



Cordnplast is an Engineering company, providing industrial solutions for its customers in Textile and Plastics;

Access Customer <u>Needs</u>

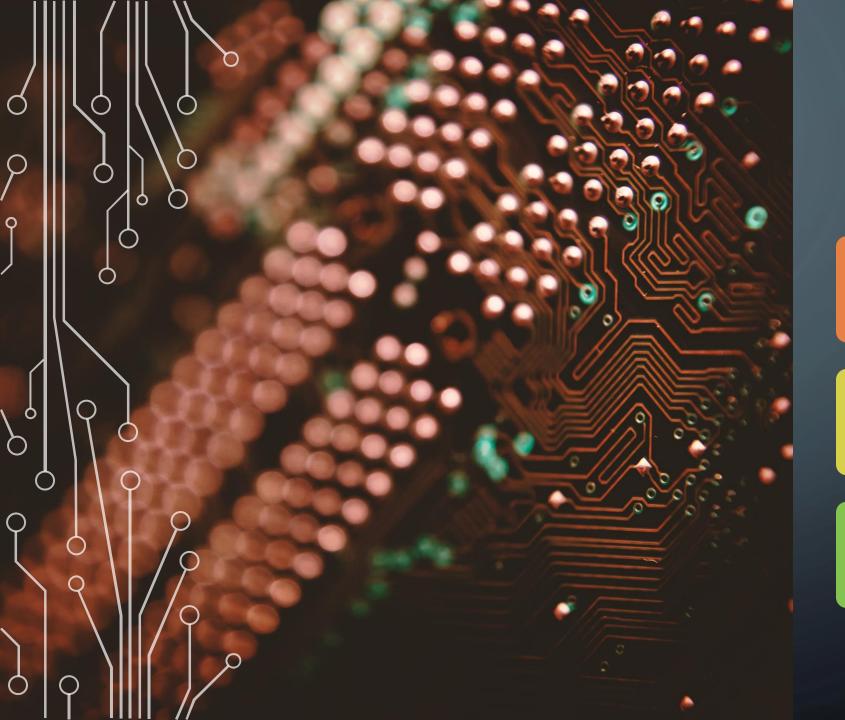
Determine Possible Solutions Select
Technology &
Deliver the
Solution

Composite Solutions
-Textile Solutions

-Plastics Solutions

-Recycling Solutions

-Marketing Solutions
-Consultation



# COMPONENTS



**PLASTICS** 



TEXTILES & COMPOSITES



CONSULTATION



Compounded Polymers

\*Recycled Polymers

TP Elastomers Molded Parts

PA66, PA6

PE, PP, PVC

ABS, PC

TPU

**BIOPLASTICS** 

rPET

GLASS FILLED

MINERAL FILLED

FLAME RETARDANT



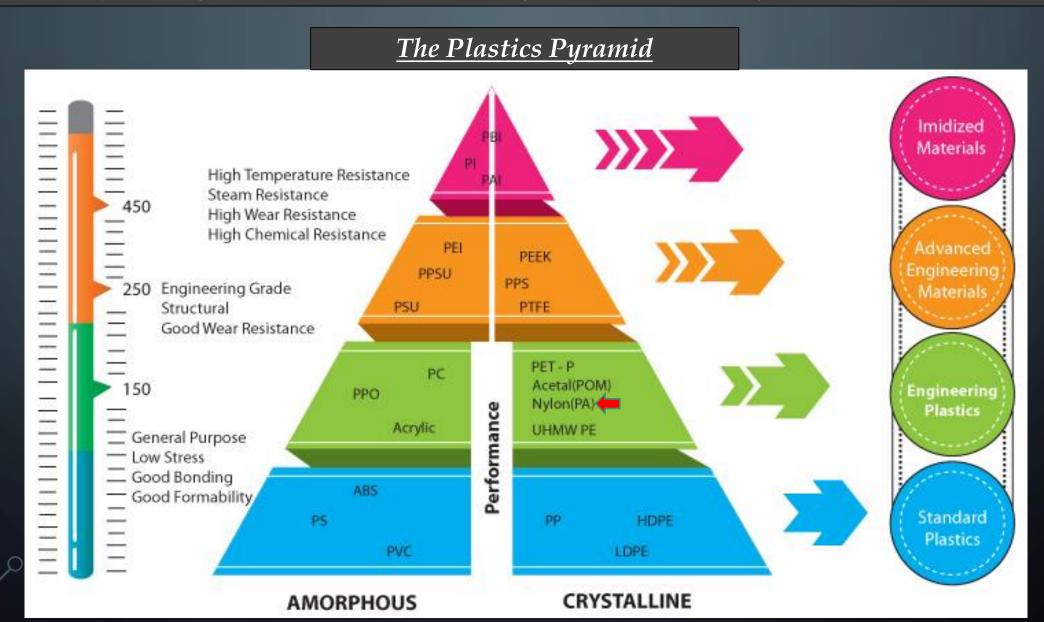
**PLASTICS** 



We make Projects with our customers to recycle their Wastes and Sideproducts to help them <u>reduce their production costs</u>.

