GRENSOL

Recovering Materials from Recycling Waste

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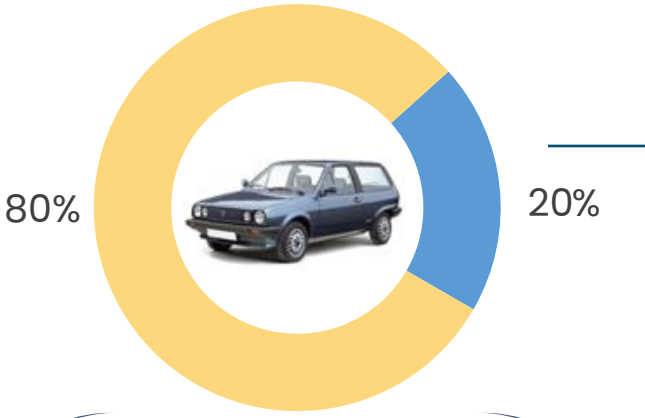
Problem: Recycling Waste Disposal is Expensive & Not Sustainable

Recyclers are losing 20% of materials to incineration or landfills



Parts Reuse

Metals Recycling

Our Focus

Recycling Waste

Contains heavy metals, mixed plastics, glass and other minerals

Incineration or Landfill

- Regulated Complex Waste
- Increasing Disposal Costs
- CO_2 Emissions
- Loss of Materials

Data: Independent analysis

Solution: Novel Approach for Up-cycling Recycling Waste to Useful Raw Materials

Patented, Emissions-free, Circular, Low Cost – No direct market equivalent

Permitted & Financed, In-Construction

Under Scale-up Research & Development
Financing Needed for Construction

Recycling Waste

1 **Metal Recovery**

2 **Minerals Recovery**

3 **Photolysis**

Metals
Copper, Aluminum, Steel

Minerals
Glass, etc.

Hydrogen
Syngas

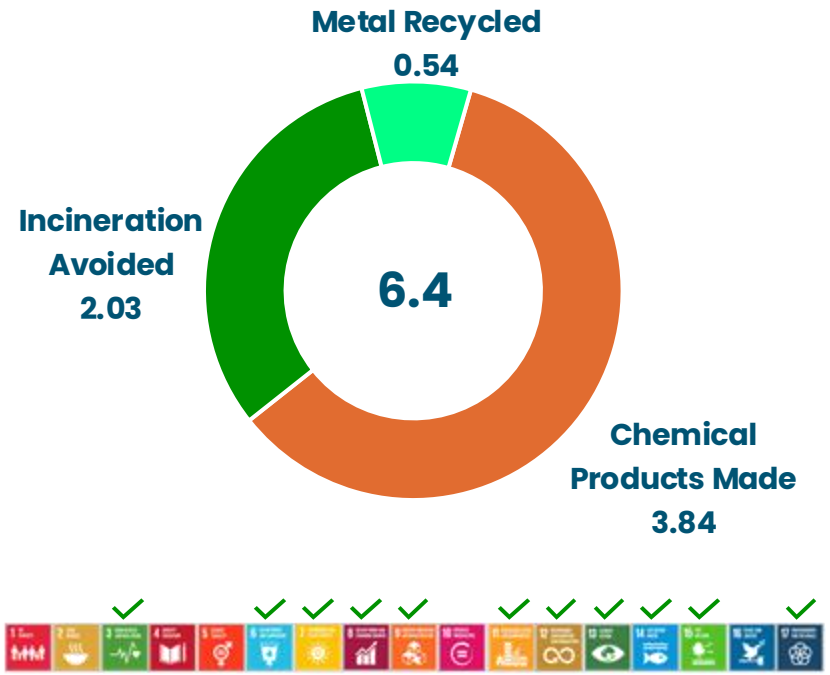
Carbon Materials
Carbon Black & other

Grensol Patent Pub Nos: US-2025-0065382-A1 and WO 2025/041061 A1 (Photolysis, Metals); Patent Application Nr. EP25164442.3 (Minerals)

