

SWEDISH ALGAE FACTORY

Advanced Materials from Algae

THE USE OF DIATOMS





NANOPOROUS STRUCTURE OF DIATOM SHELLS







THE SHELL ENABLES SURVIVAL



- Traps visible light efficiently
- Blocks harmful UV light, partly by manipulating UV light to visible light
- Absorbs and releases nutrients and water efficiently



SELLING TO SKIN CARE + PARTNERSHIPS IN SOLAR

Skin care and cosmetics

Solar energy

Natural and efficient:

- Moisturizer
- Absorbent
- UV filter



PARIS

Sales started in autumn 2018. Customers:

TRUE ORÉAL ORGANIC EKOLOGISKA KURBADEPRODUKTER — OF — SWEDEN

+ 20 with ongoing tests + more in pipe



Enhances efficiency with at least:

- 4 % for silicon based solar panels
- 38 % for DSSC (Dye sensitized solar cells) 3 testing partnerships, each

needing 200 kg -10 tons/year. In discussions with 6 more actors.

ΩUΛΝΤΟΙ'Ι





Future applications



Long-term opportunities in e.g.

- Lithium ion batteries, 40 % increased capacity of anode
- **Biosensors**
- UV filter in e.g. plastic films

Commercialization and collaboration with:





DNTNU

CIRCULAR = SUSTAINABLE &



STATEMENT 1

Biorefinery business models are needed, where the biomass is utilized for not only one commodity application, in order to be able to compete with today's unsustainable/fossil products





STATEMENT 2

There is a lack of investments to sustainable solutions and innovations



STATEMENT 3

Political instruments is needed to be able to drive us towards a bioeconomy



GREAT TEAM WITH 100+ YEARS' EXPERIENCE IN ALGAE RESEARCH, OHEMISTRY &

ENGINEERING

Gustav	Sofie Angela	Harriet Micke	Justin
CEO & Founder: Sofie	RnD & Founder: Angela	Biz Dev: Harriet & Caroline	Tech: Gustav Micke Justin & Sanna
Award-winning			
entrepreneur and	Award-winning and	Harriet's been 30 years in	Algae veterans with large scale
biotechnology engineer	Nature-published	the chemical industry in	algae cultivation background,
with an MSc in business	professor at	sales and product	researchers with experience in
development from	Gothenburg University.	management. Caroline is a	algae, biology and process
Chalmers.	29 years research in	tech entrepreneur, Forbes	engineering. Published Nature
	algae, climate and UV	30u30, Cambridge Uni	paper with Angela.