

# «BIOPACK» BIO-BASED PACKAGING FOR PERISHABLE FOODS

TEAM :  
TIBULCA VICTOR GEORGE  
TIBULCA ELENA LILIANA

## ABSTRACT

The basic idea is to approach environmental and economic sustainability issues in some relevant agri-food chains by means of a creative, user-centered and low-cost packaging solution for perishable foods, based on renewable raw materials and IoT sensing devices (Circular4.0 and Bio4.0.)

BIOPACK is in the combined form of an active primary packaging consisting of biological and smart materials associated with two wireless communication systems (chipless printable RFID and NFC).

BIOPACK enables replacing of polyolefins with renewable raw materials to produce active food packaging, recovering and valorization of waste and by-products deriving from the cereal, fruit and vegetable, fish supply chains, extending the shelf life of some highly perishable foods, and introducing reusable packaging systems as a new alternative energy source.


