



**GARWARE**  
TECHNICAL FIBRES

November 28, 2022

GTFL:SEC:2022

**BSE Limited**

Corporate Relationship Department,  
New Trading Ring,  
Rotunda Building, P. J. Towers,  
Dalal Street, Fort,  
Mumbai 400001.

(Company code: 509557)

**National Stock Exchange of India Ltd.**

Exchange Plaza, Plot No. C/1, 'G' Block,  
Bandra-Kurla Complex,  
Bandra East,  
Mumbai 400051.

(Symbol: GARFIBRES, Series: EQ)

**Sub:- Disclosure under Regulation 30 of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015**

Dear Sirs,

Pursuant to the aforesaid Regulations, please find below the schedule of investor / analyst meeting / conference to be held as under.

Schedule of the Investor / Analyst Meet / Conference:

Date	Particulars of Investor / Event	Mode of Meeting
November 29, 2022	Group Meetings	Physical and / or Virtual
November 30, 2022	APG Asset Management, One-on-One	Physical

Note: The above schedule is subject to change. Changes may happen due to exigencies.

A copy of the investor presentation to be made in the aforesaid meetings is enclosed for your reference and the same is also placed on the Company website i.e., [www.garwarefibres.com](http://www.garwarefibres.com).

The Company does not intend to discuss any Unpublished Price Sensitive Information during these interactions.

Please acknowledge this communication.

Thanking You,

Yours faithfully,

For **GARWARE TECHNICAL FIBRES LIMITED**

Sunil Agarwal  
Company Secretary  
M. No. FCS6407

**Registered Office**

Garware Technical Fibres Ltd. (Formerly Garware-Wall Ropes Ltd.): Plot No. 11, Block D-1, M.I.D.C., Chinchwad, Pune 411 019, India.  
T +91 20 2799 0000/0306 E [pune\\_admin@garwarefibres.com](mailto:pune_admin@garwarefibres.com) [www.garwarefibres.com](http://www.garwarefibres.com) CIN: L25209MH1976PLC018939

# Better Ideas in Action



**GARWARE**  
TECHNICAL FIBRES

[www.garwarefibres.com](http://www.garwarefibres.com)

# Garware Technical Fibres Limited – At a Glance

- Pioneer in Technical Textiles in India
- Presence in 75 countries
- 5000 + employees
- We produce 80MT per day & 20,000 SKUs
- Great Place to Work certified. Top 50 companies in India.
- Well qualified R&D team of 22 scientists and 5 Doctorates

SKUs

SKU's

77

Patents filed in last 5 years

23

Granted



## **Mission**

“To Provide innovative,  
application focused  
solutions to enhance value of our  
customers globally”



**GARWARE**  
TECHNICAL FIBRES



# Our Four Pillars of Value

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## Ownership

Own the process of delivering results with Entrepreneurial Spirit & Joy of working in an Empowering Environment

## Improve

Continuously Improve our Products & Services to become preferred Partner of our Customers

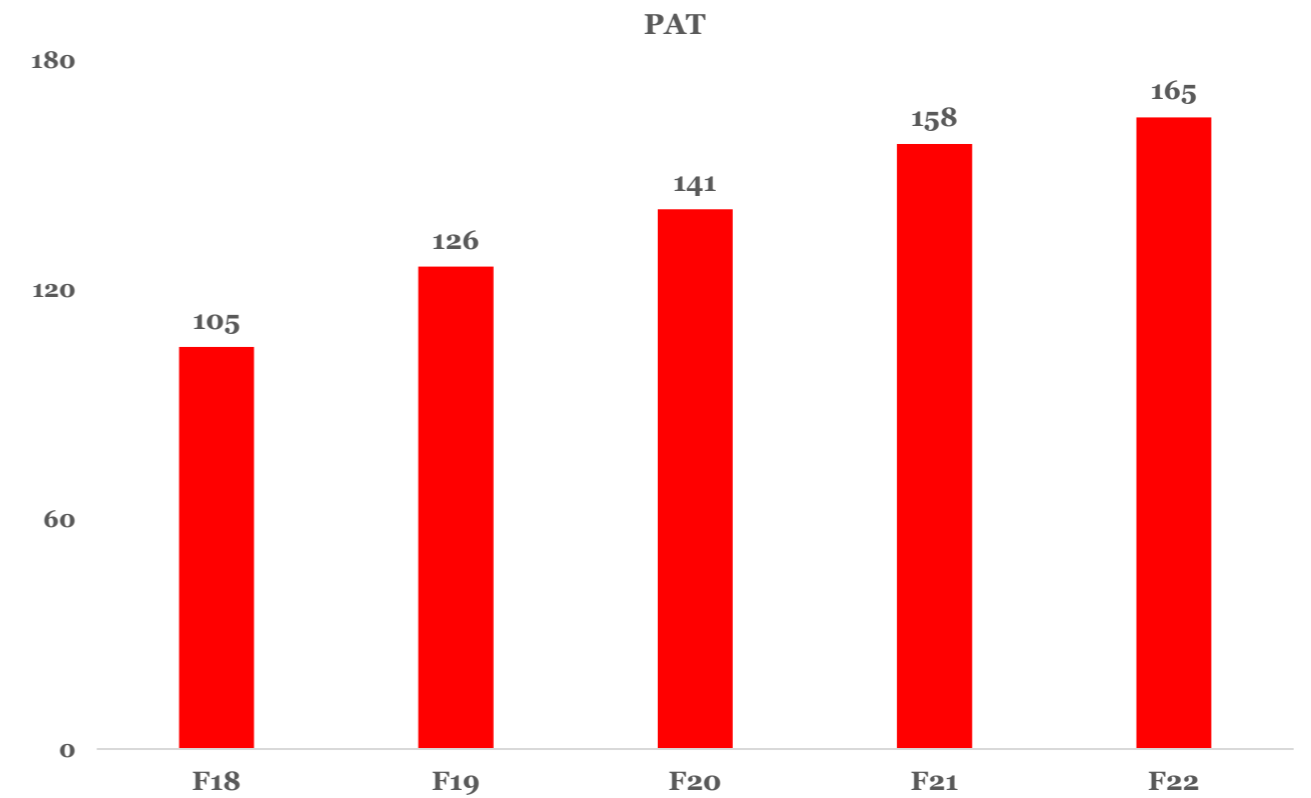
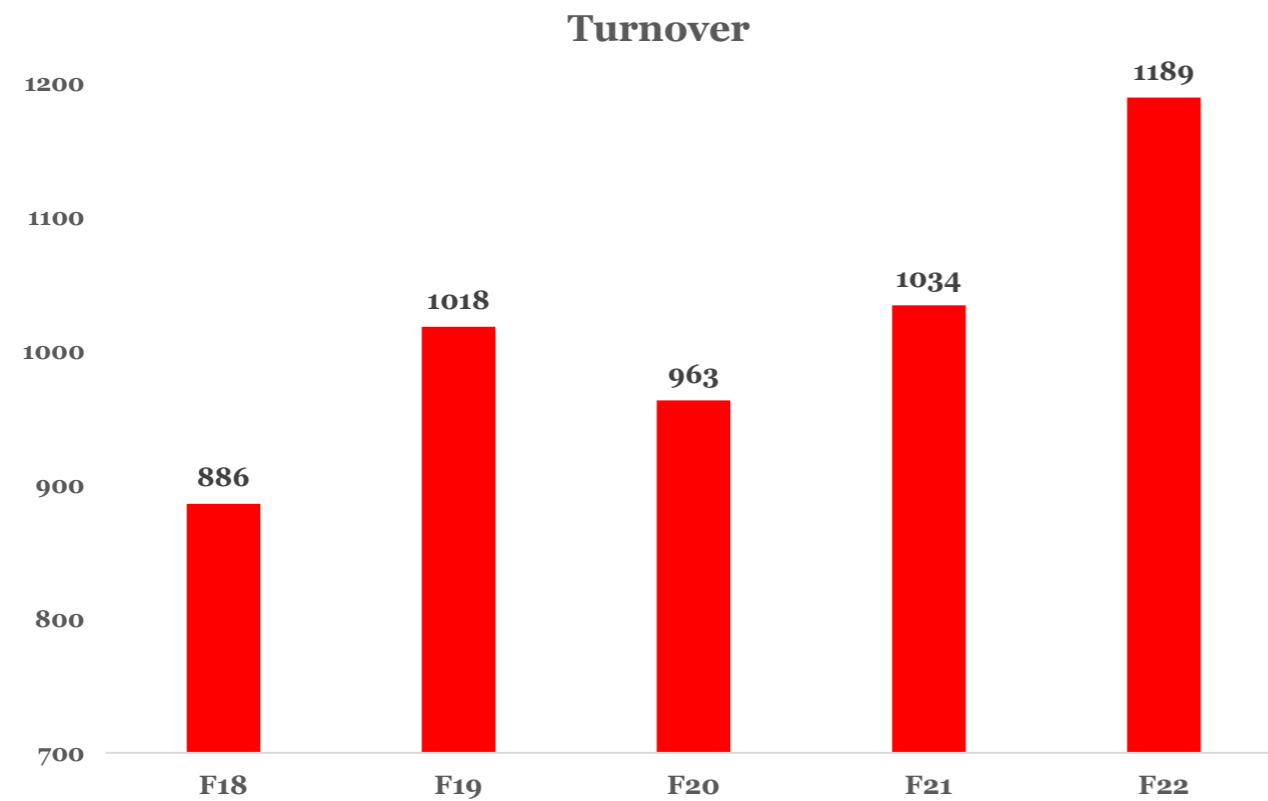
## Bond

Enhance our Family Bond with the Employees & Business Partners through Fair & Equitable dealings

## Enhance

Enhance Stake Holder Value through Profitable Growth in Sales and Earnings

# GTFL Financials Rs Crs.





# GTFL Infrastructure



## Manufacturing facility at Pune

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Pune manufacturing facility conforms to ISO 9000:2015 standards and boasts state-of-the-art machinery

### **Products**

Ropes  
Rope Articles  
PPMF Yarns

PPMF Twines  
Geo Textiles  
Metal Gabions

Cargo Nets  
Gangway Nets





## **Manufacturing facility at Wai is the largest unit in India and spread across 40 acres**

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Wai manufacturing facility conforms to ISO 9000:2015 and ISO 14001:2015 standards and boasts state-of-the-art machinery

### **Products**

Aquaculture Cage Nets  
Plateena (Dyneema)  
Fishing Nets & Twines  
Net Assembly

