

# Environmental Impact of Fishing Gear

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*Environmental Manager*



**HAMPIÐJAN**



# Environmental Aspects

- Bottom contact
  - Drag
  - Sediment disturbance
- Fuel consumption/emissions
  - CPUE
- Selectivity
  - Sustainability of fish stocks
  - Target species and value
- Life cycle of fishing gear
  - Recyclability
  - Carbon footprint

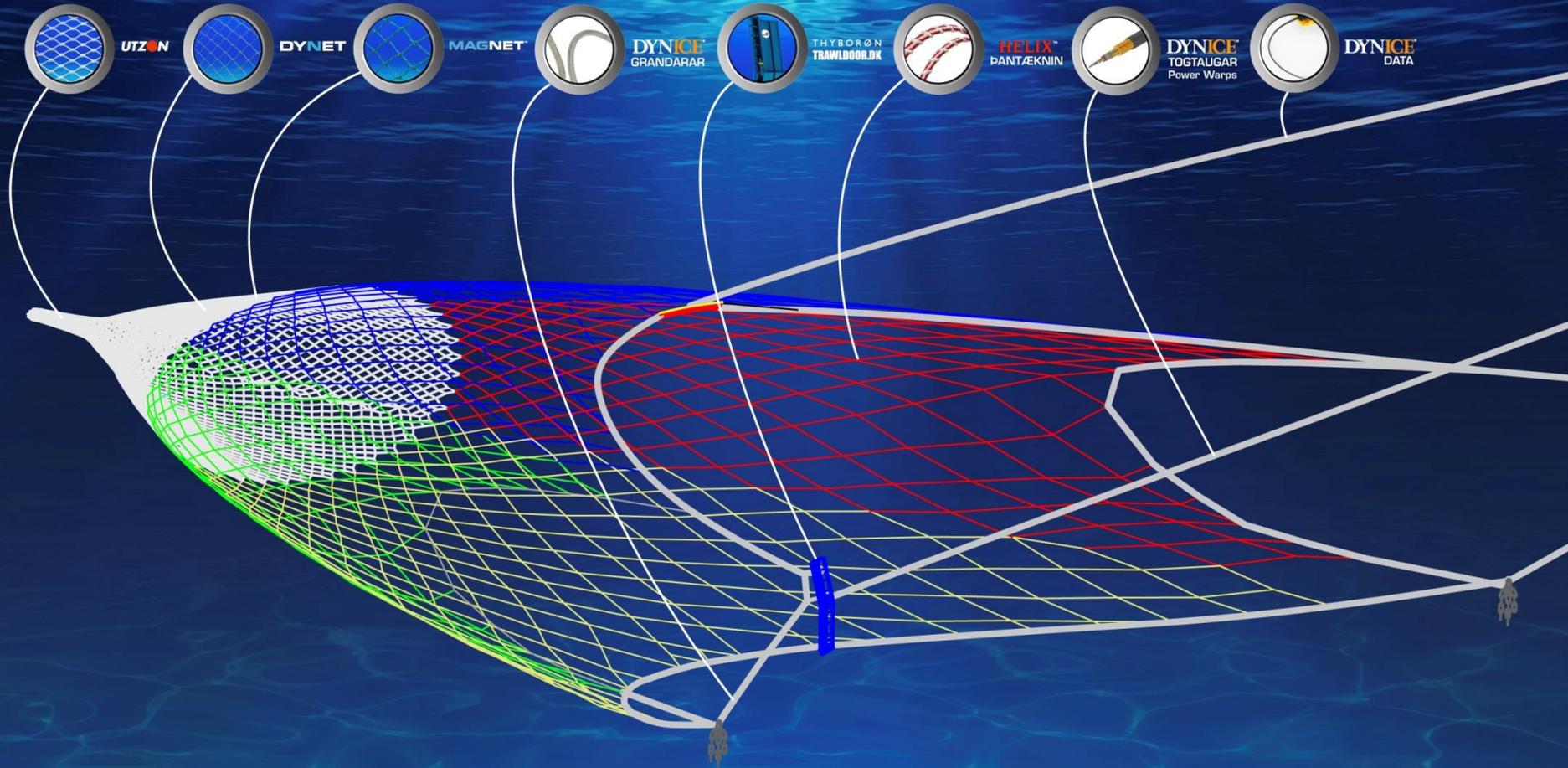


# RELENTLESS PRODUCT DEVELOPMENT

*is the Essence of Our being*

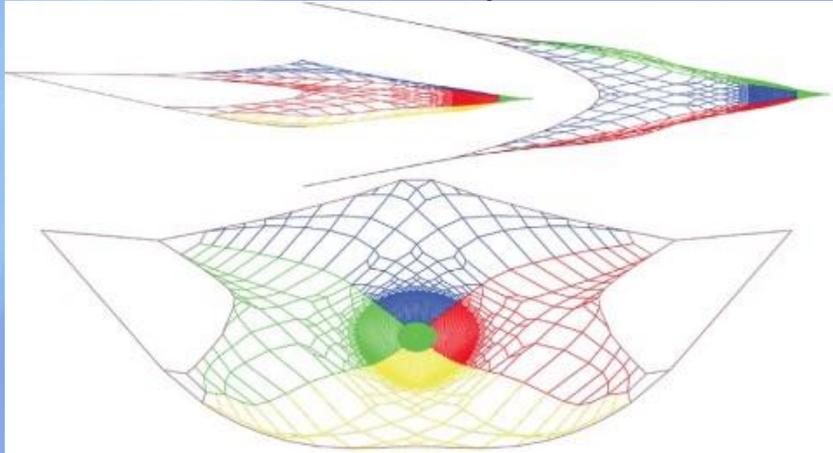
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- for every ocean