#### NYLON 6 or PA 6

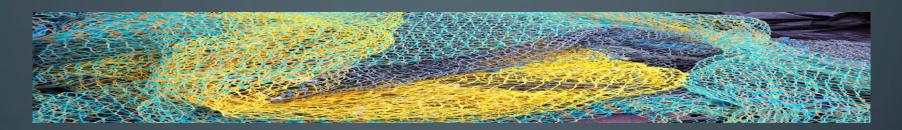
It is a semi-crystalline polyamide characterized by tenacity, elongation, transparency, softness, flexibility and resistance to abrasion. It is used for making threads, nets, ropes, and knitted garments as well as many injection molded parts.



#### **ARTICLES:**

-NYLON-6 obtained from fishing nets waste seems to be valid for recycling, as they can be processed for different potential industrial applications without any remarkable loss of main properties.

(Ref: 2019 Wiley Periodicals, Inc. J. Appl. Polym. Sci. 2019,136, 48442)



### **Critical factors**

- 1. <u>Degradation</u> due to exposure to sun light.
- 2. The <u>multifilament type</u> is more susceptible than <u>monofilament</u>.
- 3. The <u>thicker</u> the material the better is the resistance to <u>photo-degradation</u>.
- 4. The practice of <u>drying the nets in sunlight</u> after fishing should not be done in view of the strength loss due to weathering.

(Ref: Saly N. Thomas, C. Hridayanathan)

# With our partner company, we convert PA6 fishnets and Ropes to Granules and sell to Local Compounders.





<u>Properties</u>	<u>Typical Value</u>
Density	1,16
Elongation	2%
Modulus	2500-3000 MPa
Isod Notched	4-7
Ash	3%
Humidity	0,50 %
Viscosity	2,5

- Available Capacity: 1000 tons/year
- WASTE STREAMS WITH:
  - -PET: 0%
  - <u>-PP:3% max</u>
  - -PE: 8% max
  - *-Dyneema* : 0%
  - -We sort, wash, shred, dry and melt
  - -No smell in our products





### Susiness Model Canvas for Recycling of Polyamides from Used Nets and Ropes

#### Key **Partners**



### Key



Value Proposition



Customer Relationships



Customer Segments

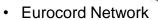


- Eurocord Network
- Rope Producers
- Net Producers
- Waste Collectors
- Fish farms
- Various Industries using ropes and net

### Activities

- Waste collection
- Separation
- Cutting & Baling
- Granulation

#### Key Resources



 Granulization Know-how & Facility

- Recycled Polyamide production with consistent quality and competitive cost structure
- No significant reduction in mechanical properties
- No smell

- Consistent Recycled material supply
- Potential to Serve Customers by using their own waste streams as raw material

#### Channels

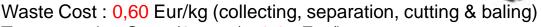


: 0,30 Eur / kg;

Partnerships

- Injection Molders
- Compounders

Cost Structure



Transportation Cost (2 ways): 0,35 Eur/kg

Granulization Cost: 0,75 Eur/kg

Total Cost: 1,70 Eur/kg





**Expected Profit** 

 Annual Profit with 1000 tons sale: 300.000 Eur / yr Incentives from Authorities

: 2,00 - 2,20 Eur / kg



### THE PLAN

EXPECTED COST : 1,70 Eur/kg

EXPECTED PROFIT : 2,00 Eur/kg min

ANNUAL PROFIT (1 kt) : 300.000 Eur min

-Work with Eurocord teams to understand more the <u>cost structure</u> of the Project

- -Understand the Regulations
- -Organize a <u>Trial</u>





## **CONTACT DETAILS**

www.cordnplast.com

info@cordnplast.com

https://www.linkedin.com/company/cordnpla st-industrial-solutions CORDNPLAST ENDUSTRIYEL COZUMLER TIC. LTD. STI.

YENISEHIR MAH. DEMOKRASI BLV. NO:54/A

IZMIT/KOCAELI

**TEL:** +905325576305