Sports &  
Adventure Nets  
Safety Nets

Agricultural Nets  
Coated Fabrics





**Wai Facility**



## Extrusion

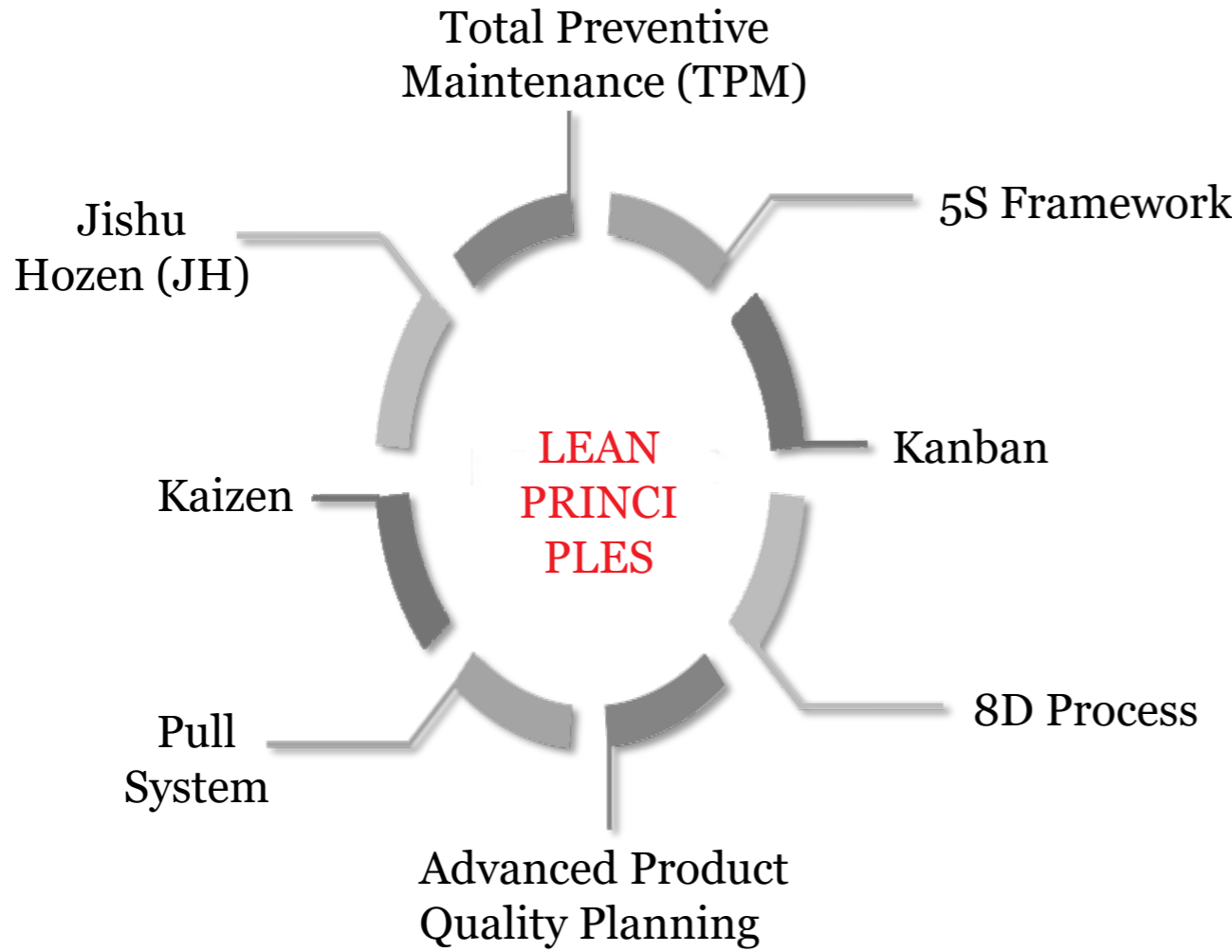


## Knotless Netting

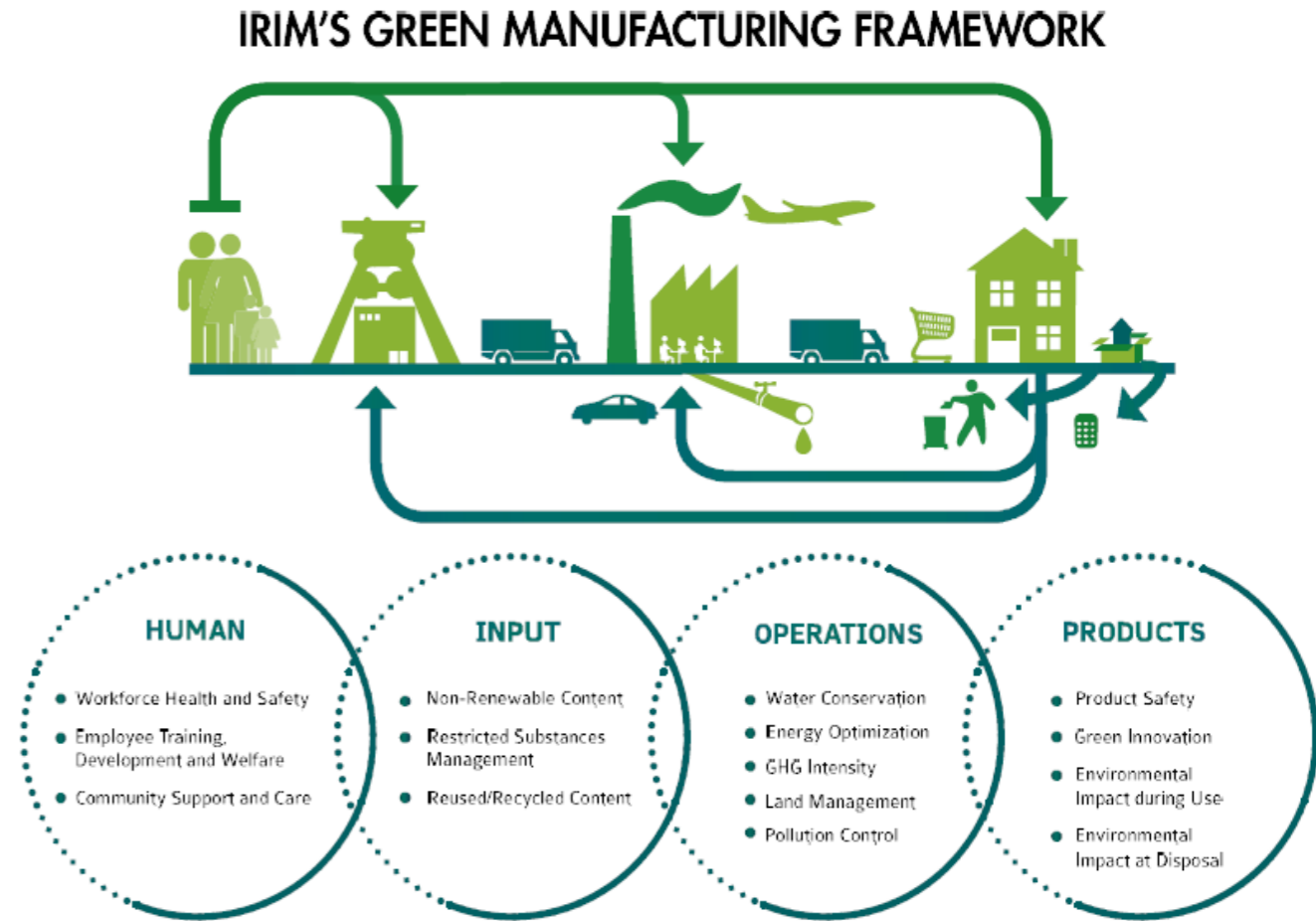


## Netloft

# GTFL's Strong Focus on Manufacturing Excellence



## Silver award – India Green Manuf. Certification Challenge





**GTFL**

**Application Areas**

# Our Innovative, Application focused Solutions Portfolio...



Fisheries

- Fully assembled Trawls
- Purse Seine Nets
- Gill Nets
- Dole Nets
- Pelagic Nets
- Ropes & Twines



Aquaculture

- Cage Nets
- Predator protection Nets
- Anti Bird Nets
- Mooring System
- Sea Lice Solutions



Shipping & IPD

- 8 Strand Shipping Ropes
- 3 Strand Industrial Ropes
- Specialty Ropes
- 12 Strand Ropes
- Safety Nets
- Cargo Nets
- Braided Ropes
- Rope Articles



Sports

- Tennis Nets
- Volley Ball Nets
- Basket Ball Nets
- Ski Nets
- Cricket Nets
- Badminton Nets
- Golf Practice Nets
- Soccer Nets
- Batting Cages
- Handball Nets



# Our Innovative, Application focused Solutions Portfolio...



**Agriculture**

- Anti Bird Nets
- Anti Hail Nets
- Shade Nets
- Sericulture Nets
- Floriculture Nets
- Insect Nets
- Grape Nets
- Crop Support
- Stacking Cord
- Banana Ropes



**Geosynthetics**

- Reinforced Soil Structures
- Landfill
- Coastal & River Protection
- Rock fall Protection
- Gabion Walls
- Geosynthetics Lining
- Erosion Control



