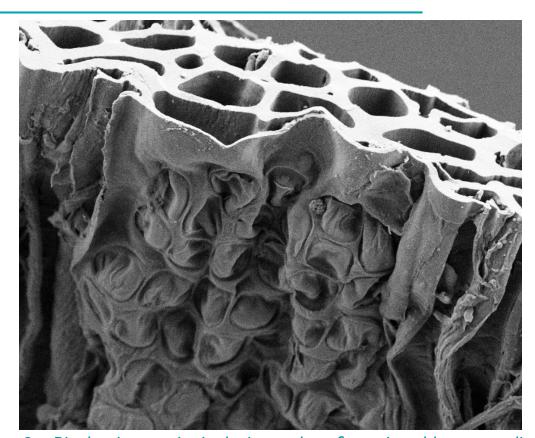
2 MW capacity
Syngas from wood chips

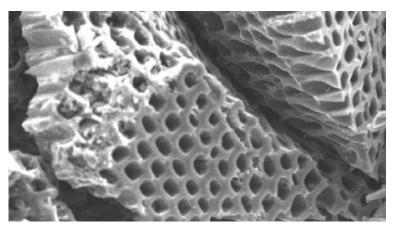
100 kW capacity Syngas from wood chips

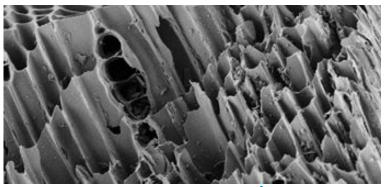


BIOCHAR

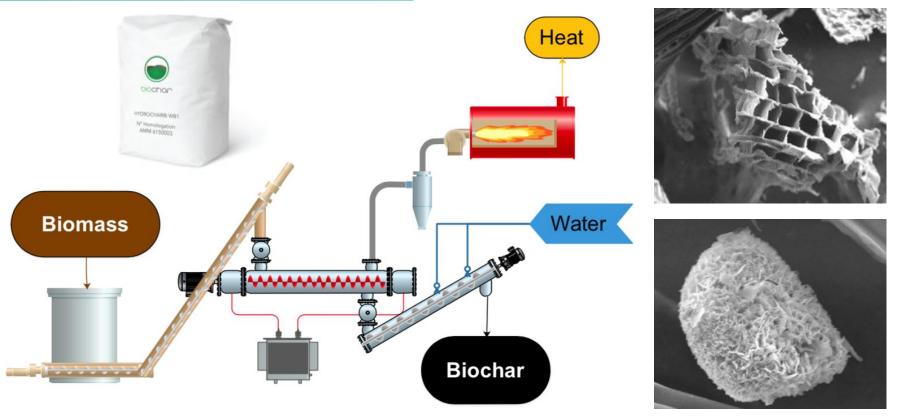
- Iron ore + our hemp based carbon = Hemp plants carbon = Superior and Durable Green steel.
- We can make green steel because our plant based carbon is no less than 75% CEFIX
- We sell the activated carbon to steel manufacturers and graphene useful in graphene
- Cheaper than all other carbon sources based on how we manufacture and our efficiencies
- Hemp graphene is a super conductor and highly desirable to the market.
- We sell each ton of BioChar for \$300-\$750 per ton depending on quality of BioChar.







Our Biochar is superior in design and configuration able to remediate water and soil via electromagnetic induction



