



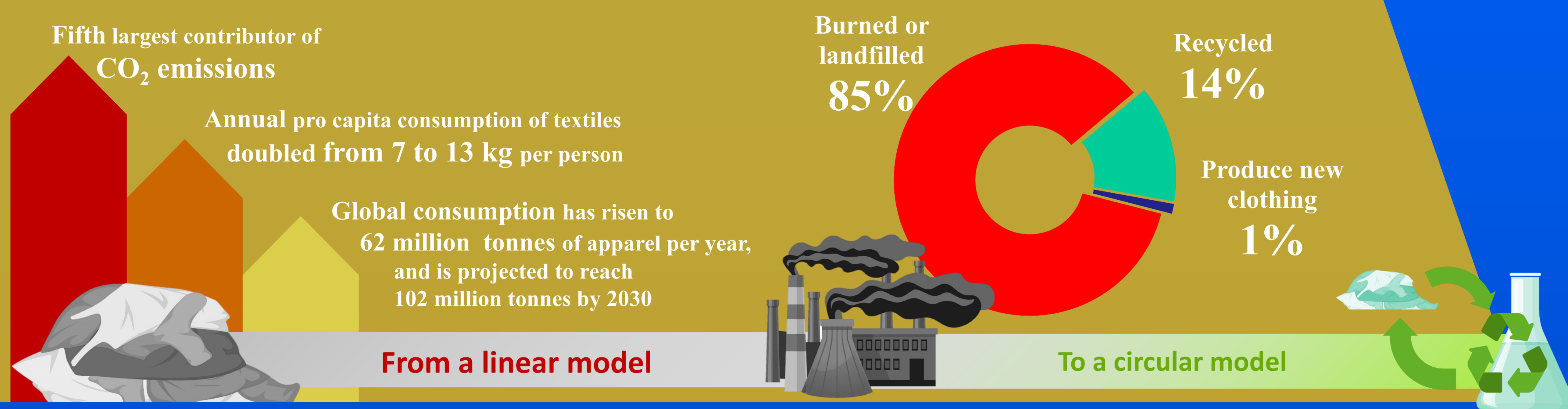
Strategies of recovery sample sugar from textile waste in agreement with the circular economy policies

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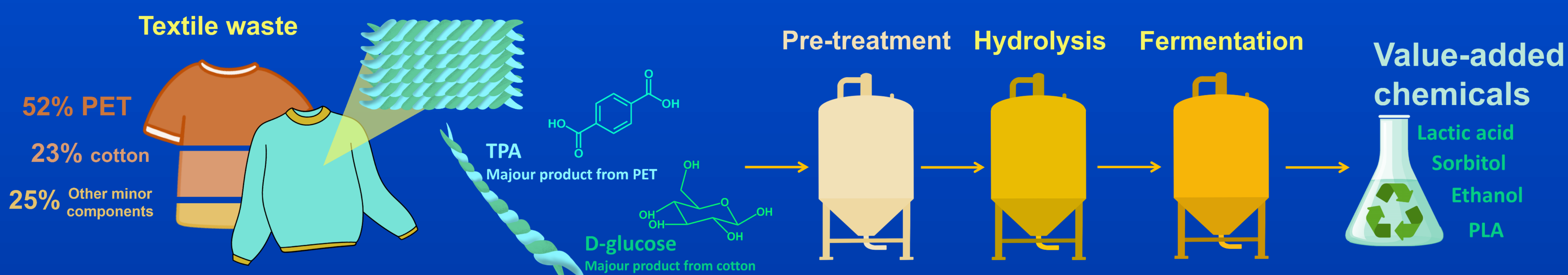
Introduction

Fast-changing fashion trends have resulted in **increases in textile production and waste generation**. In a short time, the **textile sector** has thus become one of the **most polluting in the world** due to its high environmental impact on the production process and waste disposal. In this panorama, different lines of research have been born to convert textile waste into **other high-value-added products**. This work aims to review the available biochemical strategies to valorise textile waste in the circular economy context.

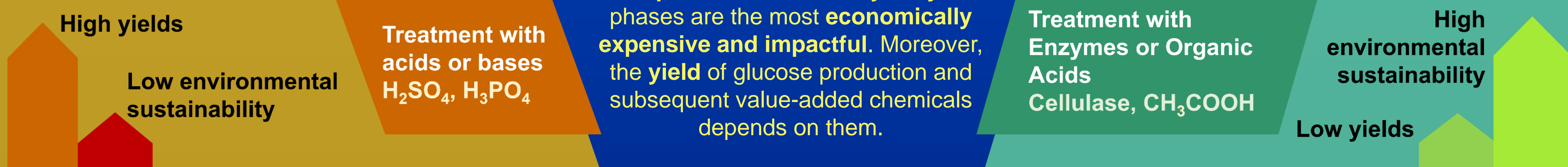


Solid waste treatments from textile industry

Pre-treatment and **hydrolysis** steps are fundamental in most of the studies analysed to obtain simple sugar which is a good starting point for a lot of productions. The **value-added materials** that can be produced from textile waste include bioethanol, lactic acid (LA), sorbitol, ethylene glycol (EG), and terephthalic acid (TPA). To obtain these products is necessary to pass through some of the building blocks shown below.