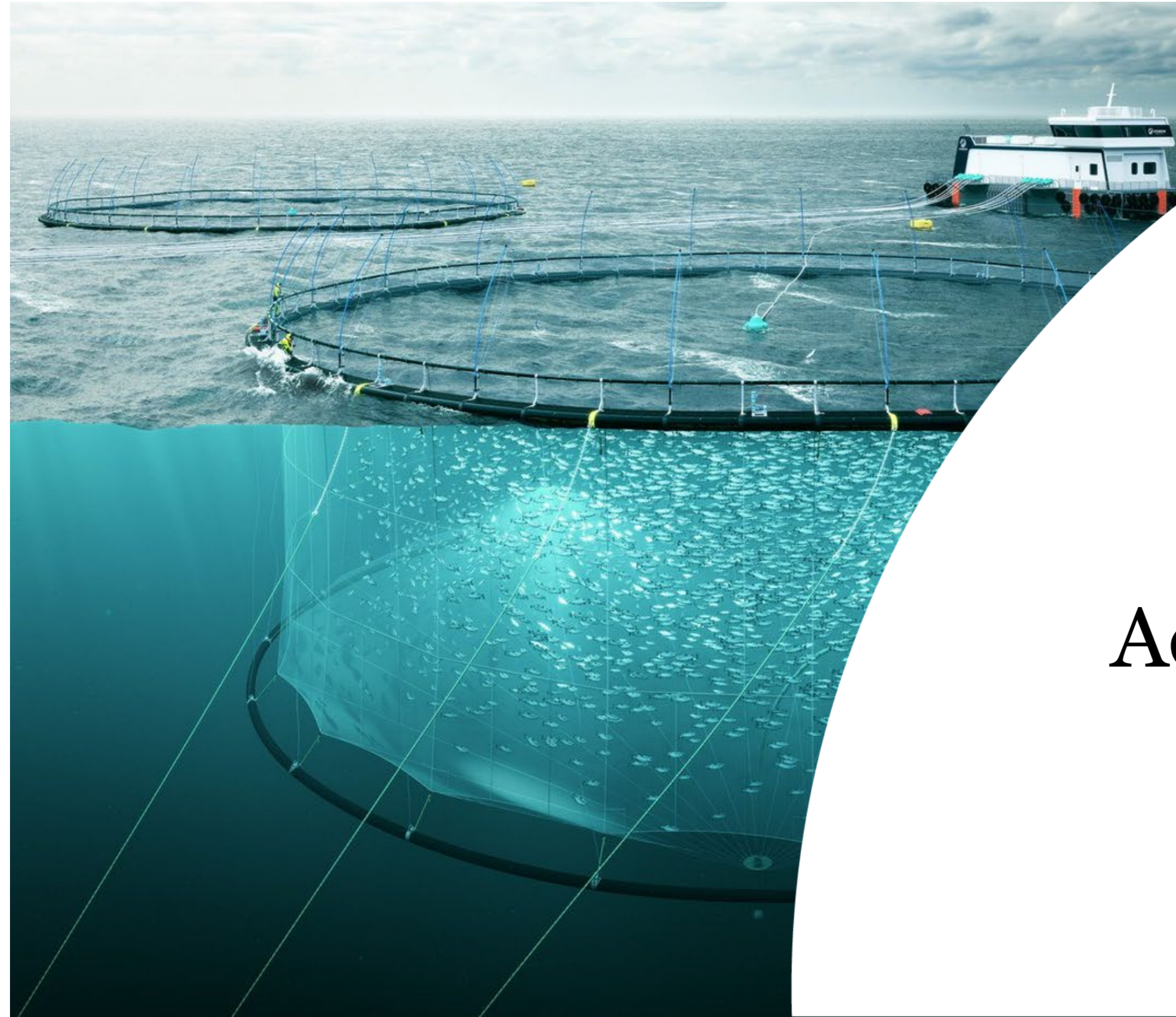
**Coated Fabrics**

- Tarpaulins
- Hanger Covers
- Awnings
- Inflatables
- Biogas Covers
- Tents
- Pandals
- Pitch Covers/ Ground Covers



**Plateena**

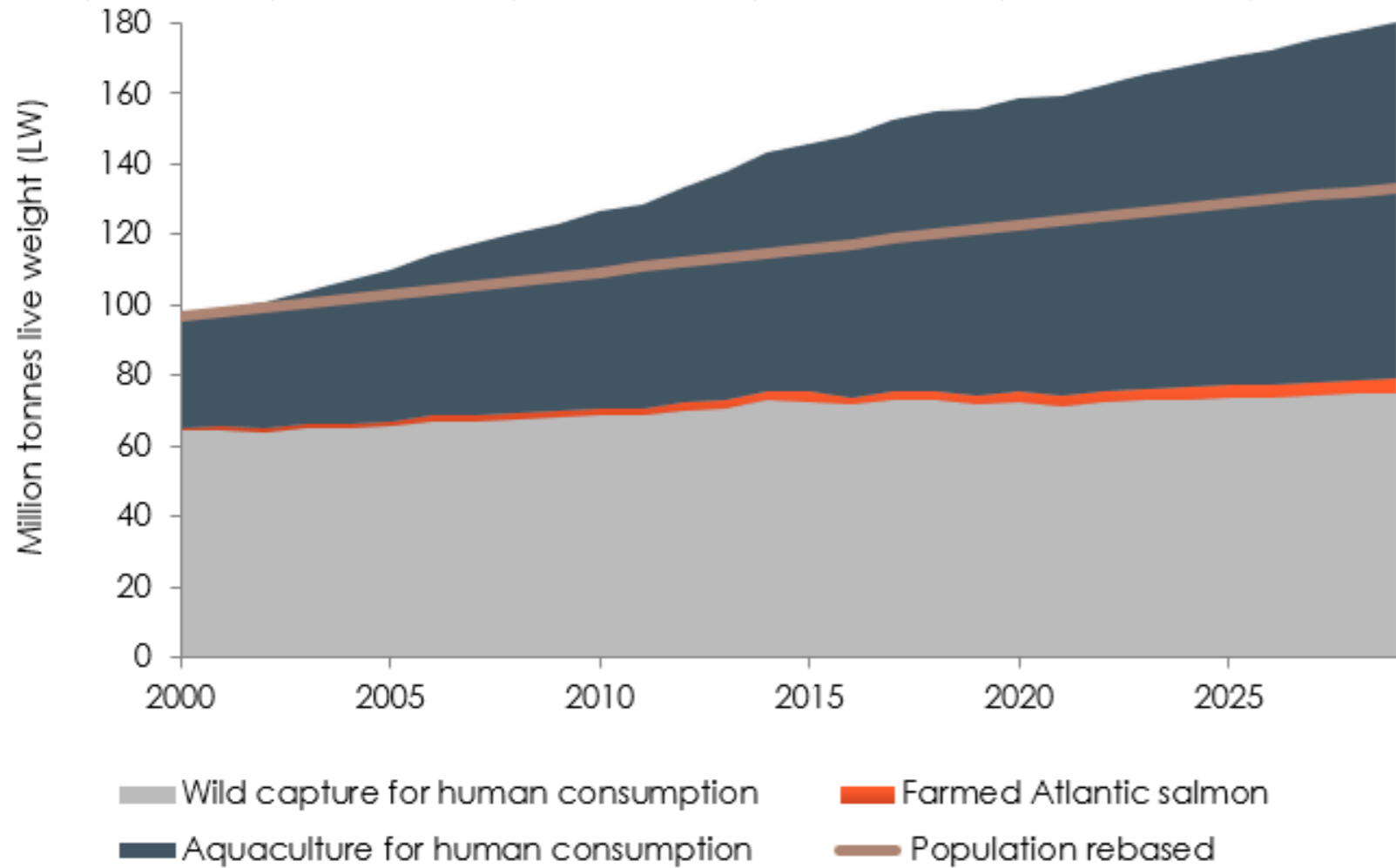
- Aquaculture Cage Nets
- Mooring & Towing Ropes
- Trawl Nets
- Purse Seine Nets
- Conductor Cable Pulling
- Hot Line Stringing
- River Cross Cable Pulling