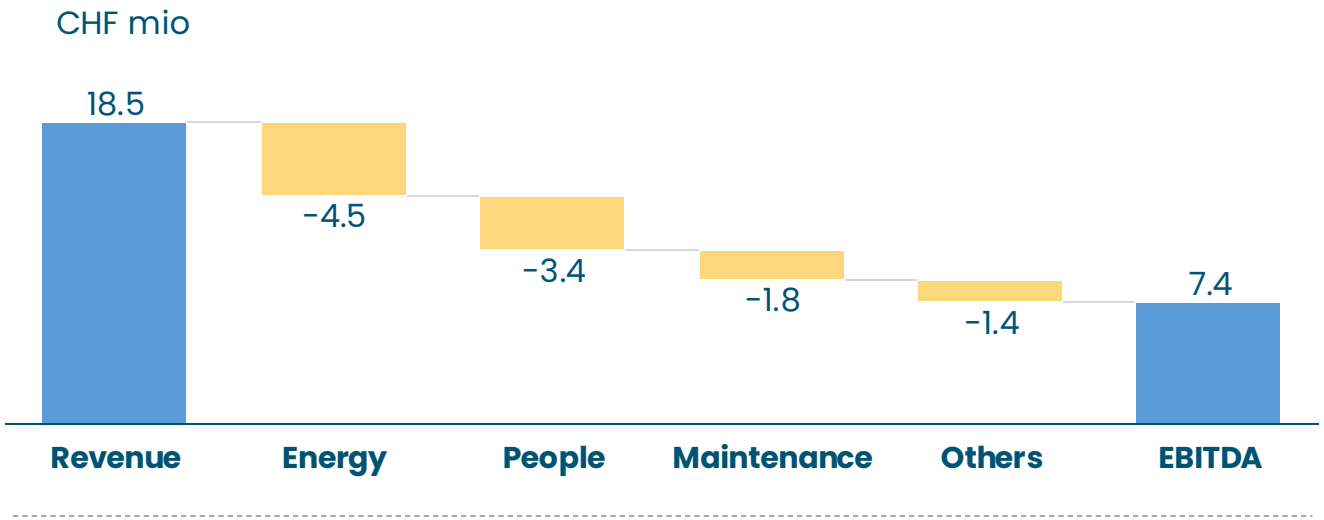
Impact: CO_2 Emissions Avoided, and At a Profit

Unlocking Circularity in Industrial Waste Disposal and New Materials Production

6.4 tonnes of CO_2 emissions avoided for each tonne of car recycling waste processed



Micro Site Unit Economics Breakdown



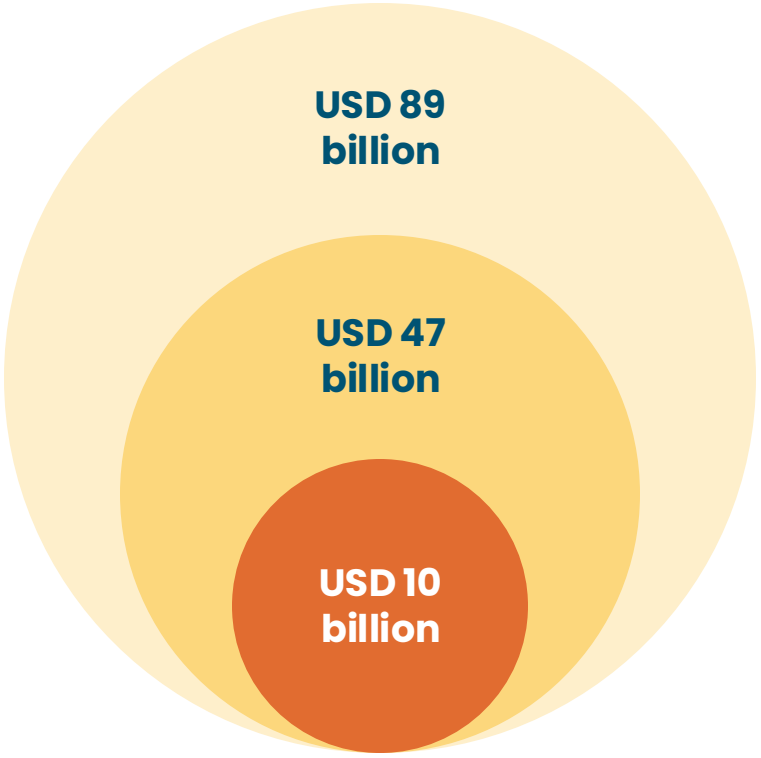
Capex CHF ~25 m, 3-4 year payback;

40 site operators for 24x7 operations.