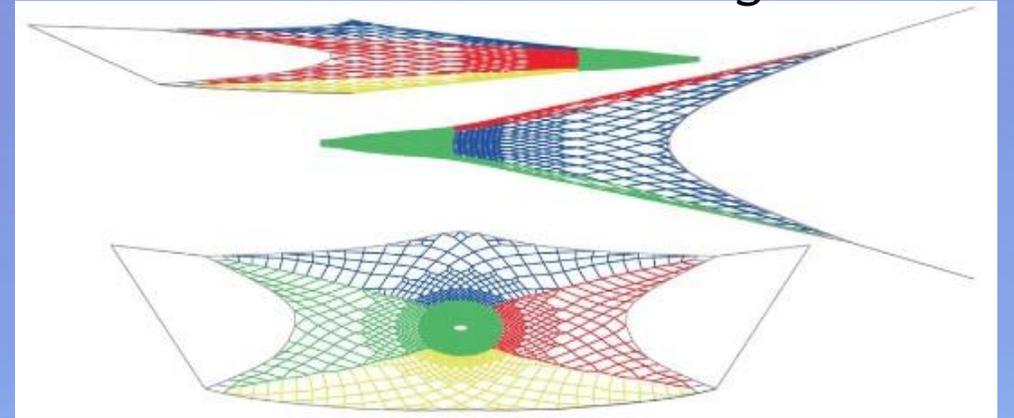


# Pelagic trawls used by the Icelandic fleet

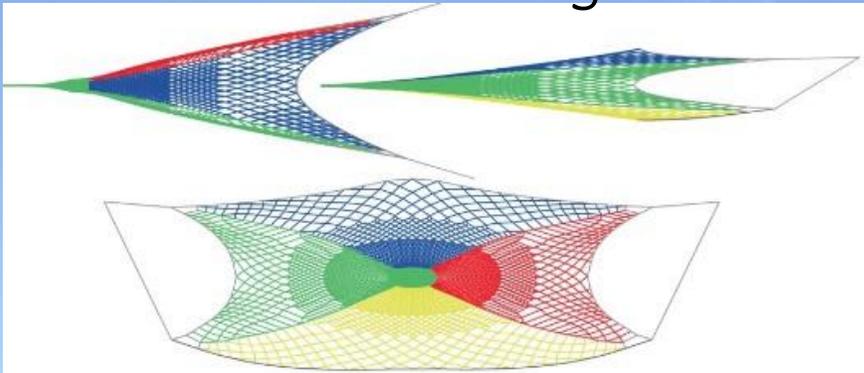
Gloría HO - *Redfish*



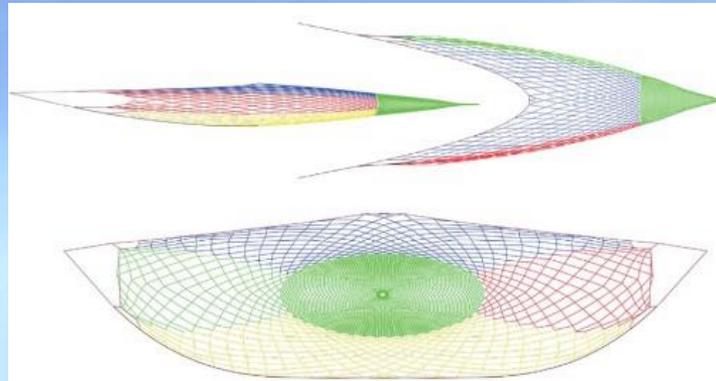