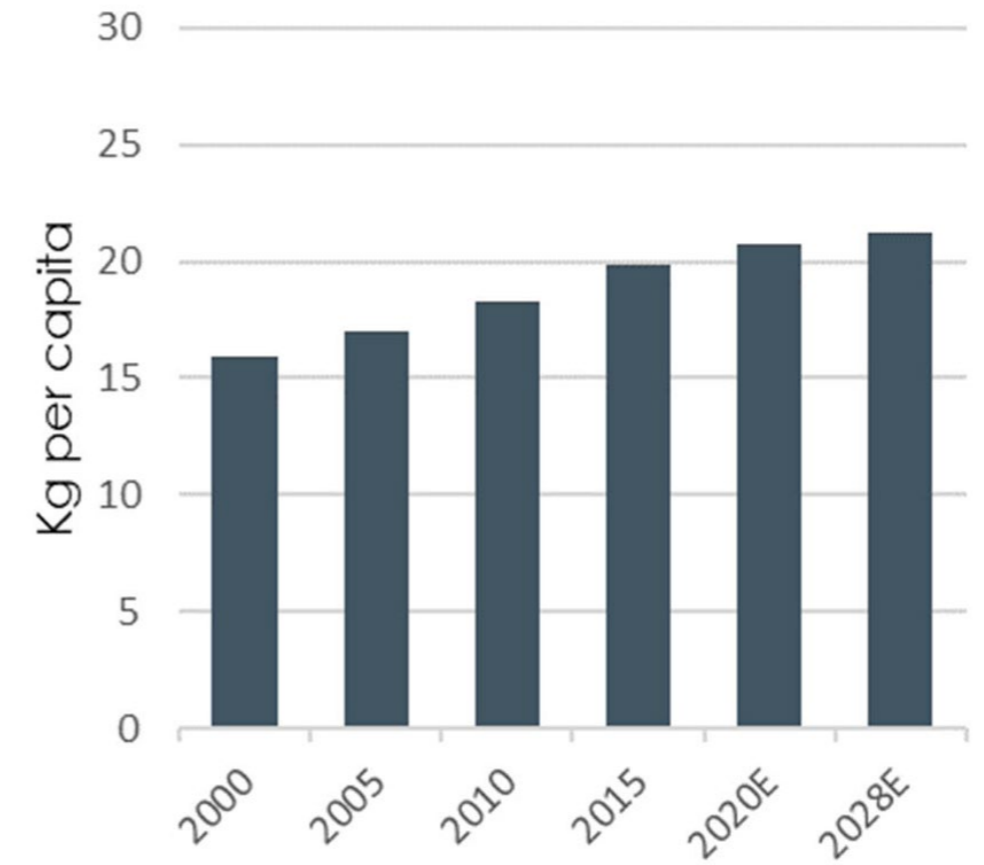
**GTFL**

**Aquaculture  
Business**

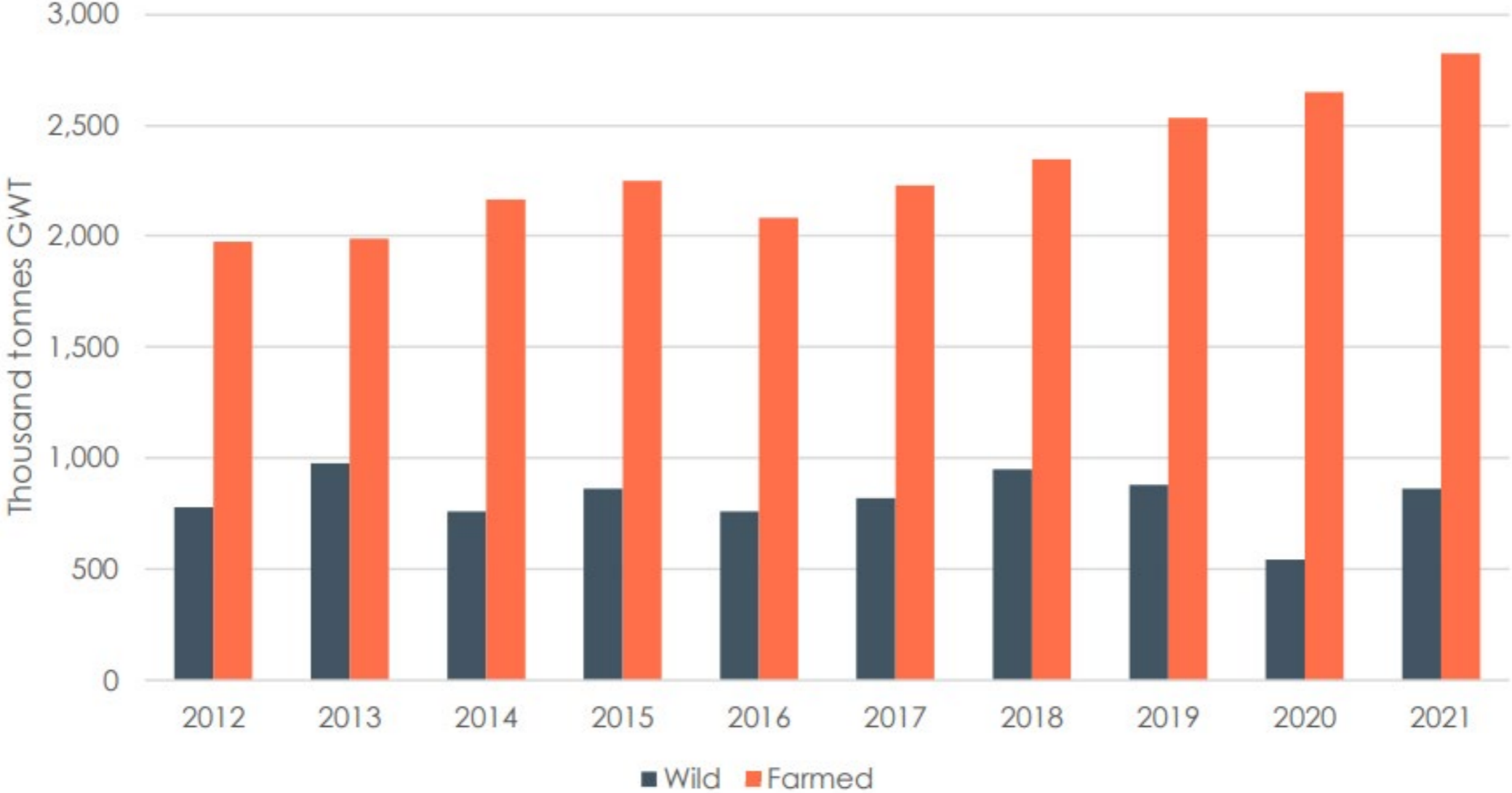
## – Growing aquaculture



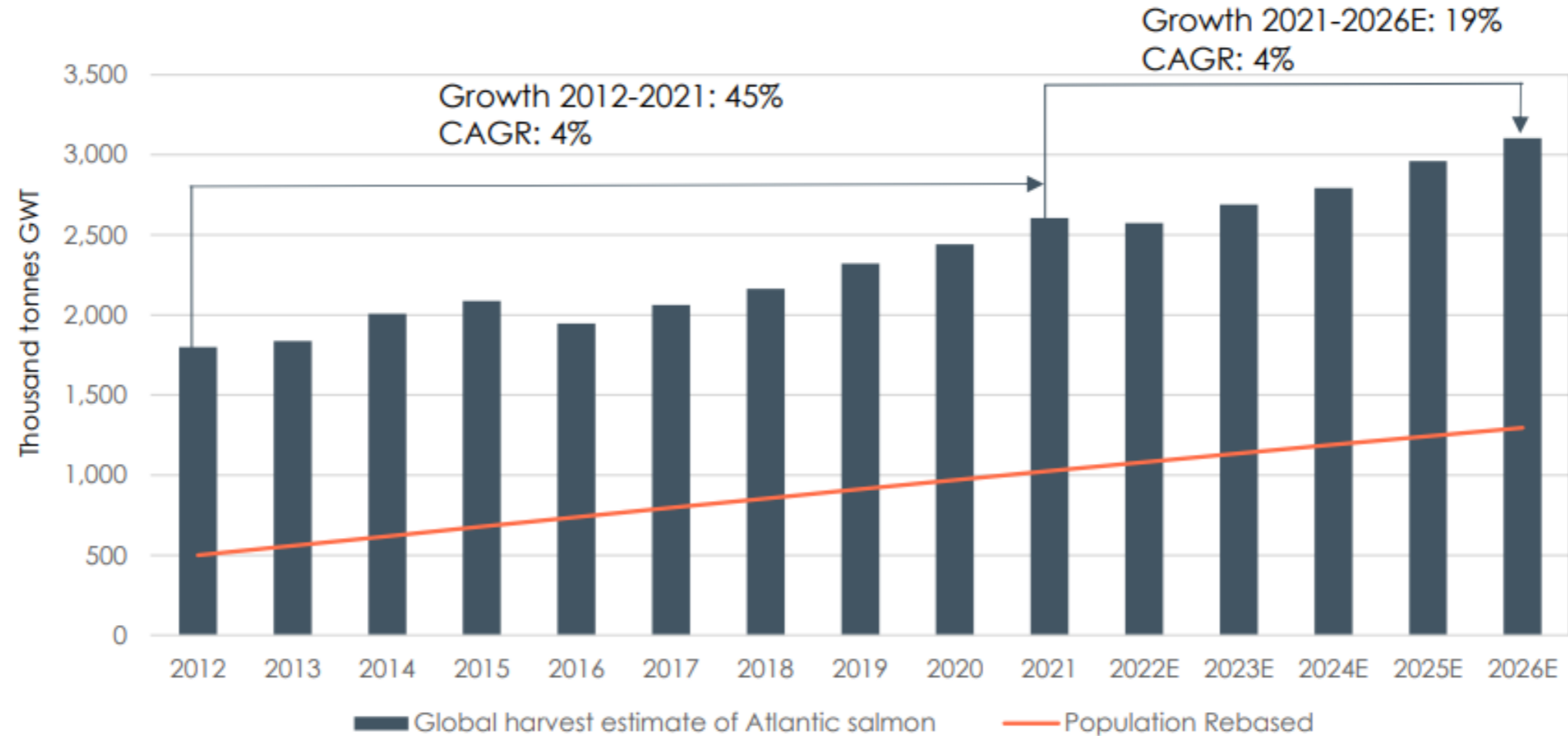
## Development of global average fish consumption