GLOBAL FACILITIES

USA





SWITZERLAND



CANADA





We can produce 40 gallons (151.6 liter) of biodiesel per acre of hemp

• 40 gallons (151.6 liter) per acre x 2,000,000 Acres = 80M Gallons per 4 months

240 Million Gallons a year by year three

240 Million gallons x \$3.40 per gallon = \$816M gross revenue per year

PLANTS IN OPERATION





RDF -> ELECTRICITY

MOBILE UNIT

RDF -> HEAT

MOBILE WASTE TO HEAT





ZERO EMISSIONS PROCESS FOR FOOD





TOASTING PEANUTS

STERILIZATION OF DEHYDRATED VEGETABLES





STERILIZATION OF SPICES

PASTEURIZATION

OF TEA

EQUIPMENT

TAR CRACKING





SYN GAS BURNERS





SLUDGE DRYERS

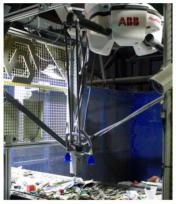
BIOMASS DRYERS

ROAD MAP

	YEAR 1 (20k Acres)	YEAR 2 (200k Acres)	YEAR 3 (2M Acres)
BIO PELLETS	 60k Tons Produced \$18M gross rev 60k tons of carbon pollution prevented 	 600k Tons Produced \$180M gross rev 600k tons of carbon pollution prevented 	 6M Tons Produced \$1.8B gross rev 6M tons of carbon pollution prevented
BIOFUEL	 1.6M Gallons Produced \$5.4M gross rev 15k tons of carbon pollution prevented 	 16M Gallons Produced \$54M gross rev 150k tons of carbon pollution prevented 	 160M Gallons Produced \$540M gross rev 1.5Mk tons of carbon pollution prevented
ROOT CROP CARBON SEQUESTRATION	 320k tons of carbon sequestered 	 3.2M tons of carbon sequestered 	 32M tons of carbon sequestered
TOTAL CARBON REDUCED	400k TONS	4M TONS	40M TONS

INNOVATION ADVANTAGE

AI ENHANCED ROBOTIC VISION





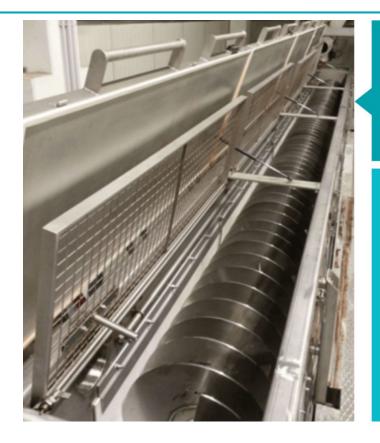


CUBING TECHNOLOGY For RDF & BIOMASS





PLANTS IN OPERATION



DRYING OF NACI

CHEMICAL SLUDGE PROCESSING



TYPE OF EQUIPMENT AVAILABLE







RnD units

Mobile and stationary pilot equipment for testing and development of new bio-based products

Containerised units

Compact, plug & play equipment for simple installation and easy configuration on site.

Stationary plants

High capacity equipment for stationary applications, often several machines operating in parallel.

WASTE TO ENERGY



THE PROCESS





Engineering

Manufacturing & FAT

Commissioning & Training



HEMP'S UNIQUE ROLE

- Hemp Biodiesel Is A Carbon-Neutral Replacement For Diesel.
- Hemp Grows So Fast That It Consumes A Ton More Co2 Emissions In Its 4 Month Life Cycle Than A Whole Forest Does In A Year.
- Hemp Is One Of The Fastest Co2 To Biomass Conversions Found In Nature.
- It Dwarfs Mature Forests And Mature Rain Forests In Their Capacity To Sequester Co2.
- Rainforests Used To Be The Benchmark Of Co2 Sequestration, We Know Now, That Hemp Consumes More Per Annum Then Anything Else – Per Acre/ Per Hectare.
- WE ALREADY HAVE 200 THOUSAND ACRES DEDICATED FOR HEMP & CAN
 SCALE TO 2M WITHIN TWO YEARS

HEMP'S UNIQUE ROLE

- We Own <u>The</u> Genetic Library Of Natural Seed That Can Fuel All These Ucals While Cleaning the Environment.
- We Have Developed Patents On Hemp Processes For Biofuels And More (In Multiple Verticals) Across Various Regions
- By Scaling One Of Our Existing Systems In Switzerland That Is 100% Renewable And Regenerative We Can Facilitate a Smooth Transition to Effective BioFuels
- We Have Developed An Agronomy And Process To Create Air Filters Cheaper & Better Than Hepa That's 100% Renewable And Regenerative

We Can Sequester 8.06 Tons Of Co2 Per Acre Of Our Pure Genetics Hemp.
 THIS IS QUANTITATIVE DATA from years of experience.



