

According to some estimates, at the speed with which we dispose of plastic products - bottles, bags, and disposable cups, films and foils, food containers - by 2050, there will be more plastic in the ocean than fish...

Source: OSN

Providing an Environmentally Friendly solution to Plastic Waste

**Unparalleled Opportunities
To recycled End of Life Plastics**

Martin Hodan | 07/2020



Introducing OPTIMUS POL IV



Unique technology
Extremely Effective recycling
Converts plastic into pure, quality oil
Inside its own ISO container
Modular and scalable
Plug&Play device – fast installation
Direct use of the oil in industry
Very low Carbon Footprint
Almost no emissions



Introducing OPTIMUS POL IV

What plastics OPTIMUS works with?

POLYETHYLENES (PE, LDPE, HDPE)
POLYPROPYLENES (PP)
POLYSTYRENES (PS)

This group of plastics represents majority of the plastics consumed by all of us – known as communal waste. (The most critical out of all plastic waste types).

Examples: Plastic bags, food containers, yoghurt cups, wrapping materials, all containers from shower gels, shampoos, cleaning, products for households etc.



Intorducing OPTIMUS POL 1V

What plastics OPTIMUS DOES NOT work with?

PVC

PET

ABS

Other technical materials which uses various mineral additives and fillers.

Examples: PET bottles, all PVC containing materials, industrial type of plastics, which are mixed with other components to achieve desired characteristics.



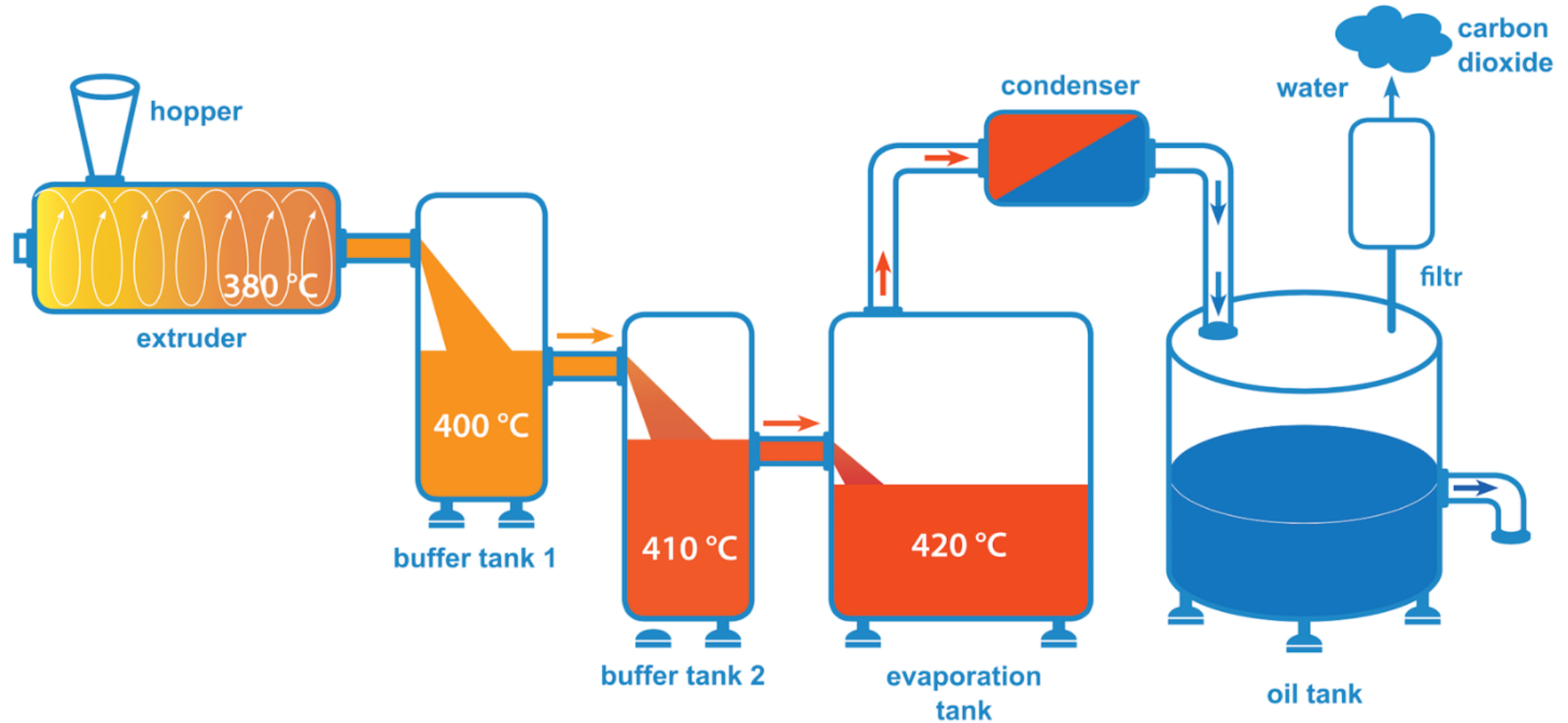
Introducing OPTIMUS POL IV



Other specifics.

