

Contemporarily restructuring the industries: Agriculture, construction, synthetics, textiles, energy.



Industrial new beginning: circular economy, renewable resources, strong regions.
Capital transfer to trendy, future-oriented economic models and technologies.

An aerial photograph of a Swiss town, likely Glarus, nestled in a valley. The town is densely packed with buildings, many with red-tiled roofs. In the background, majestic snow-capped mountains rise against a clear blue sky. The foreground shows green fields and a road.

Autonomous regions
create values and
secure assets.

Pilot installations
in Glarus, Switzerland

Multiplication to more
regions worldwide.



Swiss corporation, www.glaernischtexsil.ch and simsal.net, reg. CHE-267.056.147, owned by Martin Klöti founded 2017, **CHF 2 mio. private capital invested**, now as SIMSAL GmbH ready as a lean company.

Industrial hemp is *the **renewable resource*** with long tradition, proven processing and applications, to

- Support national **agendas of climate control and sustainability**
- start **circular economy** on a regional basis consequently
- **strengthen farming**, farmers, agricultural sector as producer and supplier of the renewable resources,
- **regain industrial production**, productive **labour, domestic production**, prosperous society, **resilience**
- **climate** control, **recovery** of ecosystems and ecofactors water, soil, air, creation.

Enable the farmers to provide massive supply by producing the renewable semi-products from industrial hemp and - by doing so - finally react to the dramatically increasing demand in the B2B markets.

Make large **industry sectors fit for climate neutral production and products** - enjoying existing customers: construction (several hempstone producers), textile (known jeans producer, more and more workshops), composites (Great Britain, Germany and others with hemp cars, Switzerland with palettes, furniture, boards), ...

In national and regional contexts **start with some hectares of farmland and scale up** season by season.



Agriculture

Seed
Harvest
Roast
Preparation

Input

Farmer's work:

- on the field (seed, cut, retting, bale)
- processing from straw to semi-products (in co-operative with neighbour farmers and Glaernisch support and tools)

Farmland:

Any (for instance 5 ha)