Gloría BW - *Blue Whiting*



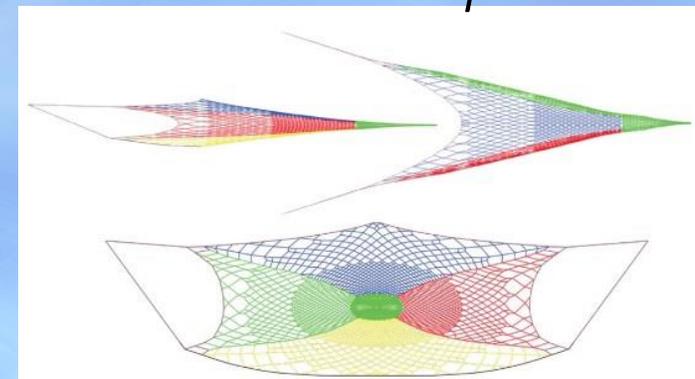
Gloría NM - *Herring*



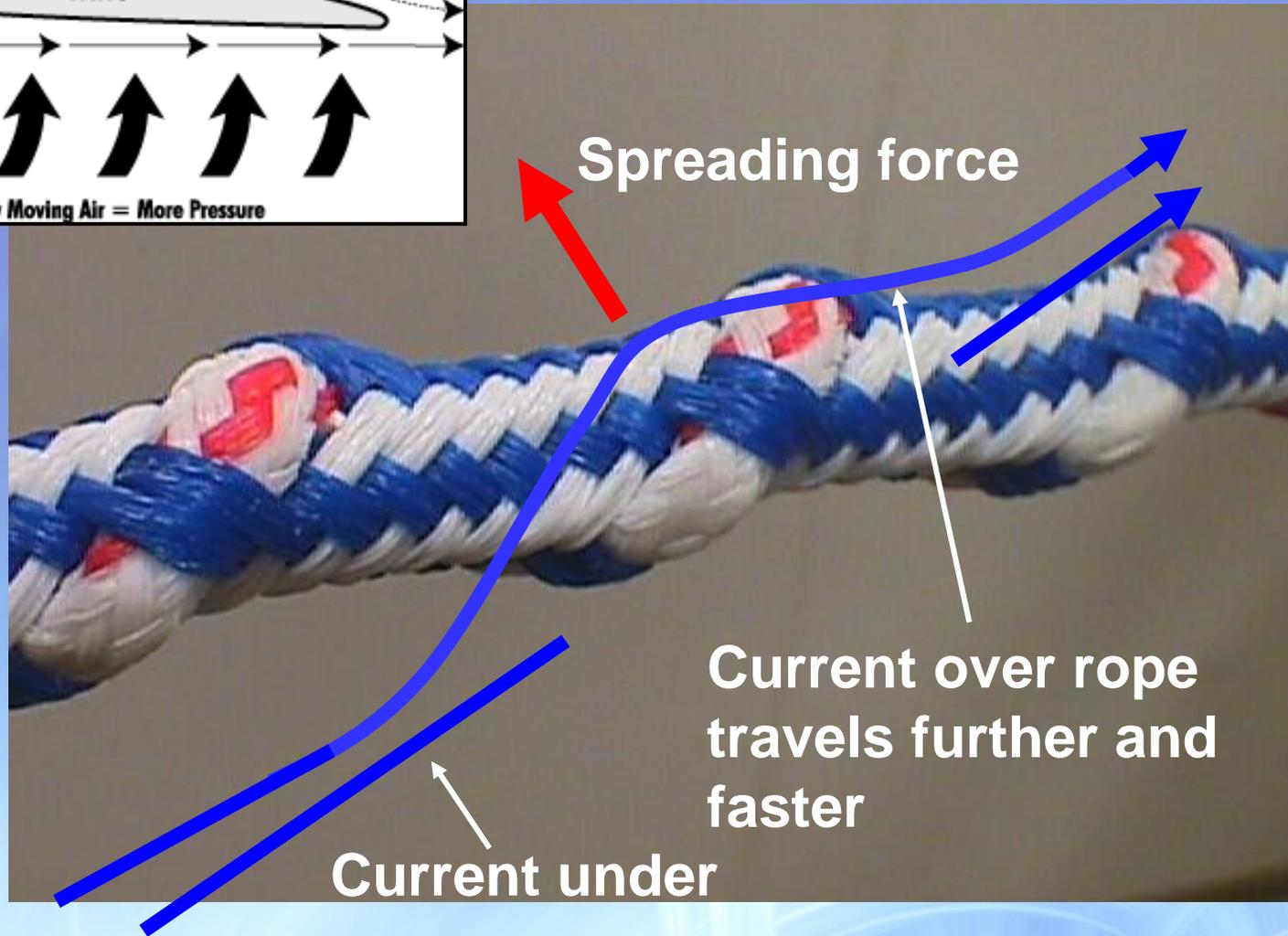
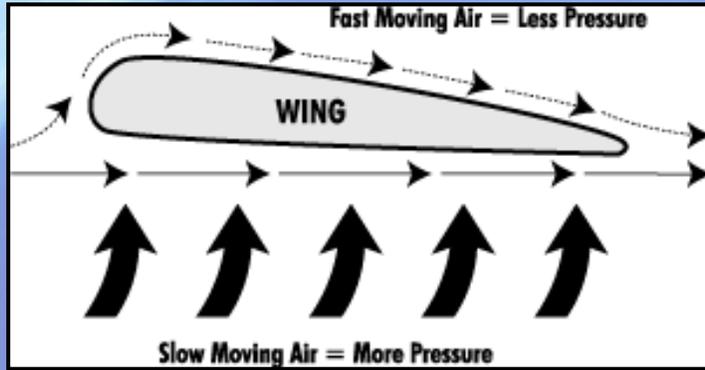
Gloría XW - *Mackerel*



