



# HORIZONTE 2020

## PORTUGUESE RESEARCH AND INNOVATION SUCCESS STORIES



### BINGO a better future under climate change



Providing practical knowledge and tools to end users, water managers, decision and policy-makers affected by climate change to better cope with all climate projections, including droughts and floods, for the near future (up to 2025). To provide adaptation strategies for climate change-related challenges, by coproduced tools and methodologies for water and land resources management strategies that are based on an improved understanding of future climate and its impact on the hydrological cycle.

**Total EU contribution:** € 7 822 422,50

**Consortium:** PT | DE | ES | NL | NO

**PT partners:** LNEC (coord.) | EPAL | CILT | DGADR

**Coordinator:** Rafaela Matos

### GOTSolar - Third Generation of Solar Cells



The emerging perovskite sensitized solar cells (PSCs) are energy efficient, cost effective and versatile. This project will bring this new and promising technology to the commercial level for the first time ever. The project is already achieving exciting results, as for instance, polymer-coated cells that maintained 95% of their initial performance at 85°C for 500 hours under full solar illumination and maximum power point tracking.

**Total EU contribution:** € 2 993 403,50

**Consortium:** PT | CH | DE | FR | PL | UK

**PT partners:** U. Porto (coord.) | EFACEC

**Coordinator:** Adélio Mendes

### GrowMeUp – Robots for the elderly



The GrowMu robot will support the needs of older people (65+) in their daily life activities. The service robot is designed to be autonomous and navigate around domestic environments. It can also detect, recognize and track humans and objects. The robot should eventually also be able to hear, see, express emotions and, most importantly, speak.

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**Total EU contribution:** € 2 790 430

**Consortium:** PT | CY | CH | DE | ES | EL

**PT partners:** U. Coimbra (coord.) | Caritas Coimbra

**Coordinator:** Luis Santos

### DiViNe – Cheap vaccines



Vaccine-preventable diseases remain a major cause of illness and death, especially in developing countries. There are a variety of reasons for this, and cost is one of them – vaccines can be expensive. DIVINE is developing an innovative approach to vaccine manufacture to reduce these expenses by implementing two major nanotechnology innovations to produce an integrated vaccine purification platform offering a drastic reduction in processing costs.

**Total EU contribution:** € 5 790 580,50

**Consortium:** PT | FR | DE | DK | IT

**PT partners:** IBET | Genibet

**Coordinator:** Manuel Carrondo



More information: [www.gppq.fct.pt](http://www.gppq.fct.pt)





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### SKHINCAPS – Nanotechnology for your skin



To develop customized and safe nanocapsules to deliver novel products for skin healthcare applications, with increased efficiency and cost benefits, leading to ground-breaking innovations on the actual products. Skin healthcare applications like creams with triggered nanocapsules containing the cocktail,

to improve the anti-ageing effect on the end-users skin or lotions and textiles containing targeted nanocapsules loaded with natural essential oils to prevent or even mitigate bacterial infections on the end-users skin are some examples.

**Total EU contribution:** € 3 265 920,75

**Consortium:** PT | BE | DE | ES | FI

**PT partners:** CENTI (coord.)

**Coordinator:** Caria Silva

### TRACE – let's all cycle and walk



TRACE assessed the potential of movement tracking services to better plan and promote walking and cycling in cities, and developed tracking tools that fueled the take up of walking and cycling measures. It established measures to promote cycling and walking to the workplace, to school, for shopping purposes or simply for leisure. It assessed the potential of ICT based tracking services to optimize the planning and implementation of such measures and enhance their attractiveness and potential impact.

**Total EU contribution:** € 2 896 984,75

**Consortium:** PT | IT | BE | BG

**PT partners:** INESC ID (coord.) | TIS | CM Agueda

**Coordinator:** Paulo Ferreira

### SEAFOODTOMORROW – Sustainable seafood



To validate and optimize commercial solutions for improving the socio-economic and environmental sustainability of the seafood production and processing industry, while contributing to product quality and safety. Activities focus on the sustainable production and processing of nutritious and safe

seafood products through the demonstration and first application in the market of eco-innovative, sustainable solutions of marine and aquaculture-derived food products and nutrients.

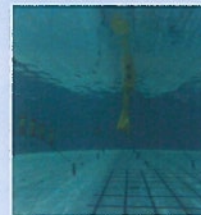
**Total EU contribution:** € 6 996 032,25

**Consortium:** PT | DE | DK | ES | EL | FR | IT | LI | NL | NO | SK | TK | UK |

**PT partners:** IPMA (coord.) | CIIMAR | ICETA

**Coordinator:** António marques

### WETFEET – Wave energy



Wave energy is technically feasible and it has vast potential to fulfill part of the global demand for a clean and safe energy source integrating the backbone of a secure energy system in the next few decades and contribute to the creation of jobs in the Eu and worldwide. WETFEET addresses the

major constraints that have been delaying wave energy's progress and it will deal with low-carbon energies specific challenges by targeting a set of breakthroughs for wave energy technology, an infant clean energy technology with vast potential.

**Total EU contribution:** € 3 456 884

**Consortium:** PT | AT | UK

**PT partners:** WaVec | IST | EDP Inovação |

**Coordinator:** José Cândido



More information: [www.gppq.fct.pt](http://www.gppq.fct.pt)