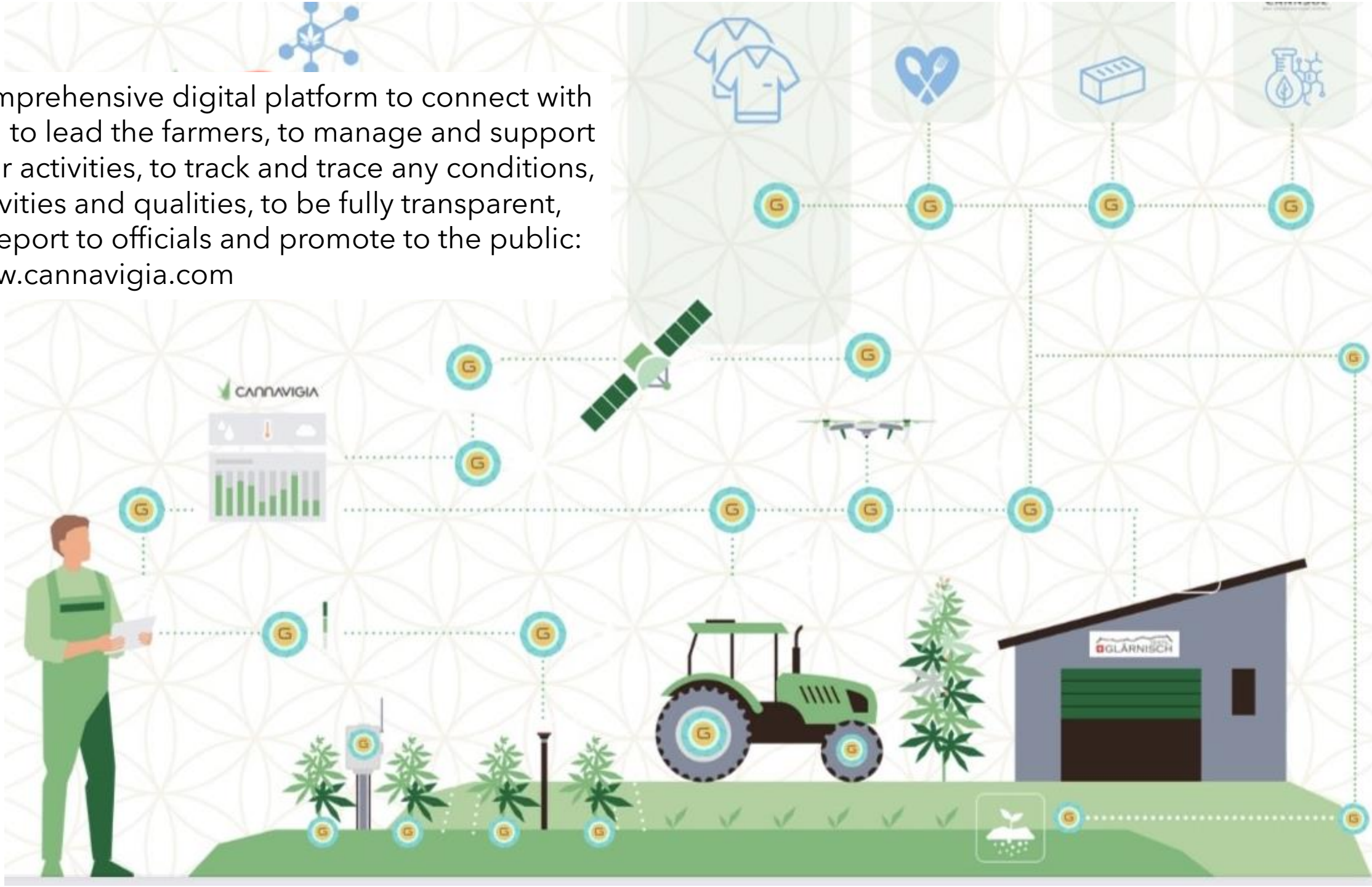
Output

EUR 2000-4000 per ha and year,

namely:

- EUR 1000-3000 from semi-products (66% of the sales made with fibres and shives)
- EUR 1000 from CO₂-compensation (20 tons of carbon per ha
2 harvests per year
EUR 40 per ton at least
> $20 \times 2 \times 40 = 1600$ in theory)

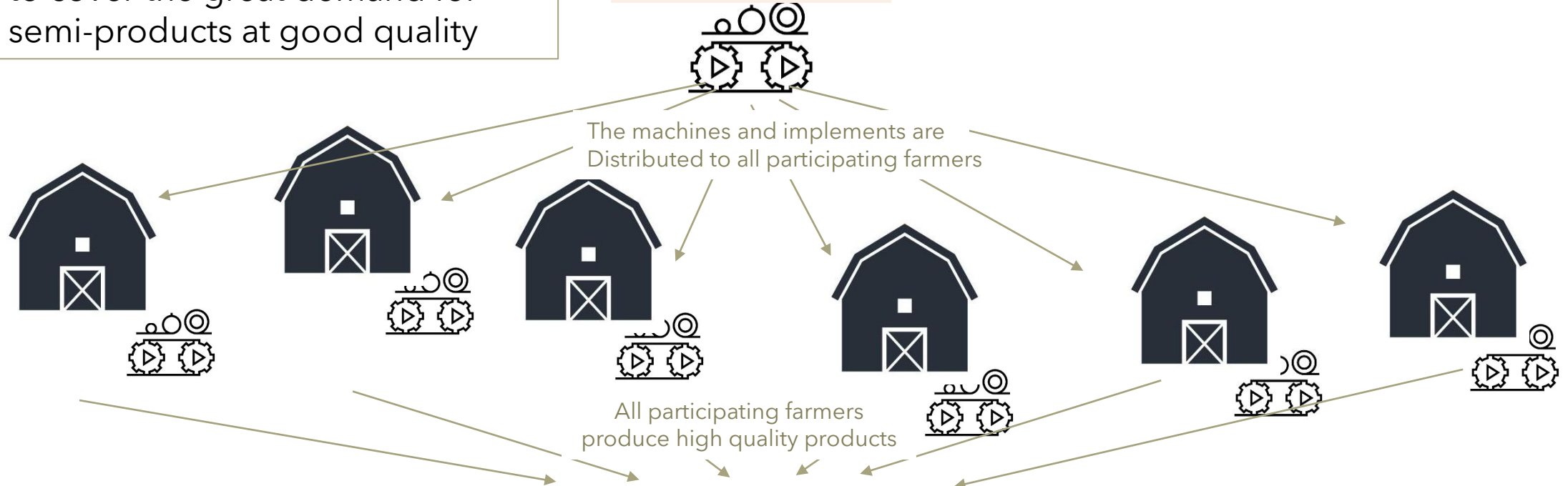
Comprehensive digital platform to connect with and to lead the farmers, to manage and support their activities, to track and trace any conditions, activities and qualities, to be fully transparent, to report to officials and promote to the public:
www.cannavigia.com