Gloría SW - *Capelin*

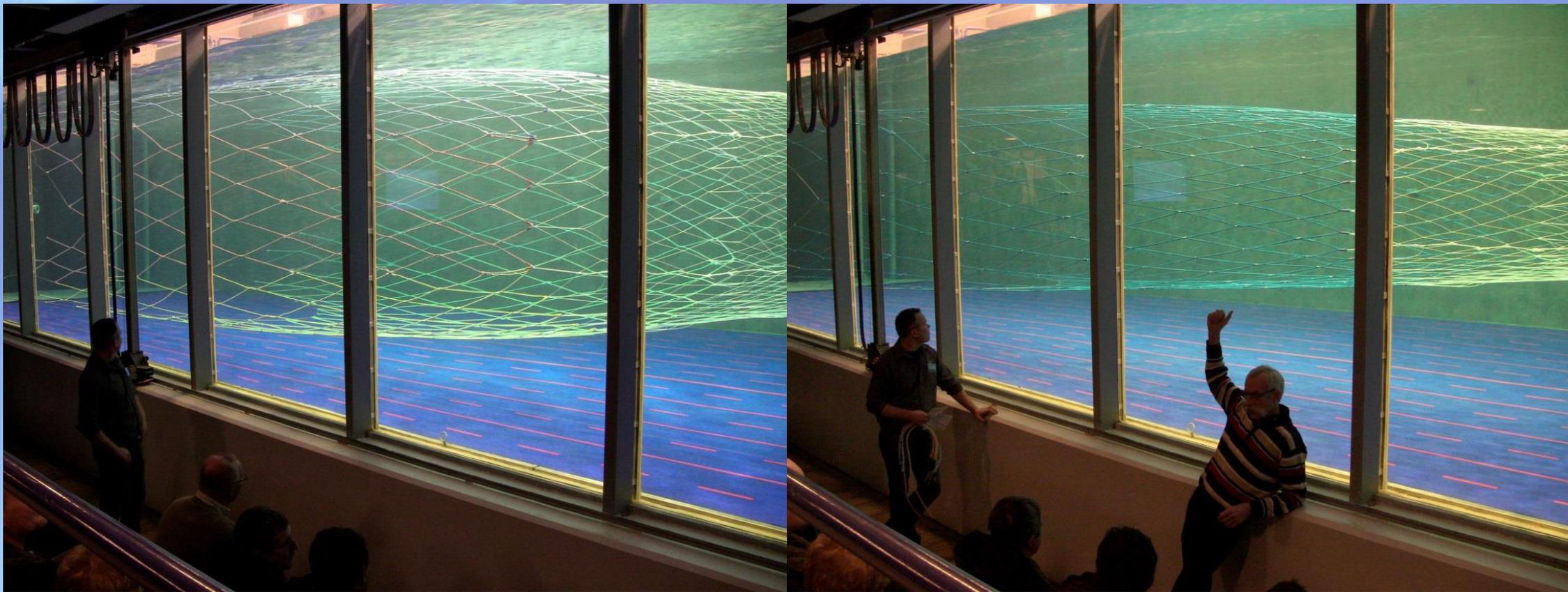


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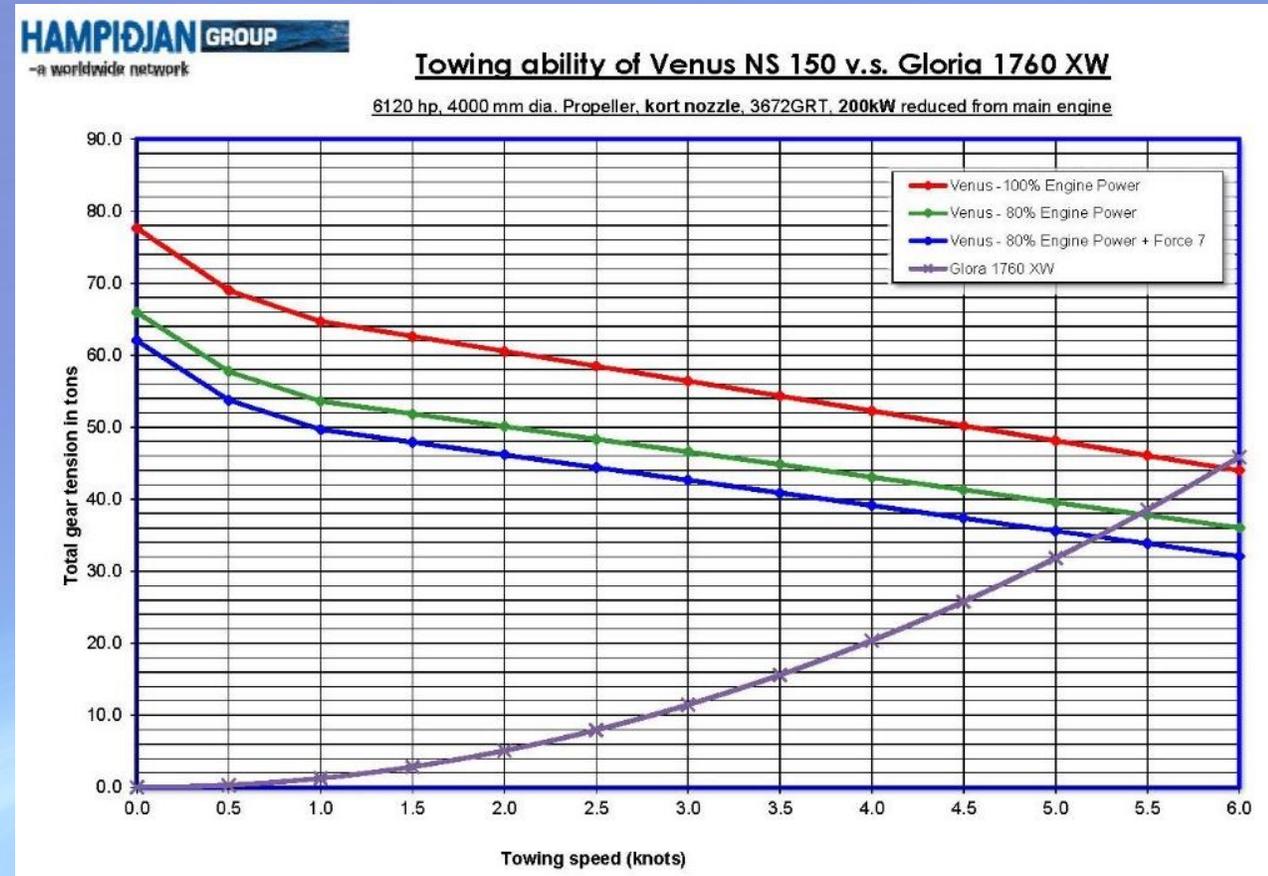