- **Certified technology**
- **Simple process – easy to operate**
- **Fully automated**
- **Designed to run 24/7 and 340 days/year** (*28 days + 2 days for service and maintenance*)
- **Safe – equipped with the most advanced safety systems**
- **Highly Economically profitable even WITHOUT SUBSIDIES**

THE PRINCIPLE



THE UTILIZATION OF THE OIL



THE UTILIZATION OF THE OIL

PETROCHEMICALS

- PLASTIC PRODUCTION
- OTHER VALUABLE CHEMICALS

REFINERIES

- BLEND STOCK FOR CONVENTIONAL FUELS
- HIGH QUALITY = LOWER COST TO PROCESS

POWER GENERATION

- FUEL FOR BACKUP GENERATORS
- COGENERATION

TRANSPORT & HEAVY MACHINERY

- FUEL FOR ENGINES
- FUEL ADDMIXTURE (in MARINE/RIVER TRANSPORTATION)

SAVING THE PRIMARY SOURCE – CRUDE OIL | LOWERING CARBON FOOT PRINT | CREATING SIGNIFICANT VALUE

OPTIMUS in the context of its carbon footprint & Environmental and Climate change protection

The synthetic oil which Optimus produces from End of Life plastics has **extremely low carbon footprint <24 g CO2 eq.**

Thus, OPTIMUS offers:

- **A solution with high recycling potential** (1kg = 1liter + 1% of residue + 5% proces gases)
- **An ideal alternative to other ways of treating waste** (i.e. burning, dumping into our oceans and rivers or landfilling).
- **To limit the production of greenhouse gasses by utilization of the oil,** as required by Paris Agreement.

OPTIMUS & THE PRINCIPLE OF THE CIRCULAR ECONOMY

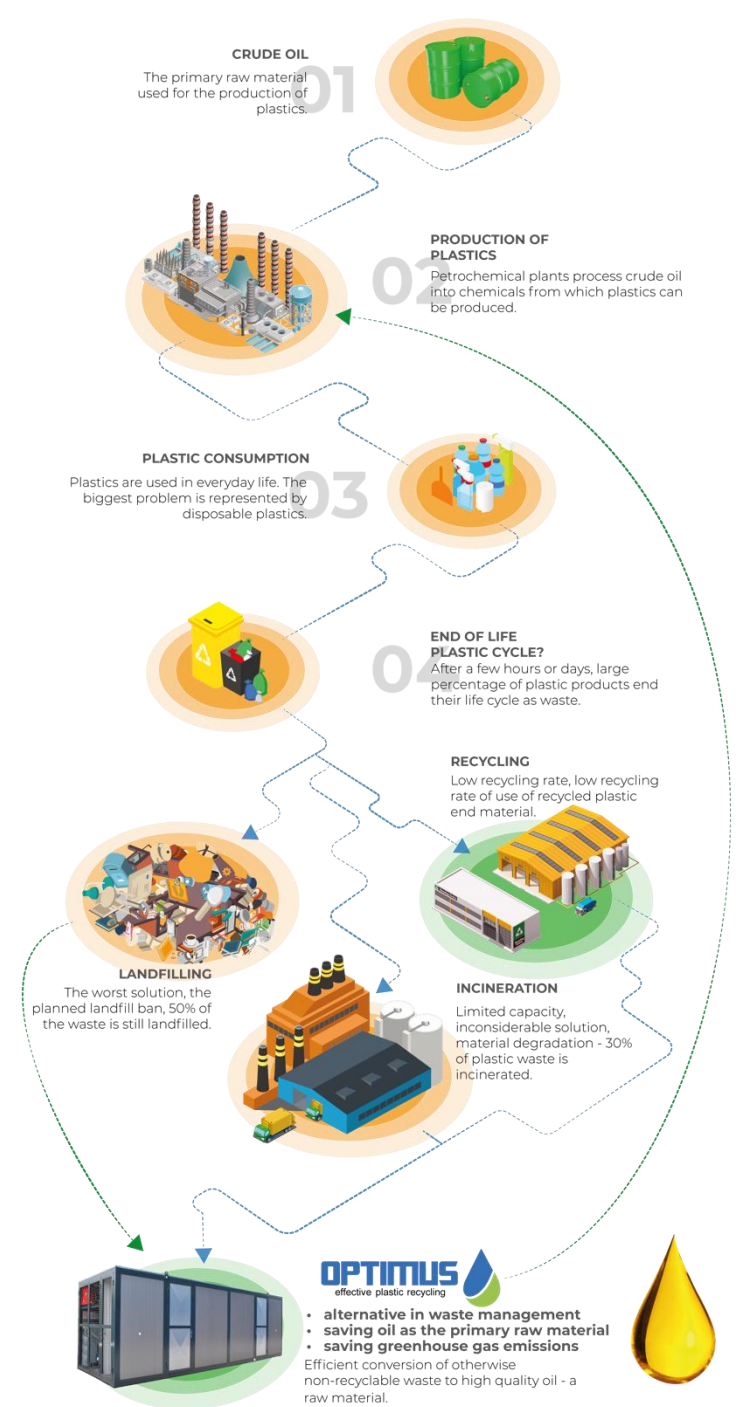
LIFE OF PLASTICS

CRUDE OIL AS A SOURCE
PRODUCTION OF POLYMERS (PLASTICS)
PLASTIC CONSUMPTION

END OF LIFE PLASTIC CYCLE

AFTERLIFE

INEFFECTIVE RECYCLING
LANDFILLING
INCINERATION
OPTIMUS



A FEW REASONS TO USE OPTIMUS



- Highest purity and quality of the oil = cutting costs
- Lowering the carbon footprint
- **Reputation and active participation**



OPTIMUS in Europe to start with...



Why are we focusing on Europe?

- Existing partnerships
 - One legislation
 - No duty
- Awareness of the problem
 - Hunger for a solution



OPTIMUS in the United Kingdom



GLOBAL PERSPECTIVE

- No such technology present in the world
- Great interest shown from all over the globe
- Actively helps to solve plastic waste issues regardless the location
 - Low realization cost, fast deployment

Issues we are facing globally

- Lack of supporting legislation, despite the need to solve the problem – however majority countries are working on this



Thank you for your attention!

www.optimus-recycling.cz