Pre-financed/ing production infrastructure to ease production and to cover the great demand for semi-products at good quality



Investors: Pre-financing the machines and devices



SIMSAL on site

Partner of local farmers for Consulting, Marketing, Service, Support



Comprehensively various applications and industries



11% of the annual revenues from sales go to the investors
Yield: 9 to 10% annual interest



Annual revenues from the sales of the semi-products

Seed

Harvest

Roast

Preparation
to
washed
Card sliver
to
Insulation mats
to shives
to nuts, oil,
and flour

Long fibre to card sliver

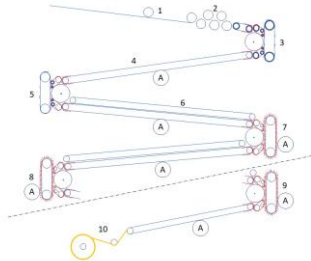
Fedora, Finola, Felina, Futura, USO31,
Schöne vom Albis, ...
45 kg / ha for winter hemp sown in August



Harvest of winter hemp
in March as parallel,
whole stems with Minos



Retting already done
over the winter on the
on the stem, to 15%.
Dry, baled in small bales.



Long Straw decortication
line € 90'000



Carding line for spinnable
Cards approx. € 50'000



Fibre Laundry/Dyeing
with periphery ca. € 30'000

Short fibre to insulation mats

Fedora, Finola, Felina, Futura, Erlyna
Schöne vom Albis, ...
30-35 kg / ha for summer hemp sown in April



Combined harvester
with particular knives
approx. € 20'000

Field retting like hay with the
available machines



Short straw decortica-
tion line € 90'000



Needlefelt machine
+impreg. € 250'000

Harvesting the nuts in
August, straw cut to
20-40 cm
laid in a tangle for retting
in the swath.

See next slide for
harvest of long stems
for long fibres!



Fine carding machine
€ 100'000



Tailoring
Packaging
Sieve drum: shives cleaning,
approx. € 20'000 sorting & filling € 20'000

Nuts with muesli, oil and flour, cleaned shives

Nut drying
€ 50'000

Nut peeling machine
€ 50'000

Oil press for oils
€ 25'000

Nut mill for
flours
€ 25'000

Long fibre also from summer hemp thanks to combined harvesting

Seed

Finola, Erlyna sown at 30-35 kg/ha in April
Long fibre only with hemp of low height lower 2m!
Undersowing with clover sown 1-2 days after hemp sowing

1st pass
Nut harvest



Harvest in August: in the 1st pass
the nuts are harvested with
with the mower set high.
Cut directly under the fruit.
Stalks remain standing.

Ideal with an early generation mech. combine.
Return the resulting straw to the field shortly after cutting.

2nd pass
Straw harvest



In the 2nd pass, the green straw is
laid in parallel with a parallel mower in
the swath, where it is left for 2-3 weeks
through the field retting.