# Supply of farmed and wild salmonids

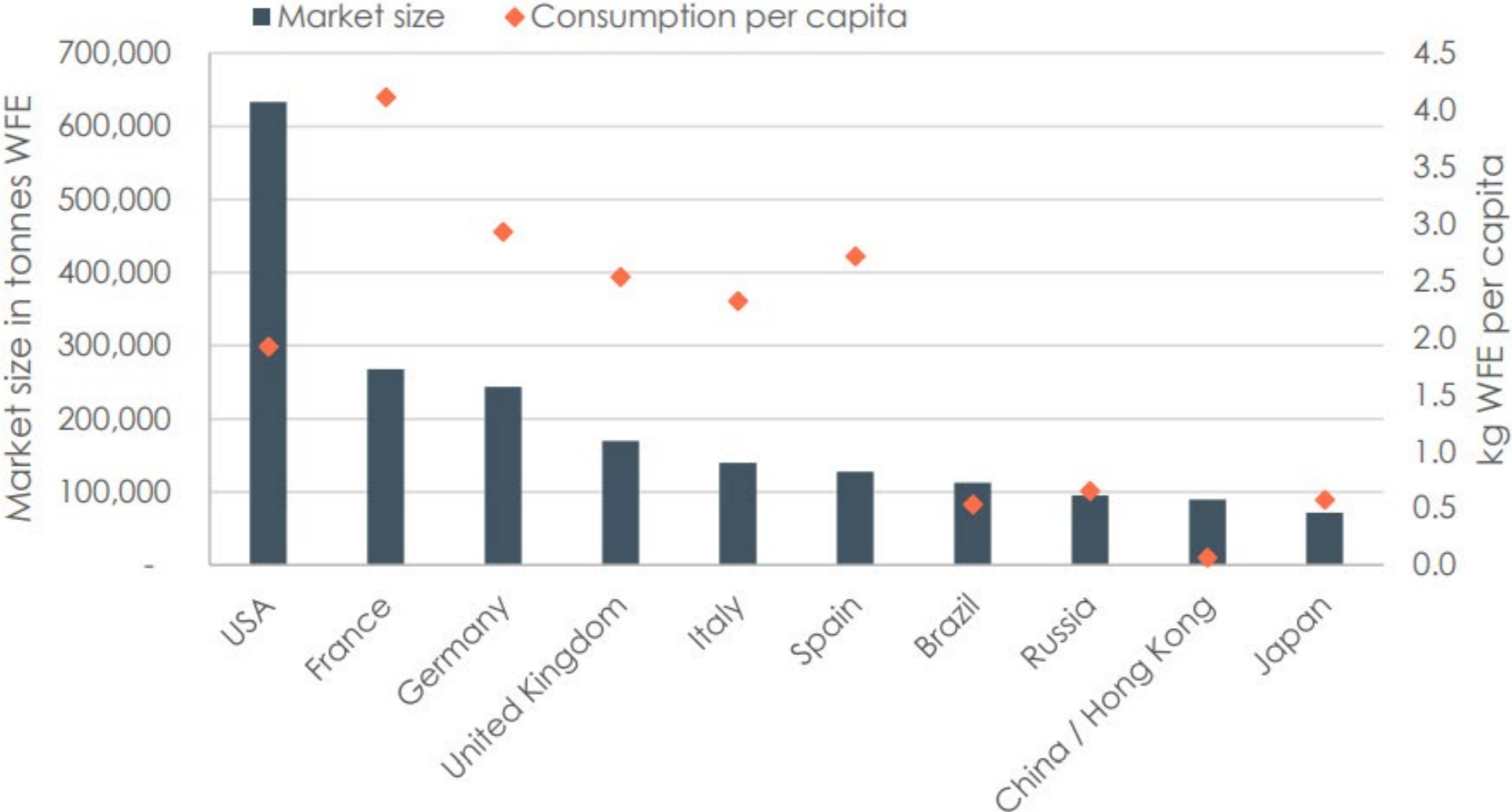


# Total harvest of Atlantic salmon 2011-2026E



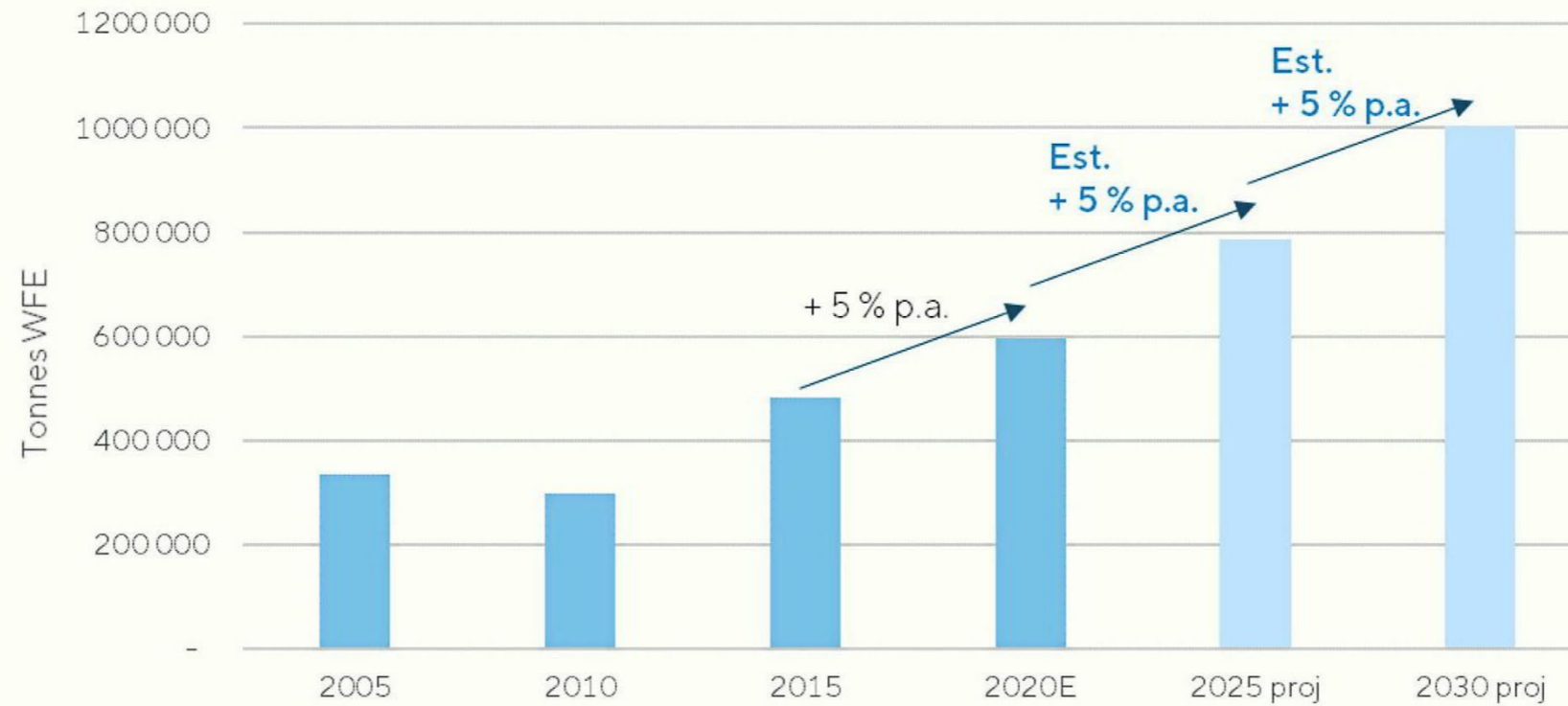
# Global trade flow of farmed Atlantic Salmon

## 6.3 Top 10 markets by size (2021E)



# North America - Atlantic Salmon Consumption

At 1 million tonnes WFE by 2030 ?

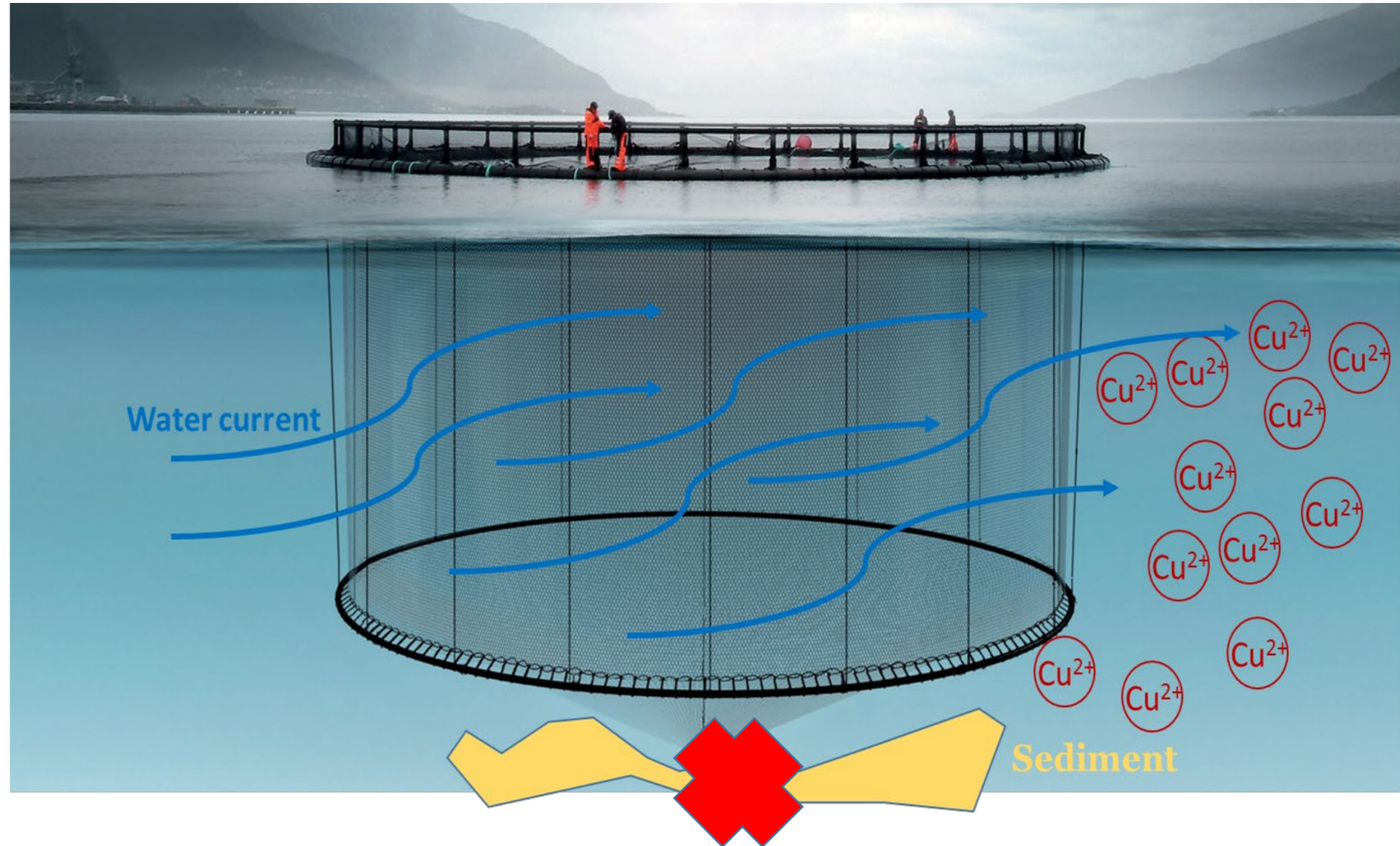


Better Ideas in Action

V2 Update



# Key Challenges – Bio Fouling and Copper Sedimentation



# Top

## Challenges in Aquaculture

- Causing an annual release of more than 1000 Tons of copper into Norwegian waters alone.
- This is added with current high cost of cleaning operation during the production cycle.
- Frequent net cleaning causes loss of appetite leading to reduced biomass growth

# Estimated Annual release of 1000 Tons Copper from AF coating in Norwegian Waters

Net cleaning can inflict substantial damage on net coatings (Fig. 1d). Pressure-washing can remove up to 30% of the coating during the first cleaning event (Bloecher *et al.* 2019) and, together with leaching, results in up to 85% loss of the coating during a single service life, causing an annual release of more than 1000 tonnes of copper into Norwegian waters alone (Skarbøvik *et al.* 2017). While net cleaning per