Note: Figures for Minerals and Photolysis are preliminary, as these technologies are still in early development

Market: USD 89 billion Global Market, USD 10 billion Obtainable, Regulatory Tailwinds

Lowering the share of unsustainable landfilling and incineration of recycling waste



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Target Addressable Market: Large-volume Mixed Plastic Waste being landfilled or incinerated:

- Car Recycling waste (most advanced use case)
- Low-grade Electronic Scrap
- Demolition Waste plastics residues

80+ mio tonnes/yr

Serviceable Addressable Market: Large size and regulation (CO_2 tax, min. recycled content, waste export bans)

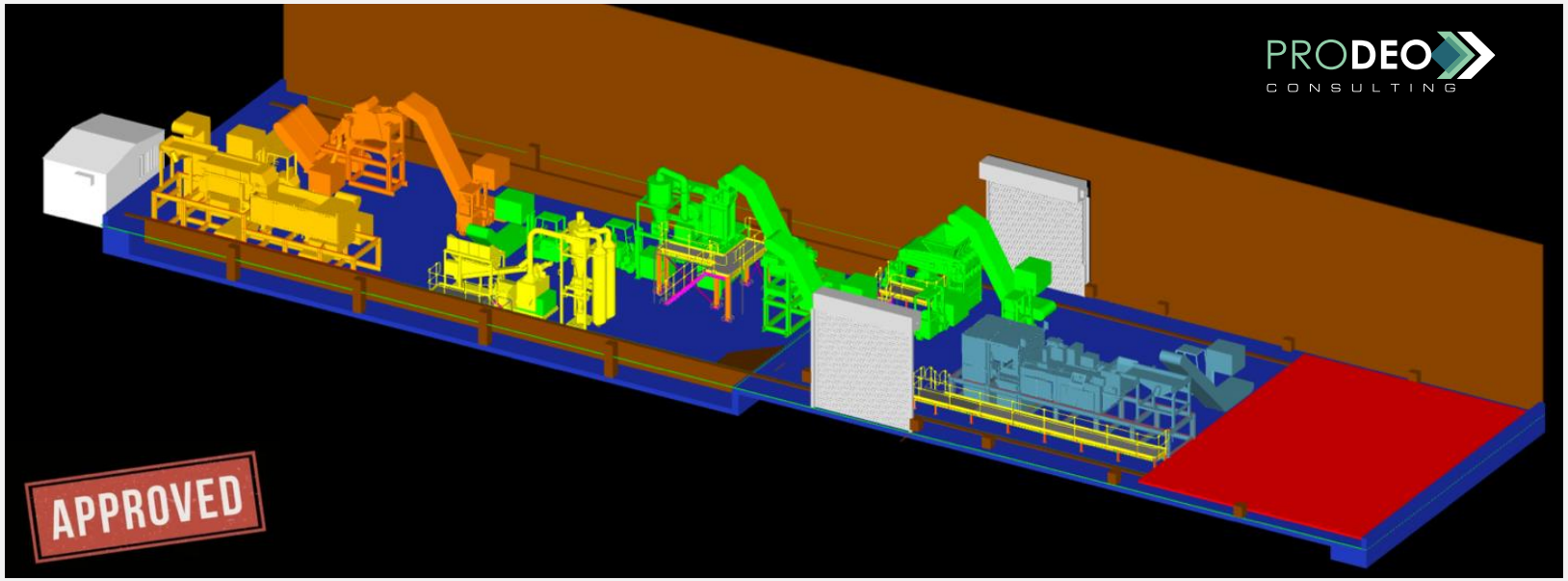
- Focus in Europe and North America
- Opportunistic in Asia and Middle East

Serviceable Obtainable Market: Target market share based on market maturity (regulation, collection, incentives, etc.)

First Site: Metal Recovery Project Underway in Switzerland

Permitting received, in construction, operations starting in early 2026

- Site leased – close to waste suppliers and product offtakers
- About 850 m² – HIAG's redevelopment of the Paper Mill site in **Biberist**
- Authorisations received in January 2025
- Equipment deliveries and installation starting in November 2025



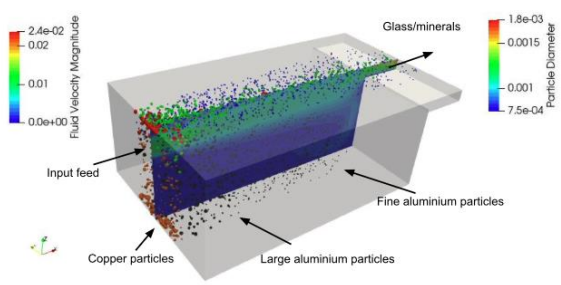
R&D Projects: Continued Progress Towards Commercialisation

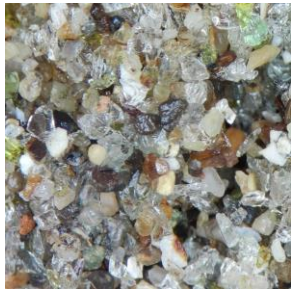
Proprietary Solutions, Being developed in the Swiss Research Ecosystem

