

abacus

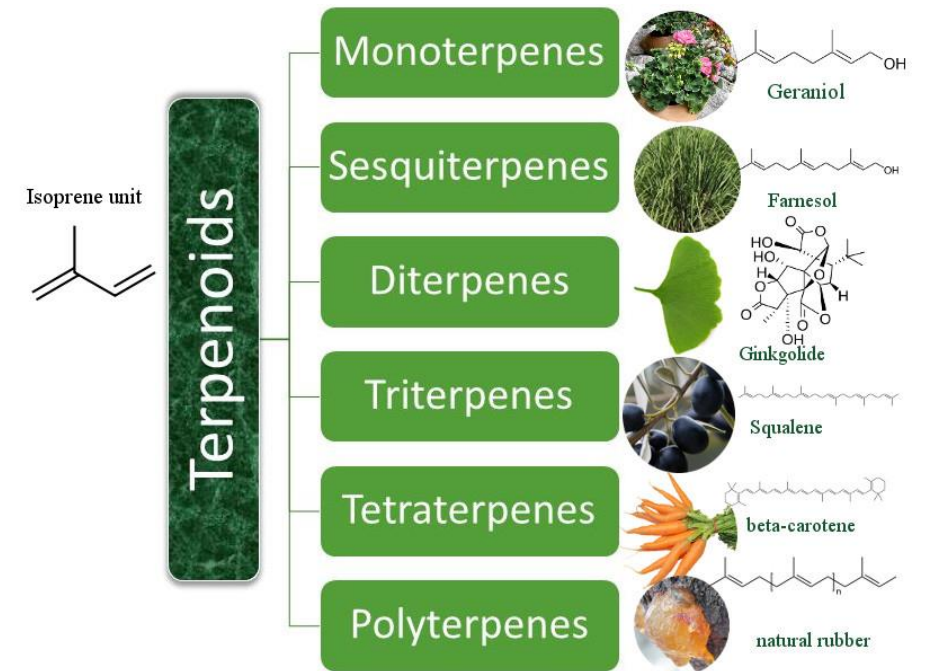
A joint European initiative to **foster algae as a biomass** applied to the production of **added value compounds**



www.abacus-bbi.eu

abacus CONCEPT

abacus aims at a business-oriented and technology-driven development of a new algal biorefinery, thereby bringing to the **market competitive and innovative algae-based ingredients** for high-end applications, spanning from algal **terpenes** for **fragrances** to long-chain terpenoids (carotenoids) for **nutraceuticals** and **cosmetic actives**.



Terpenoids can be found in photosynthetic microorganisms like plants or algae. They represent a renewable alternative to petroleum-derived fuel and building blocks of synthetic biopolymers as well as high value compounds for fragrances, cosmetics and nutraceuticals

abacus AT A GLANCE

KICK-OFF



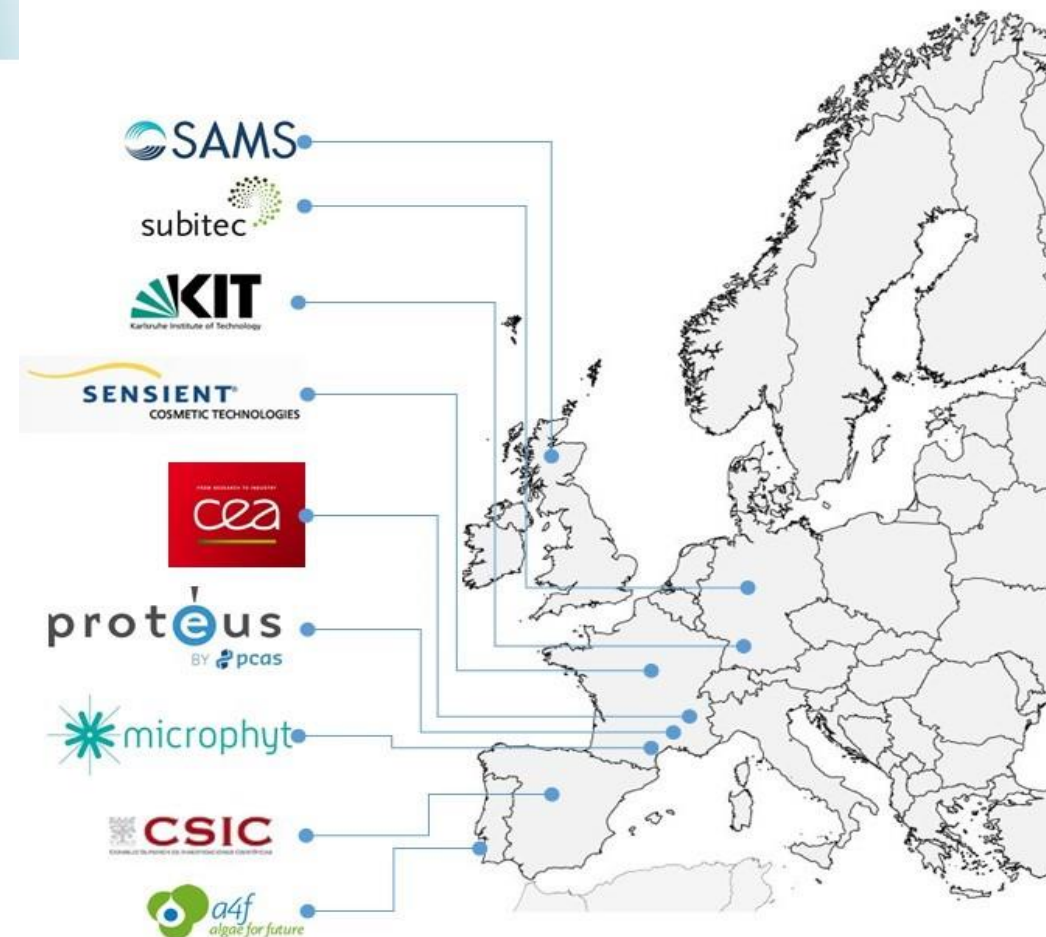
3-YEAR
PROJECT



4,65
M€
GRANT FROM
H2020 BBI JU



600 MAN
MONTHS



Specific objectives

- Selection and biological engineering of microalgal strains for oriented photosynthesis of terpenoids
- Technological improvement and automation of algae production systems to enhance biomass yields and photosynthesis of terpenoids
- Optimize downstream processing to reduce OPEX and to secure societal and environmental acceptability
- Assess applicability of targeted ingredients considering cosmetic and nutraceutical applications
- Market development of formulated products based on new algae-based ingredients with structuration of unprecedented value chains