# The difference **visualized**



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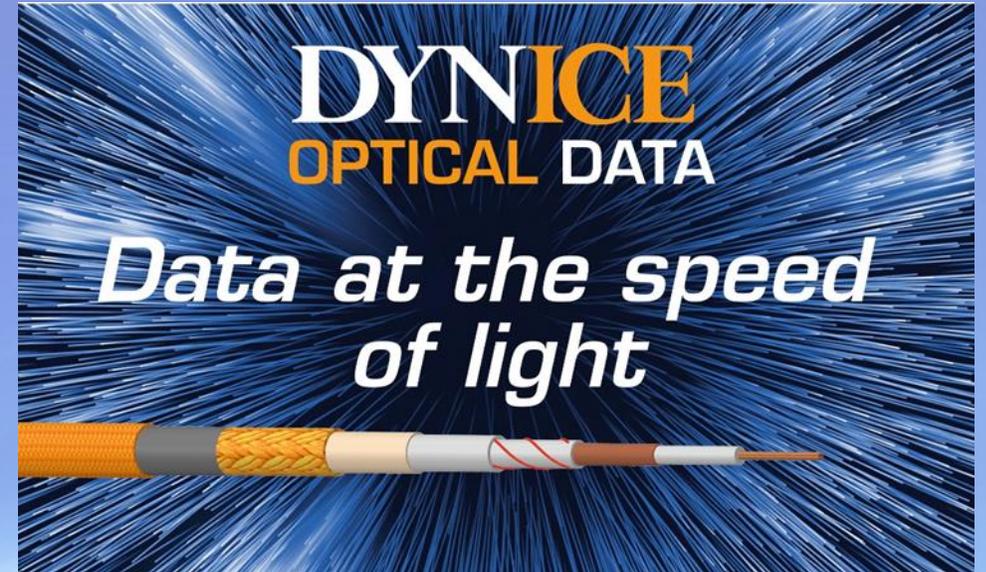
# Fishing Gear Development - Process