Results

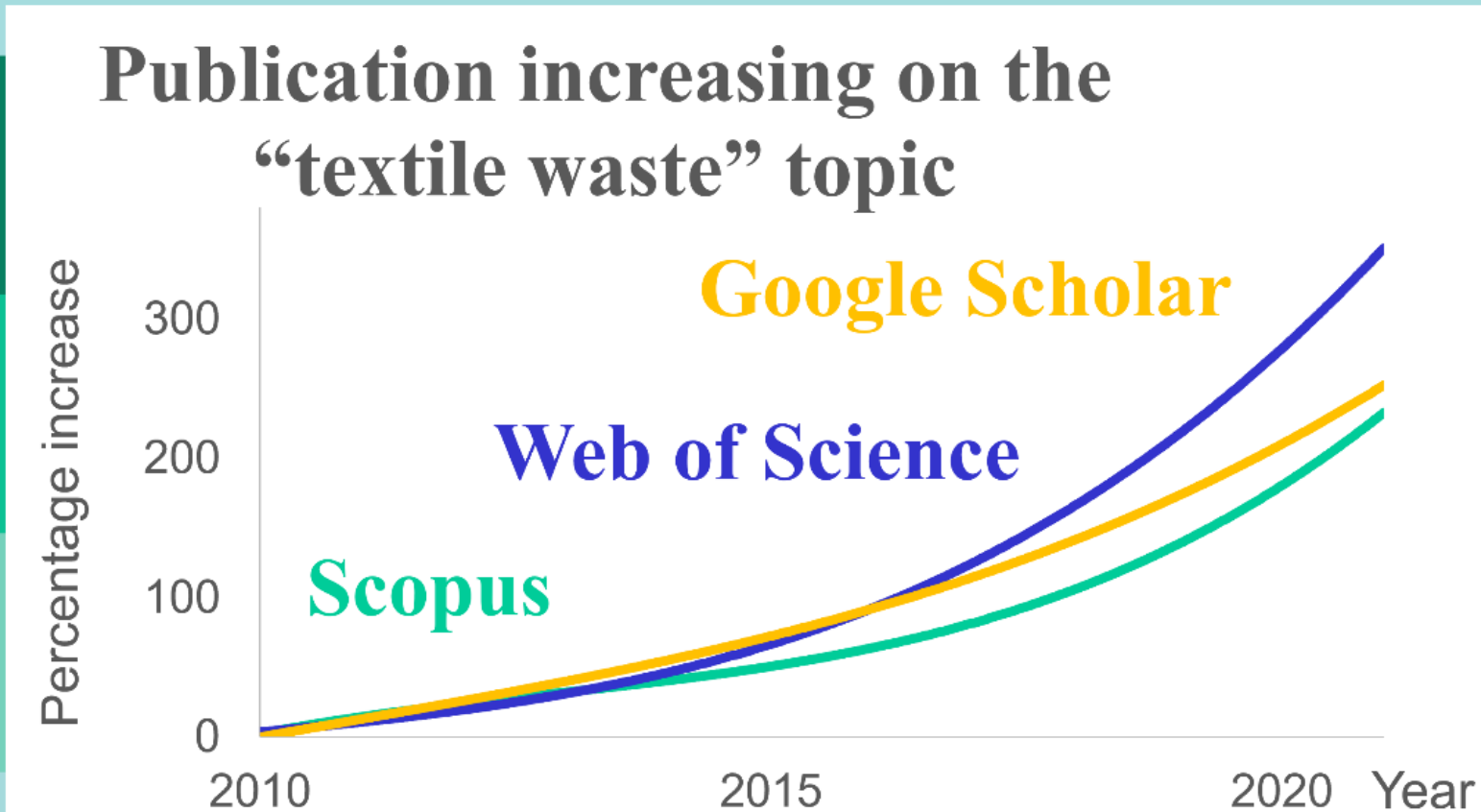


Conclusion and future perspectives



The articles considered do not yet define a method that can reconcile excellent yields and environmental sustainability. However, there has been a high increase in the **production** of lithic enzymes and a growth of **interest** in the treatment of textile wastes in the last ten years. These signals represent a **good outline** for probable innovations in the field.

- Increase in "textile waste" publications
- Increase in enzymes production
- Enzyme costs reduction



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