Minerals Recovery

2

- Recovering Glass as Cement Raw Material
- Proprietary Solution using Fluid Dynamics & Ultrasound
- In Operation by YE 2026



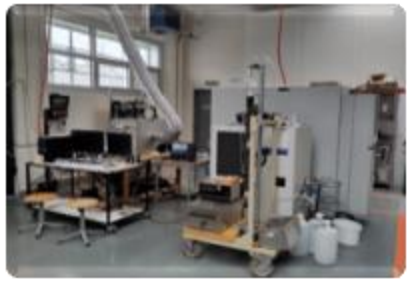


Supported by: ETH zürich JURA materials Umwelttechnologieförderung Bundesamt für Umwelt BAFU

Photolysis

3

- Recovering Hydrogen & Carbon from Mixed Plastics
- Proprietary Solution using Light
- In Operation by 2030



Supported by: HEIG-VD Institut des Énergies ENERGY LAB Innovation Booster powered by Innosuisse NEW MOBILITY LAB

Innovation project supported by
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation
Innosuisse – Swiss Innovation Agency

Who we are: Diverse Team with International Scale

Technical, Business and Operational Expertise with 100+ years of experience

Grensol Team

Rajiv Singhal
Founder, CEO
MBA (Harvard)

Metals production, industrial recycling and mining.

Ex Glencore, McKinsey, and EuroChem.

Marc Ocskay
CFO
University of Bern

Corporate Finance, metals and mining.

Ex Glencore, UBS, Angel Investor.

Dr. Marco Ziegler
CTO
PhD (Fribourg)

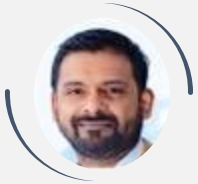
Chemicals, Materials and Industrial Operations Expert.

Ex Senior Partner at McKinsey.

Dr. Silvan Suter
R&D Manager
PhD (EPFL)

Photo-chemical and Mechanical Engineer.

Ex EPFL EssentialTech.



Dr. C. Narayanan
Scientific Lead Glass Project (ETH)

Fluid Dynamics Expert, Chemical Engineer.

Ex-Startups: Ascomp, TransAT.

Federico Bussmann
Business Dev. (UZH)

Waste management and recycling.

Ex-Startup: CleanCarbon Conversion.

Project Partners

Dr. Xenia Christodoulou
Photolysis Development

Academic Assistant HES, HEIG-VD.

Chemical Engineer, Waste-to-energy projects.

Wayne Dodgen
Metal Recovery Engineering

Project Management Consultant at Prodeo.

Design and construction of material processing plants.

Advisors

Dr. Joseph J. Laux

Metals and composites production & recycling.

Ex Dow, BMW, Magna and Bühler.

Dr. Cara Tobin

Environmental Engineer, Innosuisse Expert.

Technical Advisor to various start-ups.

Dr. Paola Ghillani

Board Member and Innosuisse Coach.

Board Member of Migros, Romandie Energie.

Dr. B. Mishra

Professor at WPI, NSF's CR3 Project.

Mechanical Engineer, Material Science.

Dr. Hubert Girault

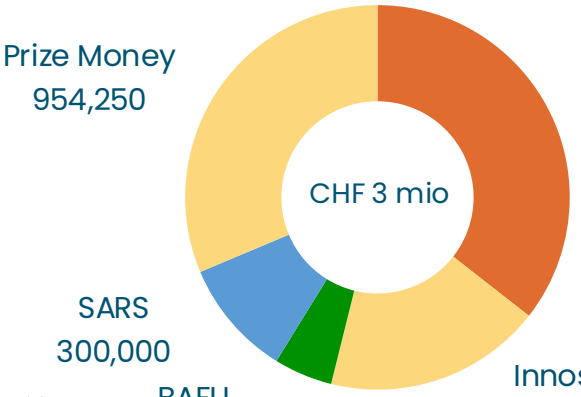
Professor Emeritus, EPFL. Independent Advisor

Co-inventor of Photonic Processing.

Financing: CHF 5+ mio Raised, Project Widely Supported

From Grants, Prizes, Equity Issuance, and Credit (CH, US Sources)

Grants, Prizes: CHF 3 mio



Equity Investors: CHF 1.8 mio

- Management
- Business Angels
- Institutional Investors:

Financial Support:

Supporting Programmes

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