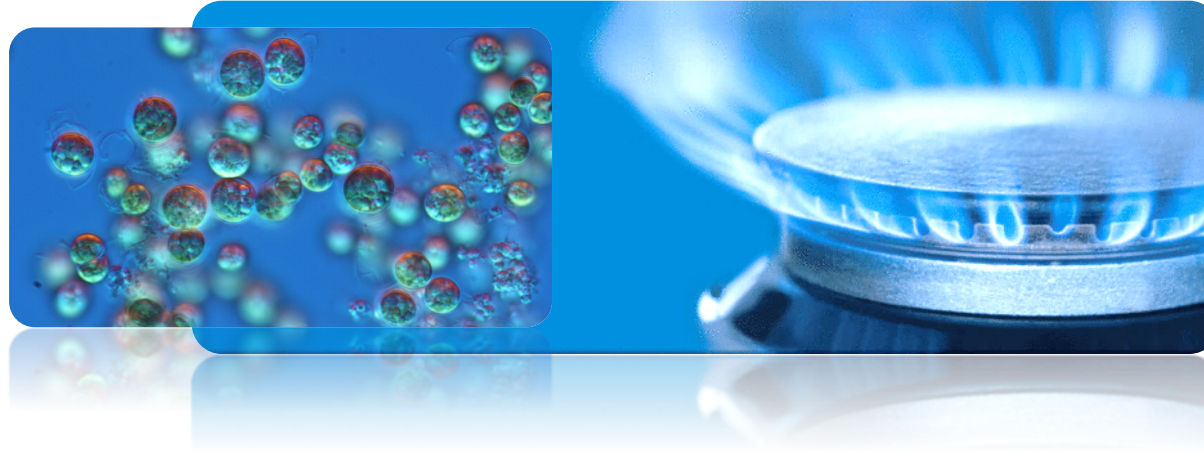


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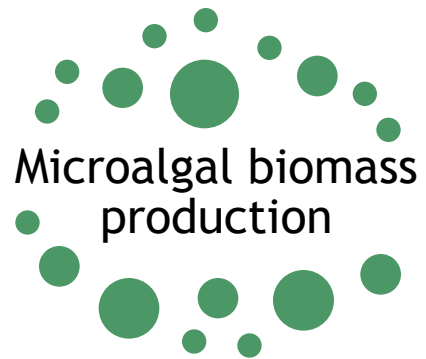
Biogas production using biomass derived from Baltic microalgae

Marek Klin

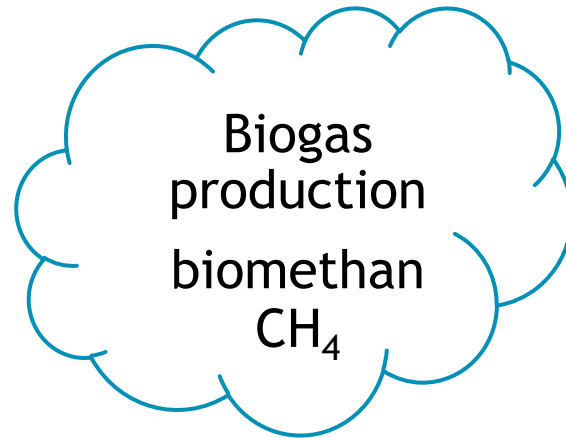
Institute of Oceanography, University of Gdańsk, PL

Gothenburg 4.04.2017

What is our idea?



- Biomass' biochemistry profile differentiation
- Various media usage (incl. wastewater)