1000  
Tons/year  
of copper  
released in  
Norwegian Waters

**Towards cost-effective biofouling management in salmon aquaculture: a strategic outlook**

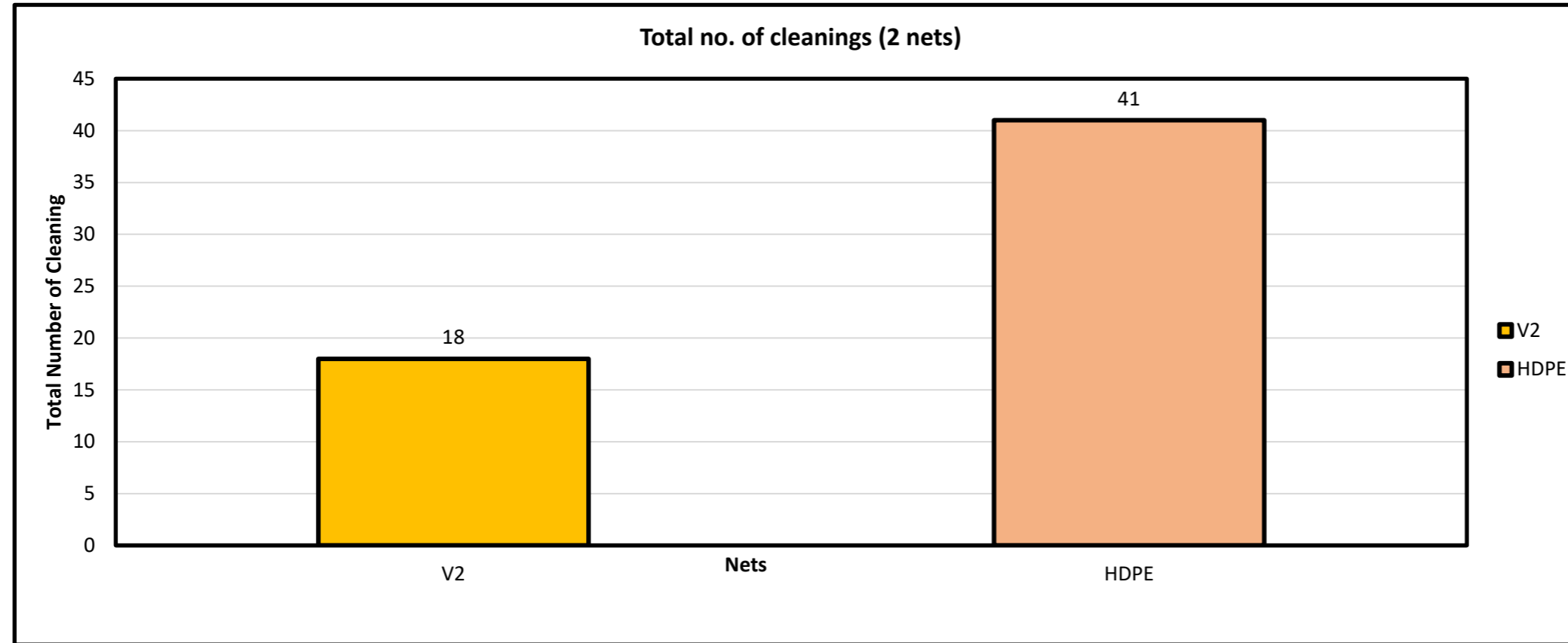
Nina Bloecher<sup>1</sup>  and Oliver Floerl<sup>1,2</sup> 

<sup>1</sup> SINTEF Ocean, Trondheim, Norway

<sup>2</sup> Cawthron Institute, Nelson, New Zealand



# Total Number of Insitu cleaning for V2 vs HDPE nets –Norway Site



**Cleanings saved due to V2 nets ~ 60 % -**

Cost per cleaning~ NOK 20 000,-

Total savings in 5,5 months 23 x 20 000,- = NOK 460 000,-

Savings per net for half year in high season NOK 230 000,-

Payback ~ 1 production cycle

# V2 Nets – Reduction in Cleaning – Norway Experience

**Currently under Trial in Norway**

**30% - 40% reduction in cleaning**

(mainly based on photos)

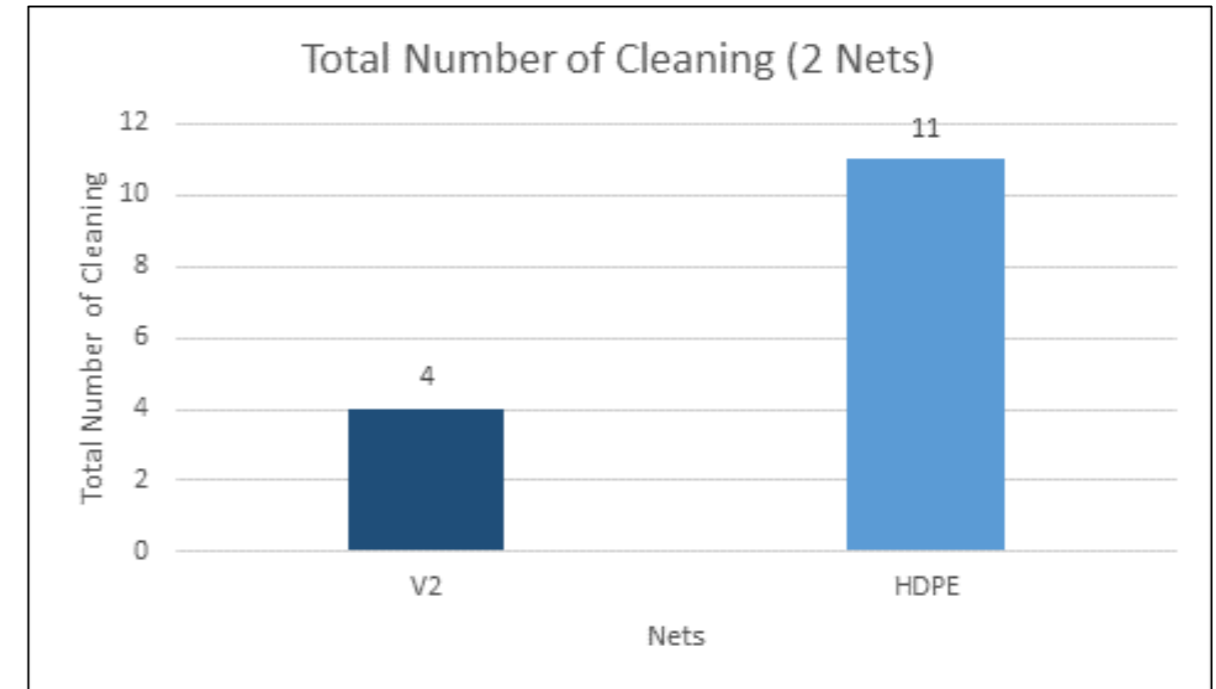
**Represent significant savings**

## V2- Cage results –Canada (Customer 1)

Marsh Bay Site – Dec 2021 discussion and update

- In water since June 2021
- Cleaning done : Control HDPE -11 times, V2 Nets – 4 times
- Last cleaning done : 28<sup>th</sup> Oct

### CANADA: June 21 to Jan22

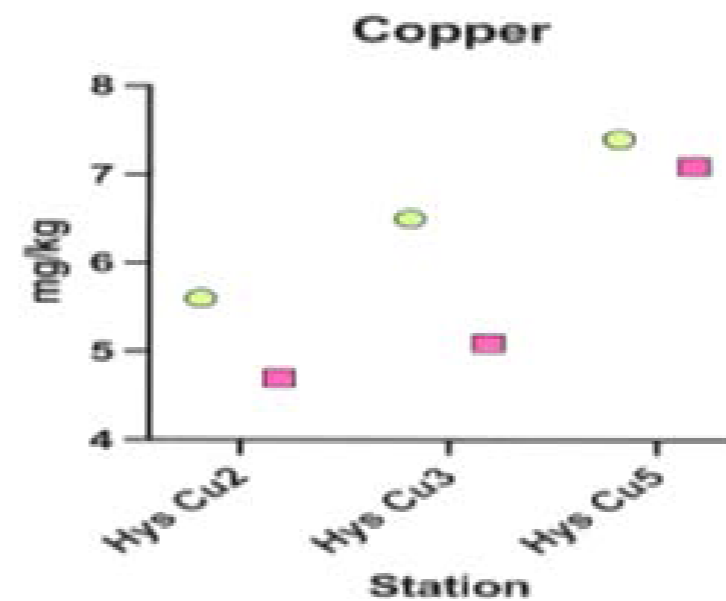
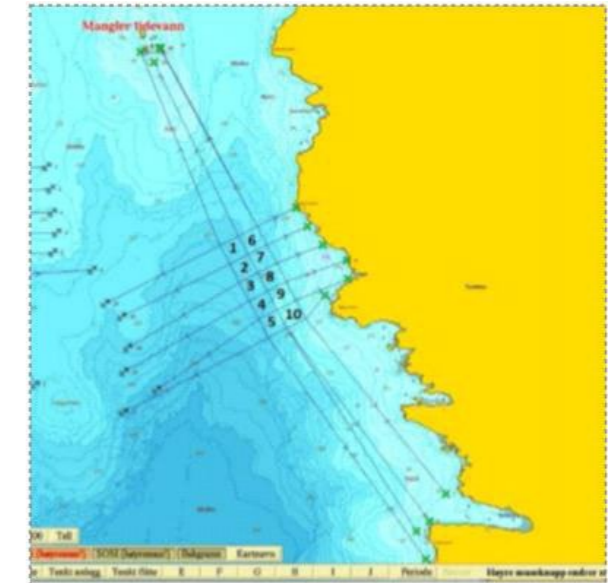


**Feedback from customer is positive  
on the V2 nets usage and  
performance**

# SUSTAINABLE HDPE CAGE NET SOLUTION FOR AQUA FARMING – V2 NETS

## Reduction in Sedimentation

One of the key benefits of V2 nets is reduction in sedimentation at the farm site. STIM AS conducted tests on V2 nets to evaluate the sedimentation at a farm site installed with V2 nets.



Sedimentation data results at Site  
Sample collected from bottom  
(beneath the cage)

Better Ideas in Action

New Development –

Predator Cage  
Solutions

# Sapphire -CFR

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# TUNA Attacks – GTFL’s Solution – Sapphire CFR

NEW Slide added

**Blue fin tunas are blasting their way through salmon nets**

News by editorial staff - 4 October 2018  
The sea beasts burst through steel strong nets at not one but two salmon farms.



**Lerøy technician poses with ENORMOUS tuna that was trapped in salmon cage**

News by Aslak Berge - 29 August 2019

**250 kg bluefin tuna caught in fish cage: Here is Lingalaks' big catch**

News by Aslak Berge - 5 September 2021

**Bluefin tuna attacks Mowi salmon cage**

News by Stian Olsen - 14 September 2020  
Large fish still blasting their way into salmon cages.

**Bluefin tuna caught in salmon pen**

News by Aslak Berge - 3 September 2021  
A bluefin tuna is reported to have broken through the net at one of Lingalaks' salmon pens in Bemlo municipality in Norway.

**300-kilo 'invader' hits Hebridean salmon farm**

News by Aslak Berge - 30 October 2017

Workers on a Marine Harvest Scotland site off the Hebridean island of Colonsay could hardly believe their eyes when a three-meter-long Pacific Blue Fin Tuna appeared in one of their pens.