Old mower binders available at Hempner/Glaernisch

Roast



Field retting in a parallel laid swath
Turning with a parallel turner
Baling with a parallel baler

Parallel turner Cretes, approx. € 100'000
Cretes parallel baler, approx. € 100'000

Fibre
preparation

With long fibre production line for breaking, scraping,
Combing and brushing of the long fibres to form flat clutches
and round card slivers.

«SIMSAL

Simulate > Know the options > Be fascinated > comit > Get support
> monitor > Be sure and safe

Cultivate hemp
.... ha for

- Seed
- Flower
- Fruit
- Leaves
- Straw

In <nation>

- A
- B
- C
- .
- .
- .
- .

Summary of your Plan:
5 ha of industrial hemp
for straw in Republic
Srpska

Work Plan, Efforts

Revenues

Impact

ENGAGE

ENGAGE

Login/Register as

- Farmer
 - Private Gardener
 - Shop / Dealer
 - Financier
 - NGO
- (Stakeholders)*

Exchange:
Matching of
stakeholders to
get the project
into realization
immediately

Support parties
Track & Trace conditions
Summarize impact on:

- ✓ Work
- ✓ Business
- ✓ Climate
- ✓ Soil, Water
- ✓ Community
- ✓ Prosperity
- ✓ Peace

Investment in agriculture

On a regional basis as of 2023

Pre-financing of the machines distributed on the farms

Total investments for 10 farm groups @ CHF 200,000 CHF 2,000,000

Pre-financing of the central machines for all groups

Total investments in common installations CHF 1'250'000

Total investments to finance agriculture CHF 3,250,000

Annual returns to the Investors

On a regional basis 2023 - 2026/7

Income from the sale of cooperatively produced semi-finished and finished products

2'750 tons of shives @ CHF 300 CHF 825'000

2'250 tonnes of fibres for construction, engineering and textiles @ CHF 5/kg CHF 11'250'000

Total income per year CHF 12'075'000

Total income share for investors per year, 11% of annual income CHF 1,328,000

Compared to the investments in the amount of CHF 3,250,000, there is a pay-Back duration of 2.45 years, or a profit of 23% after 3 years, 63% after 4 years and after 4 years and 104% after 5 years.










Construction

Hempstone
Formwork
construction
Prefabricated
construction
Expansion



Construction

	Hempstone	Formwork construction	Prefabricated construction	Expansion
Target product				
Source material for provision	 <ul style="list-style-type: none"> + lime + water + bearing + Heat 	 <ul style="list-style-type: none"> + lime 	<div style="background-color: #444; color: white; padding: 5px;">"unusable useless" straw Hemp</div> <ul style="list-style-type: none"> Remains of - plastic - Baumat. - Glass + hemp cord 	<div style="background-color: #444; color: white; padding: 5px;">"unusable useless" straw Hemp</div> <ul style="list-style-type: none"> Remains of - plastic - Baumat. - Glass
Means of production to the provision	Participation/s in Concrete plant/s	No further prod. necessary. Processing takes place on on the construction site.	(Hammer mill €20,000). Storage room+container €10'000 Agitator/mixer €10'000 2 plate moulds €10'000 Industrial back bunk 140° €100T Cord-roping+braiding €20T	} Identical without Cord ropemaking/braiding
Earnings potential	Like brick and lime bricks	Approx. €300/tonne of shives	Like prefabricated elements made of wood or concrete	

Estimated cost of equipment = Total investment

A row of spools of white thread in a factory setting, with a teal text box overlaid on the left side. The spools are arranged in a line, receding into the background. The foreground spool is in sharp focus, showing the texture of the thread and the dark metal core. The background is blurred, showing other spools and industrial equipment.

