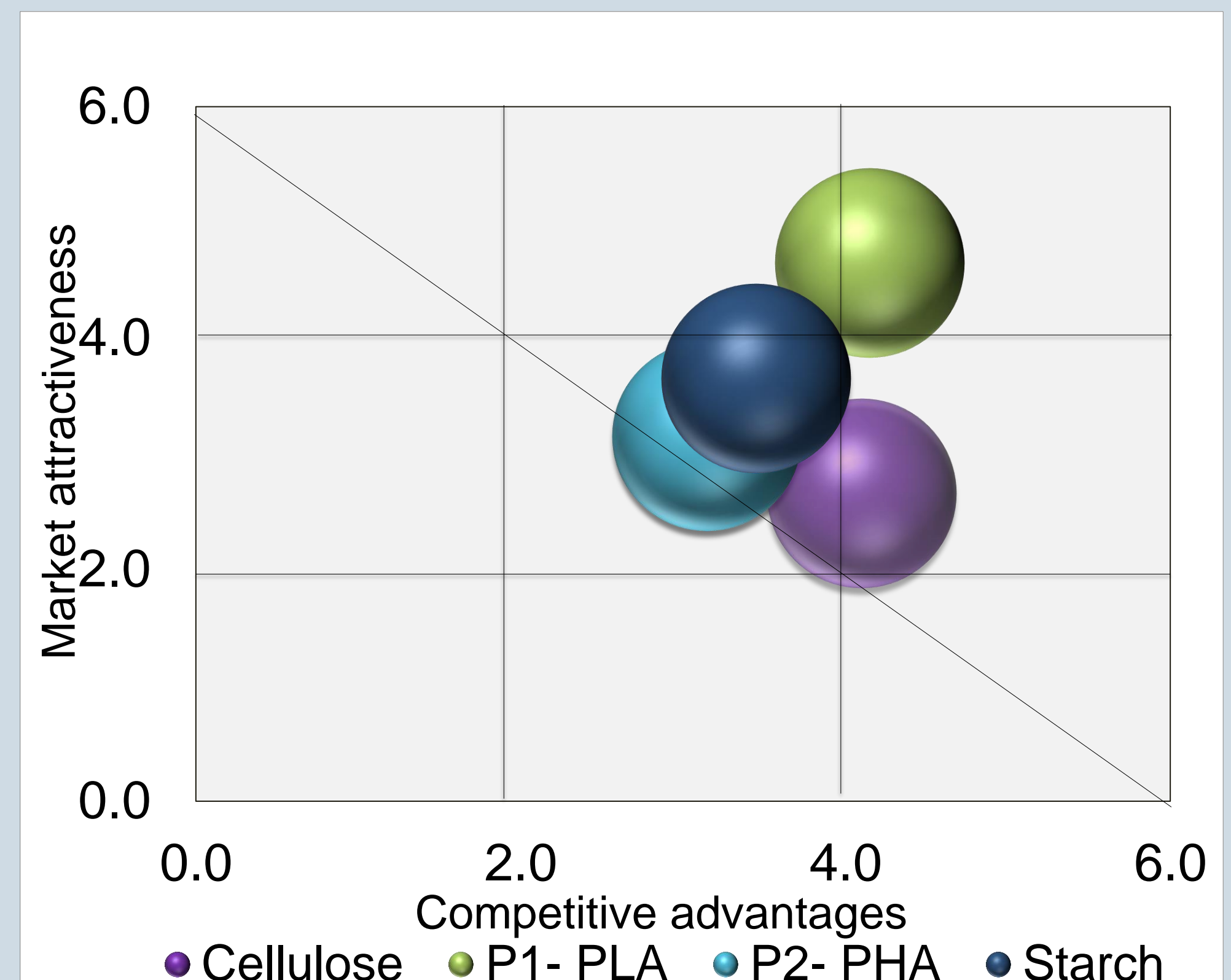


The packaging material made of PLA biopolymer has the most marketing potential considering market attractiveness and competitive advantage in the EU.



## Introduction

Global transition towards sustainable development has been one of the primary goals in recent years, including developing national and regional bioeconomy strategies.

The bioeconomy has significant potential to produce high-value items like biopolymers, pharmaceuticals, and food and feed additives. Biopolymers are especially important and should receive equal attention to other products in the bioeconomy value pyramid.

To promote sustainable bioeconomy development, evaluating the market opportunity for biopolymers and making informed decisions about commercializing packaging materials is crucial.

## Results

The results show that PLA has a substantial potential for market attractiveness (4.65) and competitive advantage (4.15).

PHA packaging material has the weakest position in the market competitive advantage (3.15).

Cellulose material shows the least market attractiveness (2.66), which can be improved by increasing the market size growth rate and potentially giving a better price.

Starch packaging materials show an average position for market attractiveness (3.65) and competitive advantage (3.45).

## GE-McKinsey strategic analysis

The strategic scheme is presented for the market innovative transfer of biopolymer packaging materials produced from agricultural waste to advance the bioeconomy.

The GE-McKinsey matrix, utilized for market evaluations, is the decision-making matrix in this scenario. Data on the economy, technology, market competitiveness, and products have all been gathered for calculations.