# Sapphire CFR Nets\* – New age Predator Net

**Suitable for both type of designs  
(Umbrella and Straight)**

**8-10% higher stiffness than  
Sapphire Ultra Core MBX**

**30% higher Cut Resistance than  
Sapphire Ultra Core MBX**

**Ease of handling – 10 to 15%  
reduced weight for same Strength**

# Tuna fish experiment



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# New Development - Sapphire CFR – Experiment of Impact of Tuna Fish



Sapphire –CFR -2.1 mm, MBS: 150 kgf

# Sapphire X18

[www.garwarefibres.com](http://www.garwarefibres.com)



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# Sapphire X18 – Stiff Predator Net

**High Stiffness of netting in its class**

**Superior Cut resistance**

**Ease of handling compared to  
Monofilament Stiff nets**

**Effective predator control – tried  
and tested in Chilean waters**

# Non Salmon Expansion – GTFL’s Solution

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Expansion in Non Salmon Species – a key agenda for growth

- New customers added in Species like Barramundi, Sea Bass, Sea Bream, Amberjack, Tilapia
- Customers added during last 1 year in
  - Mexico
  - Panama
  - Indonesia
  - Turkey
  - Srilanka, Singapore and Brunei

# Better Ideas in Action

## Sports Nets



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## Sports Nets business of GTFL

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- GTFL has been awarded with the platinum award for the highest exporter of sports goods from India by Sports Goods Export Promotion Council (SGEPC) sponsored by the ministry of Commerce and Industry, Government of India for consecutive 3 years FY 17-18 to FY 19-20
- GTFL is one of the largest Global Supplier of all varieties of sports nets
- GTFL is a supplier to all the major distributors in USA, UK, Netherlands, Italy, Germany, Australia to name a few.
- GTFL is synonymous with superior quality and our sports nets are of the highest grade

## Sports Nets business of GTFL

- The sports nets business has seen a CAGR of 20% in Sales Value for last 5 years
- Under the sports portfolio, we provide around 50 different products
- Our range of sports nets confirms to all international standards and is used in various tournaments
- GTFL holds the major market share in the tennis nets and baseball netting segment in the US
- GTFL holds the major market share in the soccer nets segment in UK



TENNIS



SOCCER



BASEBALL FRAMES

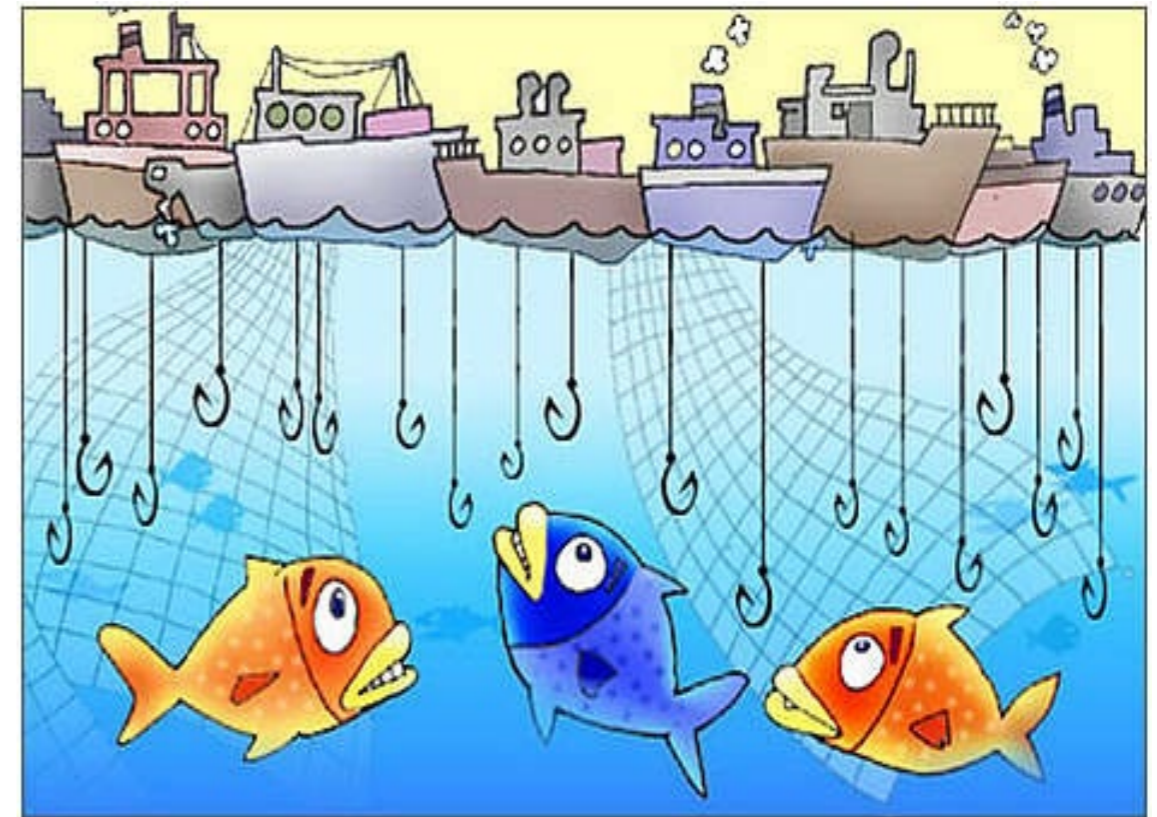
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**GTFL**  
**Marine Fisheries**  
**&**  
**Agriculture**

# Challenges in Domestic Marine Fisheries

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- Rising fuel costs/ fuel consumption
- Less fish catch & low quality fish catches

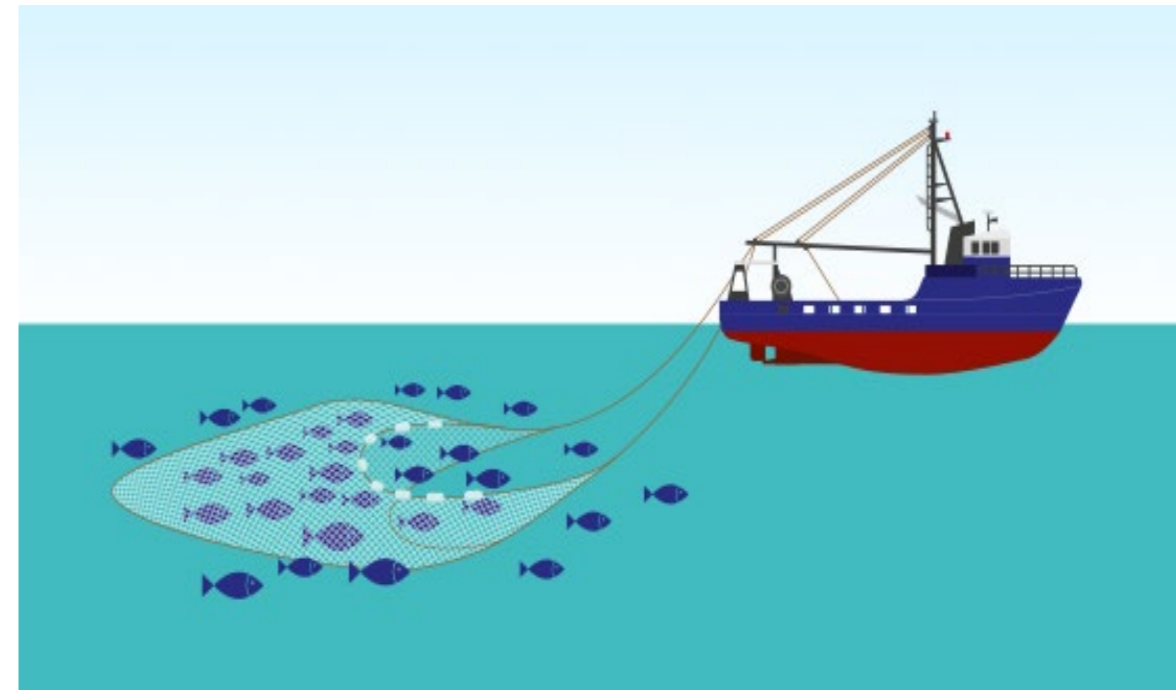


# Rising fuel prices- BIG concern in trawling

Trawl fishing operational expenses are as below

- ❑ Fuel cost is almost 65-70% in trawl fishing
- ❑ Approx 20% increase has already happened since last year

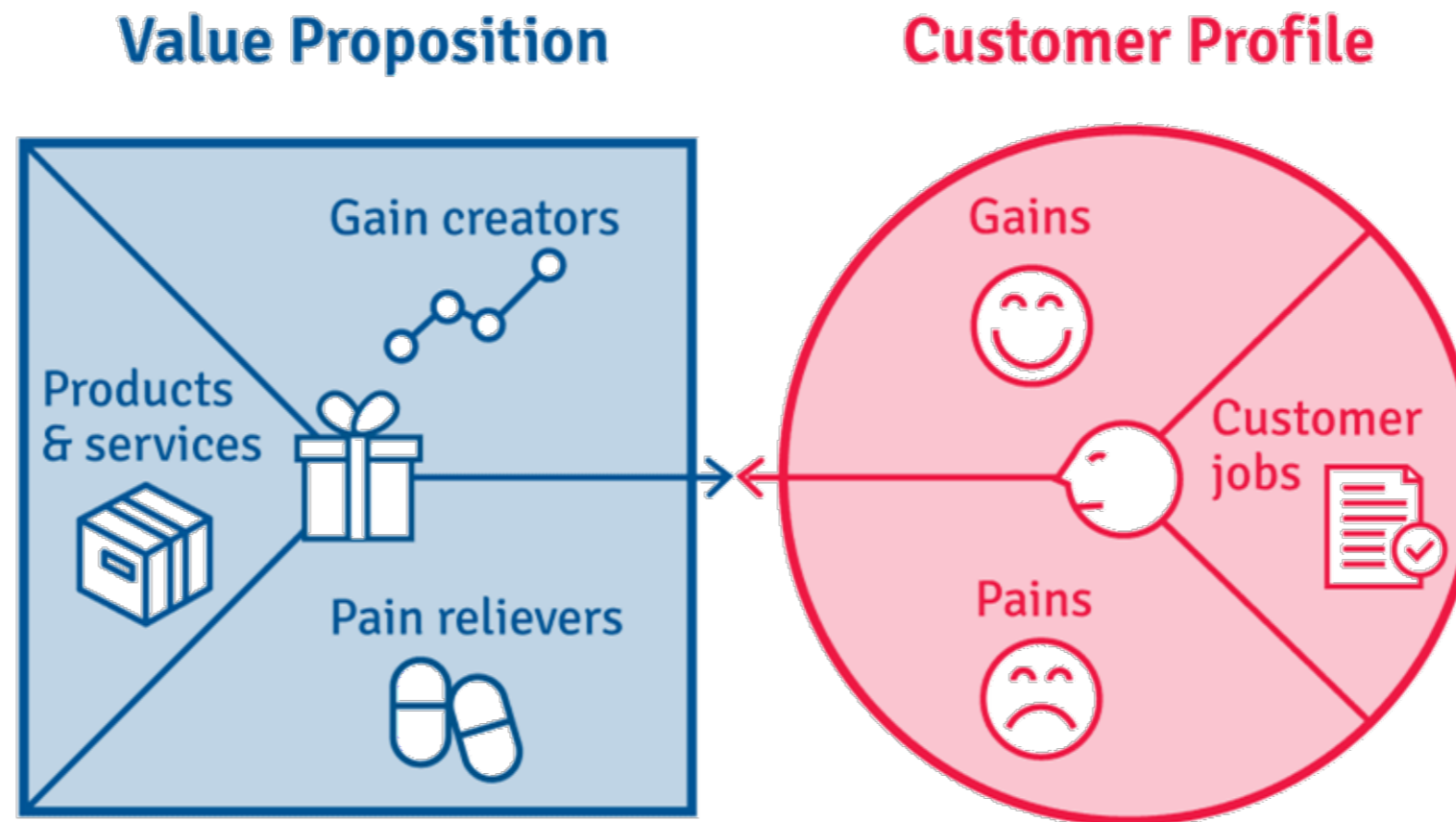
Fuel	64%
Fishing Gear	6%
Food & Misc	5%
Ice	3%
Boat Maintenance	3%
Crew Remuneration	16%
Oil/Lubricants	1%
Miscellaneous	2%
	100%