Textile

Yarns
Fabrics
Fashion
Sails/blankets

Textile







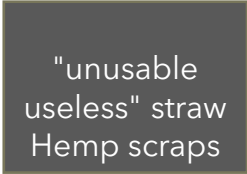
Estimated cost of equipment = Total investment



New synthetic

Hemp cellulose
Hemp art yarns
Organic granules
Bio-plastic moulds
/Composites

New synthetics

	Hemp cellulose	Hemp art yarns	Organic granules	Bio-plastic moulds Bio-Composites
Target product	 <p>Standardised Hemp cellulose Hemp pulp</p>	 <p>Standard Hemp- Artificial yarn</p>	 <p>Standard Granules From hemp</p>	 <p>Standard Moulds Hemp</p>
Source material for the provision	 <p>"unusable useless" straw Hemp scraps</p>	<p>Hemp cellulose HempPulp</p>	<p>ev. cellulose ev. hemp powder PP/PE powder (if applicable) ev. PLA</p>	<p>Poss. hemp fibre scrim/fleece ev. Hemp shredder PP/PE residues ev. expanded glass, ev. recycled s</p>
Means of production to the provision	<p>Hemp pulp mill with sewage plant € 3 m</p>	<p>New wet spinning mill (Viscose process) € 3 m</p>	<p>Participation/s in Granulat- Production company e.g. EMS Chemie € 1 million</p>	<p>Participation(s) Injection moulding Production company e.g. KS Schwanden € 1 million</p>
Earnings potential	<p>Like wood cellulose in the national B2B market and for own use with increasing value added</p>	<p>Like Tencel or Modal in the national B2B market and for own use with increasing value added</p>	<p>Like usual granules in the national B2B market and for own use with increasing value added</p>	<p>How common forms and articles in the national B2B and B2C market</p>

Estimated cost of equipment = Total investment



Energy

Power
Heat
Fuel
Soil substrate

Energy

Power

Heat

Fuel

Activated carbon
Soil substrate

Target product



Source material
for the provision

Biomass: "unusable" straw, hemp residues, biogenic and fossil waste/waste

Means of production
to the provision

Small, local pyrolysis plants
e.g. from pyrolyze.com (in the picture next to it)
€ 20'000 - 110'000 / plant

Earnings potential

Like the fossil and other offers
in the national market B2B and B2C



Processes, tools, machines for

Agriculture

Seed
Harvest
Roast
Preparation

Construction

Hempstone
Formwork
construction
Prefabricated
construction
Expansion

Textile

Yarns
Fabrics
Fashion
Sails/blankets

New Synthetic

Cellulose
Art yarns
Granules
Composites

Energy

Power
Heat
Fuels
Soil substrate

Authenticity: *the market criterion* today

Strongly increasing sensitivity of consumers with regard to **Sustainability** and **ethics**.

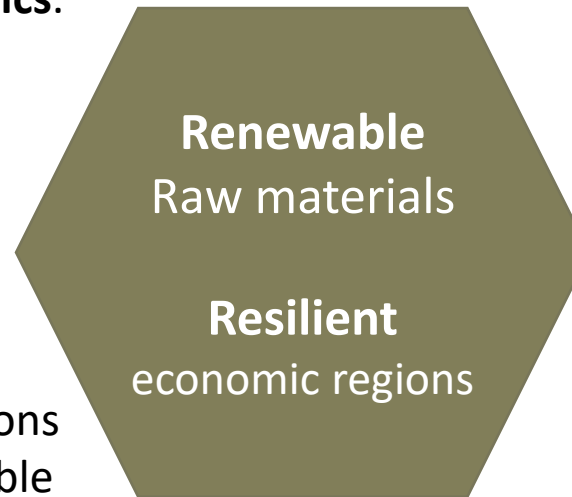
Consistent responses to the current **political agenda** (multiple crises).

Highly effective **CO2 measures**

Credible business practices regarding **corporate responsibility**

Pragmatic approaches and solutions with a **regional focus** on sustainable economy.

Virtual simulations for the rapid Achieve and spread effective **Industry clusters in production**.



Regeneration of resources

(soil, water, air, raw materials) as a Livelihood and as a means of production

Achieving the **UN Sustainable Development Goals**



Impressum

Simsal.net, hempner.net, glaernischtexil.ch

Holenstein 7, 8750 Glarus, Switzerland

Martin Kloeti, martin.kloeti@glaernischtexil.ch, +41 79 405 69 33