- Project Initiation
  - Customer request
  - Research projects
  - Legislative changes
- Analysis
  - Target species
    - Distribution
    - Behavior
  - Towing power of vessel
  - Matching of gear to vessel parameters



# Information is key

- DynIce Optical Data
  - Connection between ship and gear
  - 3 optic fibres
  - power transmission
- Endless possibilities
  - real times images
  - Precise headline measuments
  - commands to gear
  - seabed mapping
  - etc

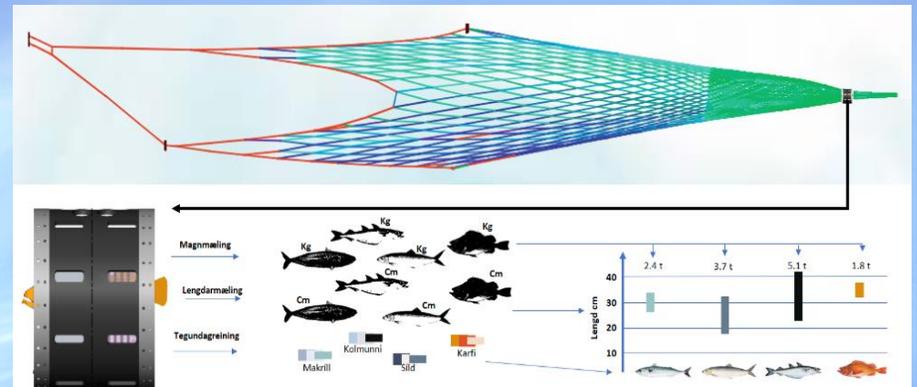
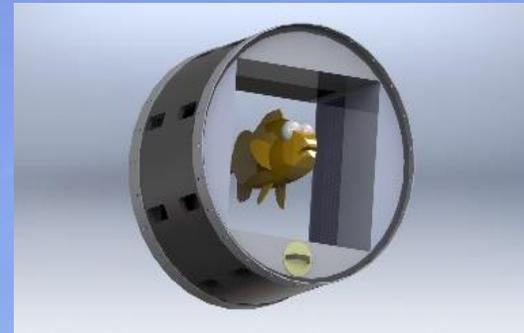
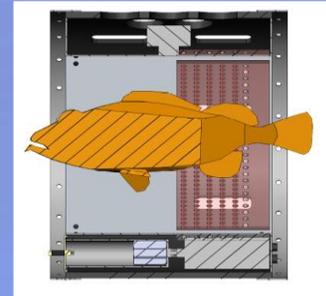


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# FishScanner (Star-Oddi)

Star-Oddi, MFRI and Hampiðjan. Funded by Tækniþróunarsjóð

- FishScanner
  - ✓ Identify species
  - ✓ Length measurement
  - ✓ Real time catch estimation
- Research application
  - ✓ Data collection without catch
  - ✓ Less towing time for sample collection
- Commercial fisheries
  - ✓ Real time catch composition
  - ✓ Summary of each catch



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# End of Life of Fishing Gear



PLASTIX



POLI  EKTRIS

No fir

 **GRANUBAND**  
IT'S A NEW LIFE

Product group	Ingredient	Brand	Name	Recycling	Landfill	Processing company
HMPE ropes	HighModulusPolyEthylene	DynIce, Prima	HMPE		(X)	(DSM Dyneema)
HMPE netting	HighModulusPolyEthylene	DynIce, Prima	HMPE		(X)	(DSM Dyneema)
Coverbraided ropes	Polyethylene 55% og Polyamid 45%	Pepa, Helix, Capto, Jaco, Torex	PE+PA	(X)		Nofir
Braided ropes	Polyamid	Nylex	PA	X		Polivektris
Nylon net	Polyamid	Utzon	PA	X		Polivektris
PE netting	Polyethylene	Magnet	PE	X		Plastix
Twisted ropes	Polyethylene	PE rope	PE	X		Plastix
	Polypropylene	PP rope	PP	X		Plastix
	Nylon	Utzon	PA	X		Polivektris
	Polypropylene 80% - Polyethylene 20%	Kraftur, Kraftex, Danline	PP+PE	X		Plastix
	Polyethylene 50% - Polyamid 50%	Codline	PE+PA		X	
	Polyethylene 50% - Polyester 50%	Gleipnir	PE+PES		X	
Floats	Acrylonitrile butadiene styrene	Castro,	ABS		X	
Rockhopper	Rubber	Eurorock	PI	X		Granuband
Chain, wire , hardware	Ferros Metals		Fe	X		Local