# Paradigm shift

## VP Route:

- Annual cost
- Benefits ( Additional fish catches & Fuel saving)
- Pay back period



# Key Benefits to customers

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Key Benefits	Impact
Incremental (vertical) mouth opening of Trawl	Leads to higher fish catches (More coverage to water column vertically)
High speed	Cover more fishing ground w- leads to incremental fish catches
Fuel saving	Trawls being lighter and stable trawl geometry while fishing- leads to fuel saving
Improved abrasion resistance	leads to lower wear and tear to trawls, specially during bottom trawl fishing applications.
Low/Uniform & controlled elongation in bridles application	keeps maintaining the trawl geometry while fishing and reduce chances of fishing at halts/ no fishing

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**GTFL**  
**Geo-synthetics**  
**Business**



# Geosynthetics – A Brief Overview

Geosynthetics are polymer-based materials used in infrastructure solutions for environmental friendliness and lower overall cost

•Roads



•Railways



•Airports



•Ports



Rockfall Protection works for a project in state of Jharkand



Coastal Protection works for a project in State of Gujarat



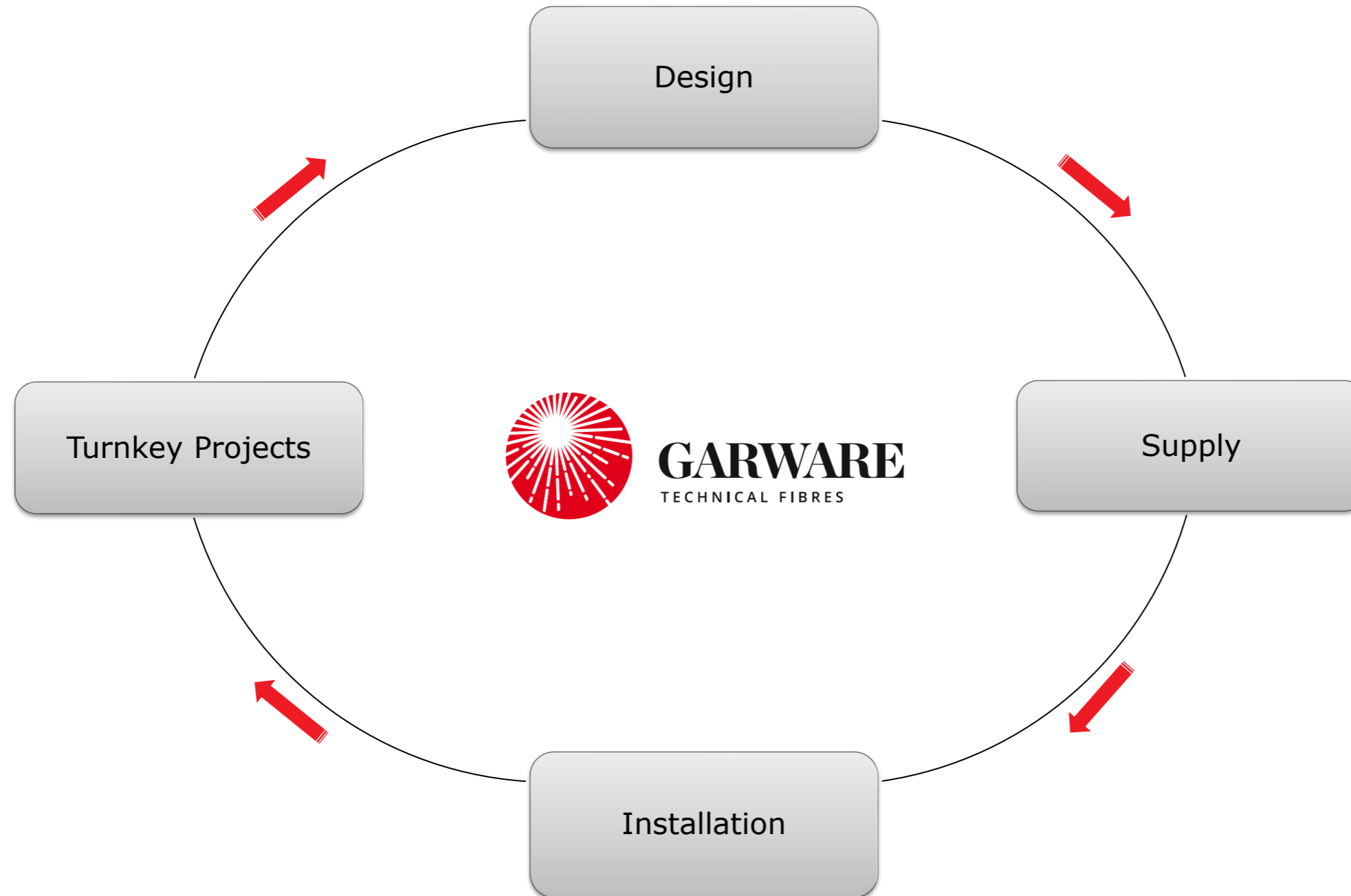
# Geosynthetics - Benefits

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# Geosynthetics – Business Model

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# Focused Applications – Domestic Markets

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Rockfall Protection  
Railways



Erosion Control  
Highways



Lining for Leachate pond  
Major Industry

# Future – Rockfall Protection and Erosion control

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- Out of a total allocation of Rs 110 L Cr by the Central Government under the National Infrastructure Pipeline from 2020 – 2025, Roads & Highways share is Rs 20 L Cr. And Railways is Rs 14 L Cr.
- There is an increasing awareness of the need to protect roads from disasters like rock fall / landslides, etc that impact the safety of the road users. Nowadays, Clients like NHAI, NHIDCL, etc. which are the owners of these highways do not give completion certificates to Contractors unless the safety aspects are taken care of by them.
- Limitations of land availability along highways means that Clients have to depend on modern and innovative techniques for stabilization
- Additionally, there are separate tenders that are being floated specifically to cater to safety aspects of Roads & Highways
- With road safety gaining importance, this is a key driver for the GEO business wherein the business model of design+ supply+ installation positions Garware as a single stop source for solutions.
- New products developed by the R&D team also add to the innovativeness of solutions proposed by Garware

## Future – Rockfall Protection and Erosion control

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- There is a similar momentum in Railways for protection of running as well as new tracks.
- GTFL Geo division has been a joint patent holder with Railways for some time for rock fall solutions and we have further enhanced those solutions with newer developments.
- This is one of our core sectors and demand is growing well.
- Garware's solution for erosion control are currently being tried out on a major project, with a good scope for penetration across the country, once the project is completed successfully.

## Future – Landfills & Linings

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- Landfills are increasingly being recognized as the most viable alternative for disposal of solid waste. Garware is well positioned as a reliable turnkey solution provider for industrial waste landfills.
- The key driver for industrial waste landfills is industrial production and mining . As industrial production and mining increases, so also the waste to be disposed of according to environmental norms
- Proactive legislation on this front along with stiff penalties on erring industries are also a key driver for growth of the landfill business
- Ability to provide a reliable high quality turnkey solution from design to implementation adds value to the client.

# GTFL GEO Export Product Offerings



- **WOVEN & FABRIC FORMS**  
Highways & Coastal Protection Works



- **AQUAROCK BAGS**  
Coastal & River Training Works



- **ROCGUARD® WITH EARLY WARNING SYSTEMS**  
Rock-fall Protection Works



- **GARMAT SUPREME**  
Erosion Control Works





# Focused Applications – Exports

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**Fabric Forms (Geo-containers)**  
For River Training Works  
Colombia



**Rockfall Protection**  
For Geohazard Mitigation  
Philippines

# Focused Applications – Exports

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**Aqua Rock Bags**  
For Coastal Protection Works  
Poland



**Fabric Forms (Saddle Bags)**  
For Pipeline Protection Works  
Oman

## Future – Exports

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- Global Market Size 10-12 Bn USD, Growing at 9% CAGR y-o-y
- Complete supply value chain needed for Geo-synthetic manufacturing is available in India
- With China+1 sentiment in global supply chain India is well poised to become second manufacturing hub for the World
- GTFL is exporting to US, France, Germany, Poland, UK, Colombia, Oman, Philippines, Singapore, Thailand, Australia

# Experienced Management Team

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Mr. Vayu R Garware  
**Chairman & Managing  
Director**

- Graduate from Wharton Business School, USA
- Dynamic & Aggressive Leader



Mr. Shujaul Rehman  
**Chief Executive Officer**

- Over two decades of experience in FMCG sector
- Strategic thinker and an aggressive marketer



Mr. Mukesh Surana  
**Chief Financial Officer**

- Over 2 decades of global experience in the entire gamut of finance, accounts, taxation, commercial and information technology
- Experience in the fields of Business strategy, M & A, Investor relations, Overseas operations and cross border structures

# Experienced Management Team

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Mr. Vivek Kulkarni  
**President – Operations**

- More than 30 years of valuable experience in manufacturing
- An expert in operations and operational excellence



Mr. Ravendra Mishra  
**Head - Human Capital**

- More than 25 years of experience in operations & HRM
- An administrator par excellence with strong management skills

# Better Ideas in Action

INDIA • USA • UK • CANADA • AUSTRALIA • CHILE • NORWAY

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# Thank You

