



Special points of interest:

- Turn an interstate problem into hard cash
- A green solution and the end of Americas biggest invader
- No emissions of grid and fully moveable
- Clean up the environment and restore indigenous species
- PowerCan® 200 fast payback, Plug and Play Power Packs

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PowerCan® 200 Tamarix to CHP

How to turn a Californian invasion into green money?

TAMARIX RAMOSISSIMA	Salt Cedar
Native	Europe and Asia
Classification of Species	Invasive
Main Affected States	South West US and California
Seeding Season	5.5 Months Per Year
Seed Proliferation	100 Seeds per 2.5cms
Seed Size	Circa 0.17 x 0.45mm diameter
Germination Rate	Within 24hrs
Root Growth	-3.4m in one season
Stem Growth	> 1cm every 2.5 Years
Fire Resistance	Roots unaffected
Effective Control	Physical Uprooting/Feedstock
PowerCan® 200	Gasification
Power Plant Size	200kWe + 260kWh
Physical Size	20ft Containers
Typical Consumption	< 4 Tons PE Tamarix Per Day possibility to convert 40 tons



Invasive Plants displace native plants and wildlife, they increase wildfire and increase flood danger, they consume valuable water, and degrade recreational opportunities. In California Tamarix destroys productive agriculture and timber lands.

Several patented chemicals have demonstrated reasonable effect against Saltceder but they have also proved very detrimental to the environment

Mechanical Solutions include burning and the California state even employed prisoners to burn Tamarix on site and to transport to landfills; as neither burning nor landfill are acceptable environmental solutions. The Tamarisk leaf beetle was introduced to eradicate Tamarisk in the South West United States but many dead trees have fuelled fires creating risk on a massive scale

The extinction of Tamarix by a PowerCan® 200 would produce between 3 and 4 percent clean organic ash during a days gasification process and consuming 4 tons of Tamarix. One PowerCan® 200 can produce more than 40 tons of pelletized Tamarix fuel for use elsewhere.

The PowerCan® 200 process means there are no ways for seeds to germinate, no smoke emissions occur in the process, and no steam, is produced.

Gasification of Tamarix feedstock using PowerCan® 200 technology works as well with dried or wet wood and the energy value of Tamarix despite its invasive nature is surprisingly good.

PowerCan® 200 technology operates off grid anywhere and is totally moveable by traditional transport. SOLIDEA Group distribute PowerCan® 200 solutions worldwide

“PowerCan® 200 The End Of The Invasive Species”

PowerCan® 200 has potential in California

CHP Biomass and Biowaste renewable energy solutions using PowerCan® 200 consume feedstock and convert their energy to electricity and hot water. PowerCan® 200 can produce enough energy off grid to pelletize as much as ten times its consumption.

Feedstock Process

One PowerCan® 200 produces enough electricity and heat off grid to convert as much as 40 tons of feedstock per day into easy transportable fuel pellets for use elsewhere. Fischer Tropsch can be added to produce Diesel and Propeller fuels even in the most hostile environments. PowerCan® 200 converts all kinds of biomass and sorted waste into to clean Renewable Energy and Fuels.

Plug and Play

PowerCan® 200 is a plug and play system. Once delivered energy production can commence in just a few hours. PowerCan® 200 connects to existing utilities to deliver energy round the clock it can also be used in network autonomous grid.

Effectiveness



Thousands of hectares of land in the South of North America and elsewhere can be rid of invasive plant species such as Tamarix and their fire risk and with just one PowerCan® 200 system. As and when invasive the control is completed PowerCan® 200 can be moved and deployed for any number of missions elsewhere.

What about consumption?

PowerCan® 200 is very energy efficient and less than 5% of energy is lost to parasitic (<5% PE) use

during operations is lost during the process and because PowerCan® 200 is moveable it never needs to be redundant.

High Performance

PowerCan® 200 produce 200kWe of electrical energy and 260 kWh of hot water. The electrical to heat ratio is 40% to 60% in CHP system. Adding a pelletizing plant unit in remote deployment can produce excess fuels to be consumed elsewhere. 24 hour operation of PowerCan® 200 requires 4 tons a day of feedstock at 25% water content. PowerCan® 200 can be operated on wet or dry feedstock such as Tamarix.

Sustainability

PowerCan® 200 technology is most sustainable the Gasification process means almost no emissions. All ash recovered is salable as fertilizer on extinction most feedstock produce slightly acidic water which can quickly recover its natural balance with no negligible environmental impact. PowerCan® 200 can be relocated without permanent foundations or connections almost anywhere