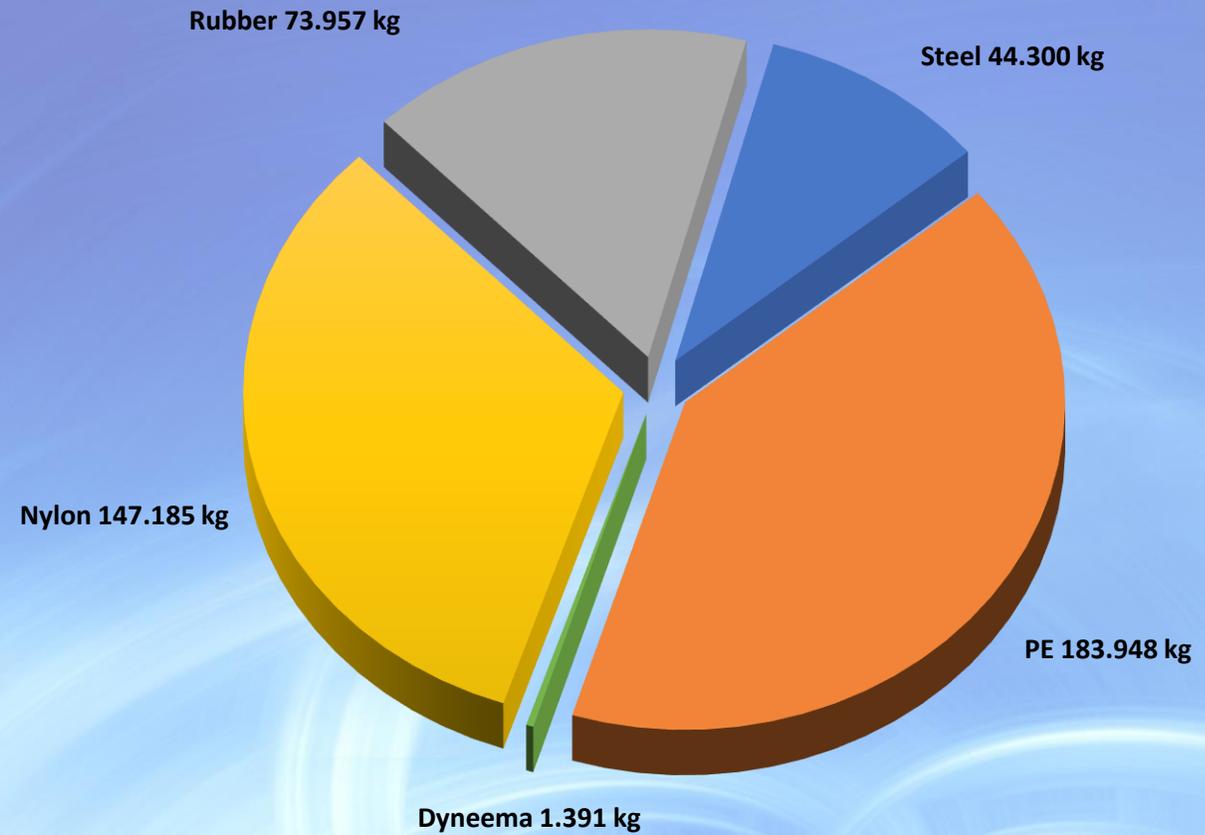
## Recycling of PE in Hampidjan Baltic



# Fishing gear for recycling (2022)



Fishing gear „waste“





Thank You!

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