Efficient conversion into biofuel
by methanogenic bacteria

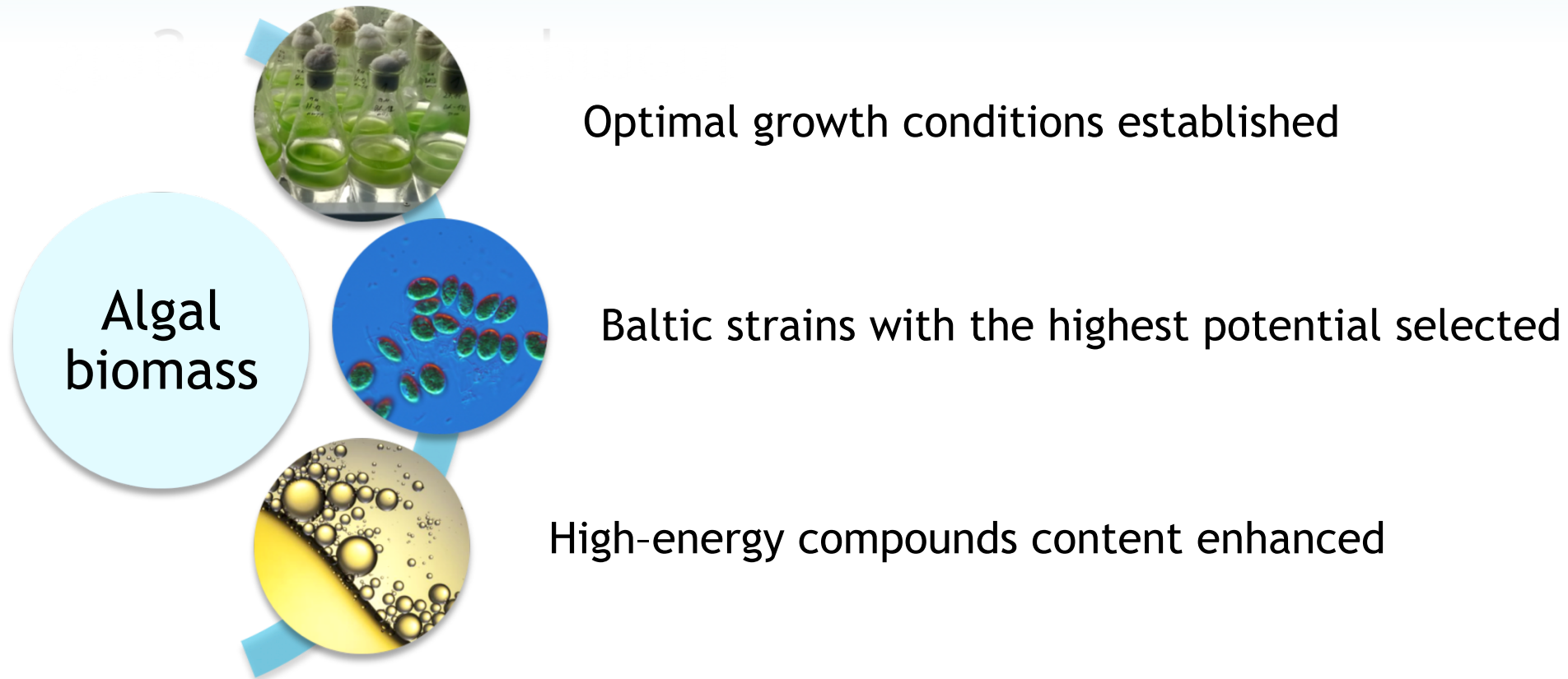


Process
efficiency
evaluation



- Know - how development
- Technology optimisation
- Profitability assessment

Stage of development



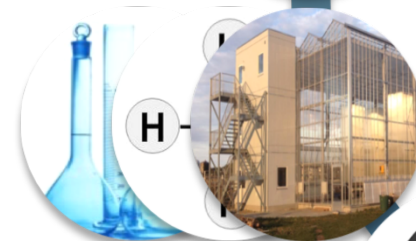
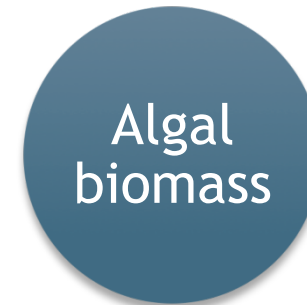
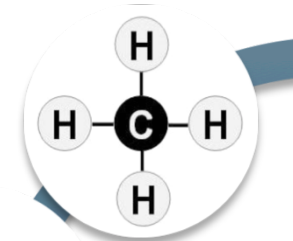
Our needs

Biomass anaerobic fermentation tests (various conditions)

Chemical analysis of fermentation products
(biomethane %)

Mass cultivation test in semi-industrial scale

Marketing & Business plan



Our team

Marek Klin M.Sc.

- microalgae productivity and lipid content evaluation
- microalgae isolation and culturing

Filip Pniewski Ph.D.

