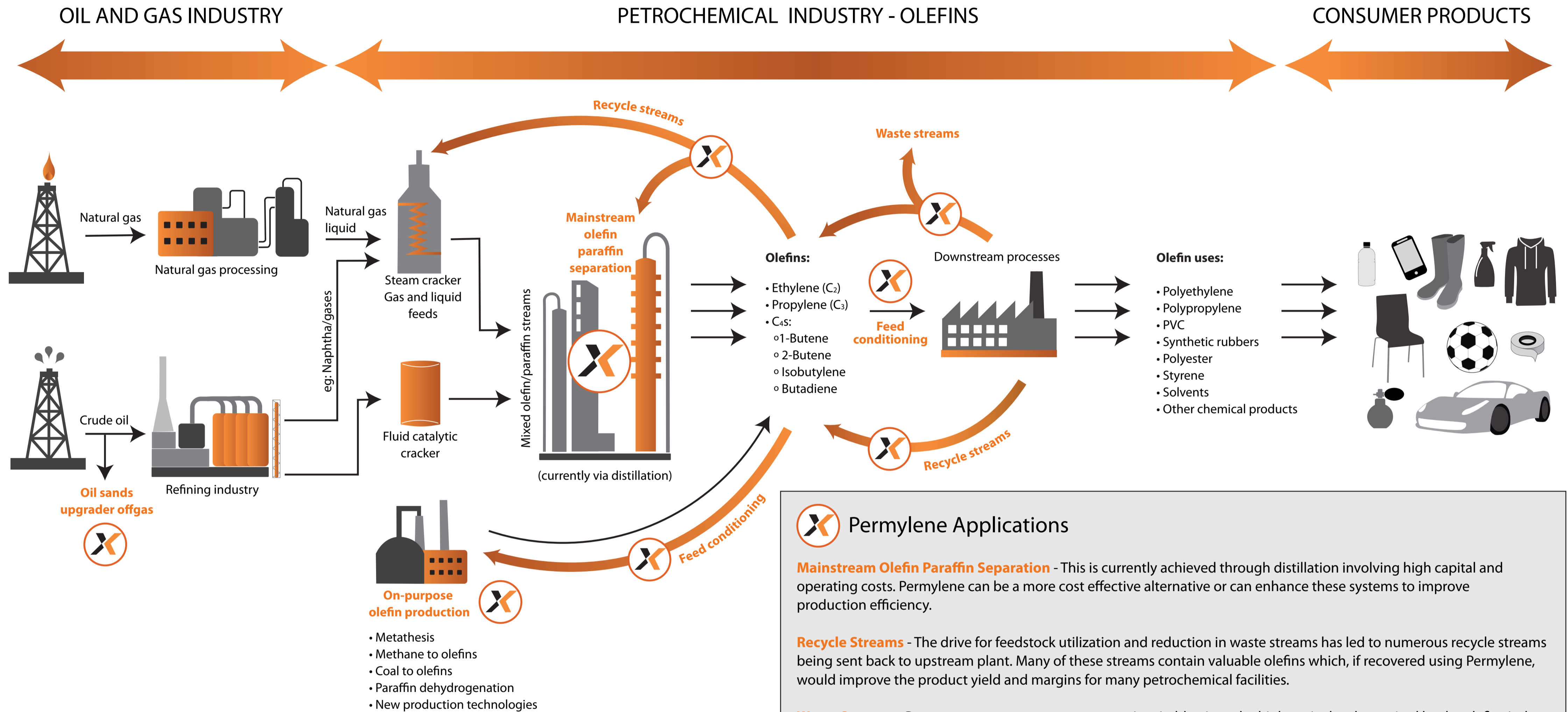


INDUSTRIAL APPLICATIONS FOR PERMYLENE™ MEMBRANE TECHNOLOGY



Permylene Applications

Mainstream Olefin Paraffin Separation - This is currently achieved through distillation involving high capital and operating costs. Permylene can be a more cost effective alternative or can enhance these systems to improve production efficiency.

Recycle Streams - The drive for feedstock utilization and reduction in waste streams has led to numerous recycle streams being sent back to upstream plant. Many of these streams contain valuable olefins which, if recovered using Permylene, would improve the product yield and margins for many petrochemical facilities.

Waste Streams - Recovery waste or purge streams are inevitable given the high purity levels required by the olefins industry. Extracting valuable olefins from these streams would both improve margins and reduce waste stream volume.

Feed Conditioning - Permylene can be used to improve certain feed streams that would benefit from a shift in olefin/paraffin or olefin isomer concentration such as metathesis, monomers and some specialty chemicals that utilize mixed feeds.

Oil Sands Upgrader - Recovery of olefins from oil sands upgrader offgas.

On Purpose Olefin Production - Permylene can be used to enhance production efficiency or cost effectiveness.

For more information, please visit <https://www.imtexmembranes.com/applications>