- This Is Nearly 4 Times The Amount Of Carbon Sequestered From Forests...Per Season
- OUT OF ALL BIO-LIFE ON EARTH HEMP IS THE ONLY THING THAT DOES THIS THE BEST.
- Hemp Is Being Uniquely Used To Also Sequester Carbon Back Into The Soil Through A Process Called Biosequestration.
- As Stated In The Us Dept Of Energy Workshop On Carbon Cycling And Biosequestration:
 "The Global Carbon Cycle Plays A Central Role In Regulating Atmospheric Carbon Dioxide (Co²) Levels And Thus Earth's
 Climate...global Carbon Cycling Is Dominated By The Paired Biological Processes Of Photosynthesis And Respiration.
 Photosynthetic Plants And Microbes Of Earth's Land-Masses And Oceans Use Solar Energy To Transform Atmospheric
 Co{Sub 2} Into Organic Carbon...this Process, Known As Carbon Biosequestration, Temporarily Removes Carbon From Active
 Cycling And Has Thus Far Absorbed A Substantial Fraction Of Anthropogenic Carbon Emissions." *

WATER FILTRATION

Hemp Can Also Be Processed Down Into A Biochar And When Used –
 Will: Improve Water Quality, Increase Soil Fertility, Raise Agricultural
 Productivity And Reduces Pressure On Mature Growth Of All Types Of Crops.



- 2 crop cycles can remediate 100% of brown fields. (NOT Including Radiation)
- According To Multiple Studies Done By The Us Dept Of The Interior, The Usgs And The
 Usda: When We Produce Biochar From Hemp, We End Up Converting Much Of The Aliphatic Carbons (Which
 Are Radical And Contain No Carbon Ring Structures) To A Very Stable Form Of Aromatic Carbon (The Stable
 Kind That Contains Rings Of Carbons, Like Graphite). This Is Crucial Because It Makes The Carbon Stable In
 Soils For 100's Of Years.
- OUR SPECIFIED HEMP GENETICS FILTERS WATER LIKE NO OTHER MATERIAL ON EARTH

CONSUMER PRODUCTS

 We Have Hemp Building Materials, Air Filtration Products, Fiber Products, And Medicinal Verticals Already In Place



- Studies Have Shown That A Large List Of Downstream Products Using Hemp Fibers
 Continue To Sequester Carbon Long After They Have Been Manufactured-Sold-And
 Used In The Marketplace From Building Materials To Packaging, Plastics And
 Consumer Products.
- Our Natural Seed Genetics Do Not Require Pesticides To Grow Naturally + The Ability
 For Farmers To Self Propagate Seed Stocks Makes This The Only Win:Win:Win Crop
 That Exists.

PLANTS IN OPERATION







JUSTICE

- Meets 2016 Paris Climate Accords
- Enables Us To Meet The Goals Set Out By Bush for Clean Energy
- Biofuels Derived From Hemp Are Cleaner Than Any Other Source
- There Is Only Positive Environmental Impact, Remediation, & Cleaning
- Minority Owned
- Affording Jobs, Training, Education, Corporate Track, And Opportunity To Underserved Populations
- Transition Program And Jobs For Veterans Into Civilian Life
- Prisoner Training And Transition Program



JUSTICE

SUSTAINABLE GOALS





































JUSTICE - (UN SDG GOALS)



By decentralizing the BioFuels Hemp production we end poverty for those families involved



By providing education and integration into profitable farming for fuel we provide upward mobility for our people



Our clean fuel systems provide inexpensive green energy that is reliable and robust



Our systems clean brownfields and waterways enabling growth of nutritionally dense foods.



Our program systems are designed to empower all people regardless of sex, class, creed.



Our program creates jobs, and upward class mobility to everyone in every part of the supply chain.



By growing our fuel we encourage health and well being in every citizen nearby our operation.



Our Biofuels systems clean waterways and remediate bodies of water.



Each of our verticals builds new industries, sectors, and pathways for people to develop in.

JUSTICE - (UN SDG GOALS)



Phireon serves People across all socioeconomic spectrum to achieve energy independence, sustainable waste management, and food security.



Our Pure Genetics, biofuels, and practices sequester more carbon than nearly every other method available.



Peace is easier when we end poverty and provide food security. All PGP systems are designed with this in mind



Phireon Bio Fuels Systems are designed to bring about sustainable cities and communities.



Our biofuels systems remediate the waterways in every jurisdiction we operate in



Phireon works across 175 facilities in 39 countries and is cross disciplinary and holistic in its approach to include all contributors.



With efficiencies in our design and implementation all systems operate more efficiently and less wastefully



Our Pure Hemp genetics remediate brownfields within two seasons