- microalgae ecophysiology
- microalgae isolation and culturing
- the Curator of Culture Collection of Baltic Algae (CCBA)

Aleksandra Zgrundo Ph.D.

- ecology
- use of algae in ecotoxicological studies
- monitoring and palaeoreconstructions

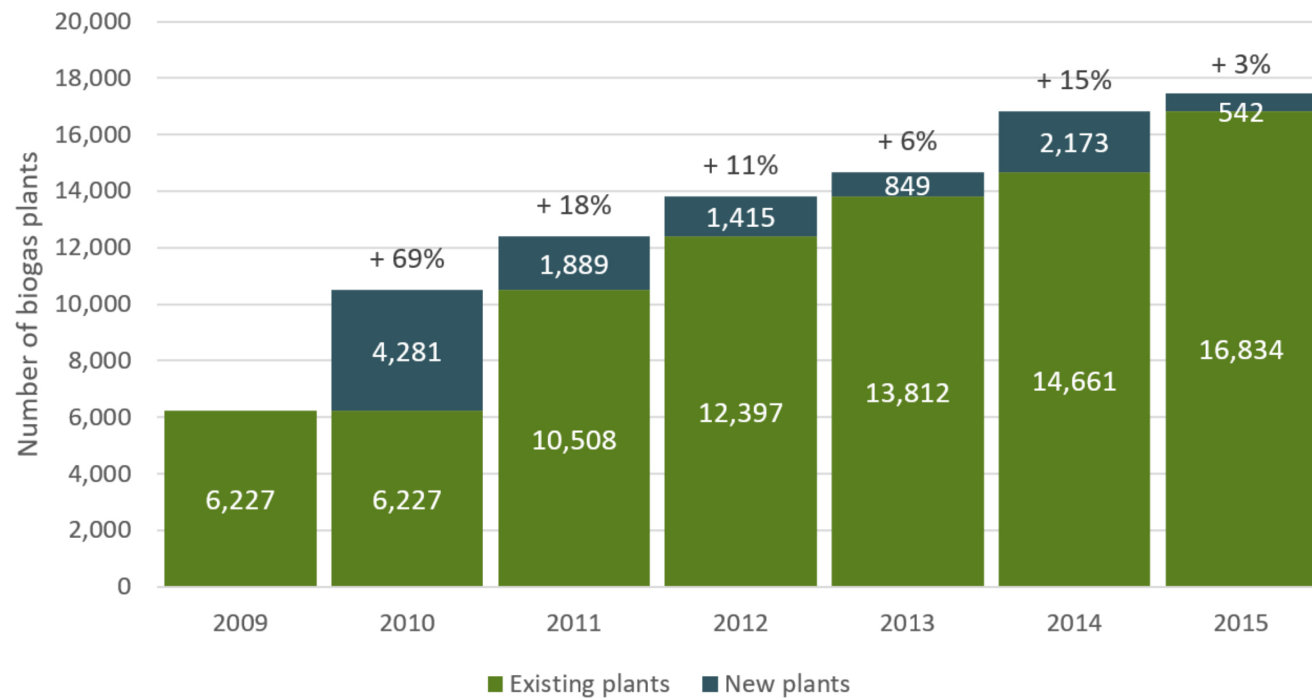
Prof. Adam Latała

- plant physiology
- microalgae isolation and culturing
- ecotoxicology
- the Head of Culture Collection of Baltic Algae (CCBA)



Biogas market

Evolution of the number of biogas plants in Europe



Target market

Our main technology customer:

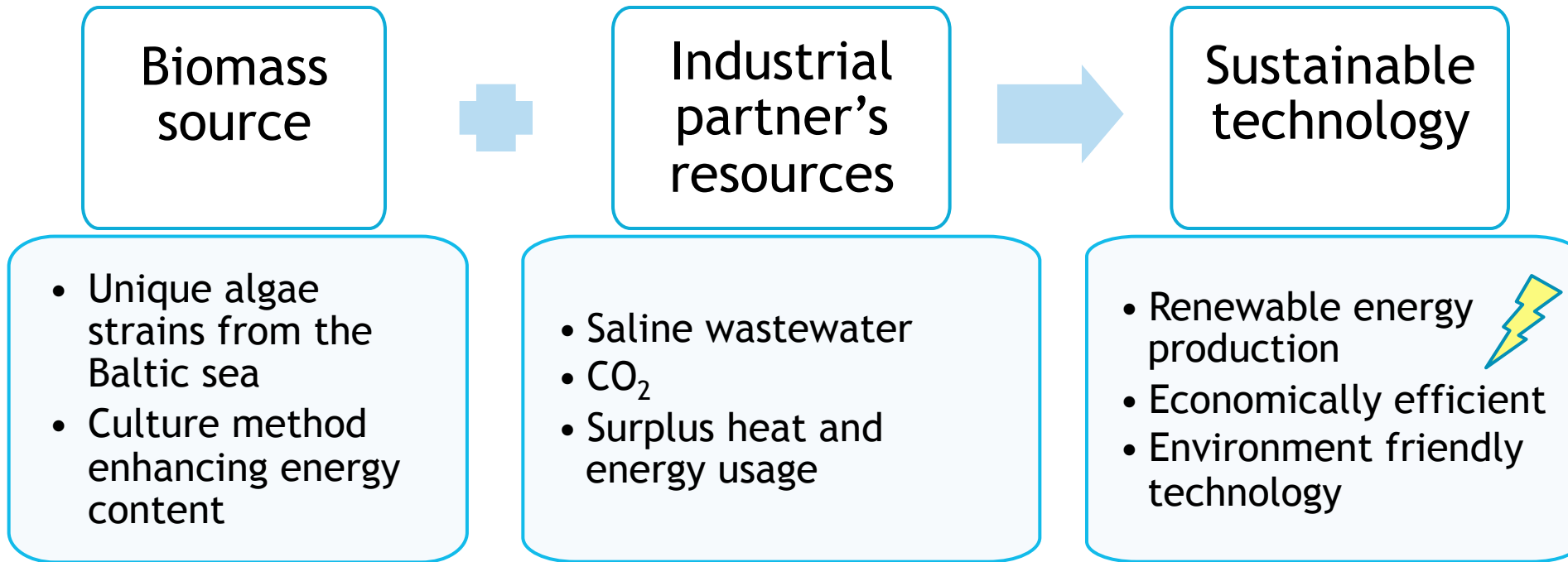
- Combined Heat and Power (CHP) Plant

Other potential beneficiaries of our technology:

- Wastewater treatment plants
- Agriculture biogas plants
- Fish aquaculture (RAS)
- Geothermia plants
- Other

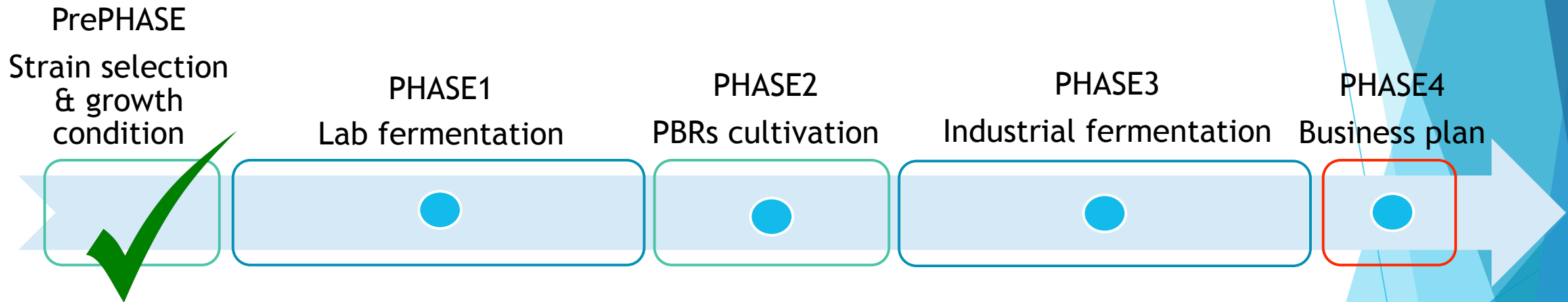


What is unique about our idea?



Project time frame

12 months



Technology Transfer

- ▶ Developed technology will be implemented with a smart CHP plant in northern Poland,
- ▶ Any commercialization of developed technology will be conducted with the help of the Technology Transfer Office (TTO) at the University of Gdańsk,
- ▶ Intellectual Property strategy will be developed with TTO.



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