



GARWARE
TECHNICAL FIBRES

GTFL:SEC:2023

November 21, 2023

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	Investor / Event	Mode of Meeting	Type of Meeting
November 24, 2023	Ambit Capital Private Ltd. - Analyst / Investor's conference	Physical	One-on-One / Group Meeting

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.


The Company does not intend to discuss any Unpublished Price Sensitive Information during these interactions.

Please acknowledge this communications.

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 www.garwarefibres.com CIN: L25209MH1976PLC018939

Better Ideas in Action

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GARWARE
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Garware Technical Fibres Limited – At a Glance

- Pioneer in Technical Textiles in India
- 5000+ workforce with presence in 75 countries
- Producing 80MT per day & operating with 20,000 SKUs
- In top 25 India's Best Workplaces in Manufacturing Sector 2023
- Well qualified R&D team of 22 scientists including 4 Doctorates

91

Patents filed in last 5 years

25

Granted



Best Companies To Work For™

Great Place To Work®

INDIA 2023



Mission

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



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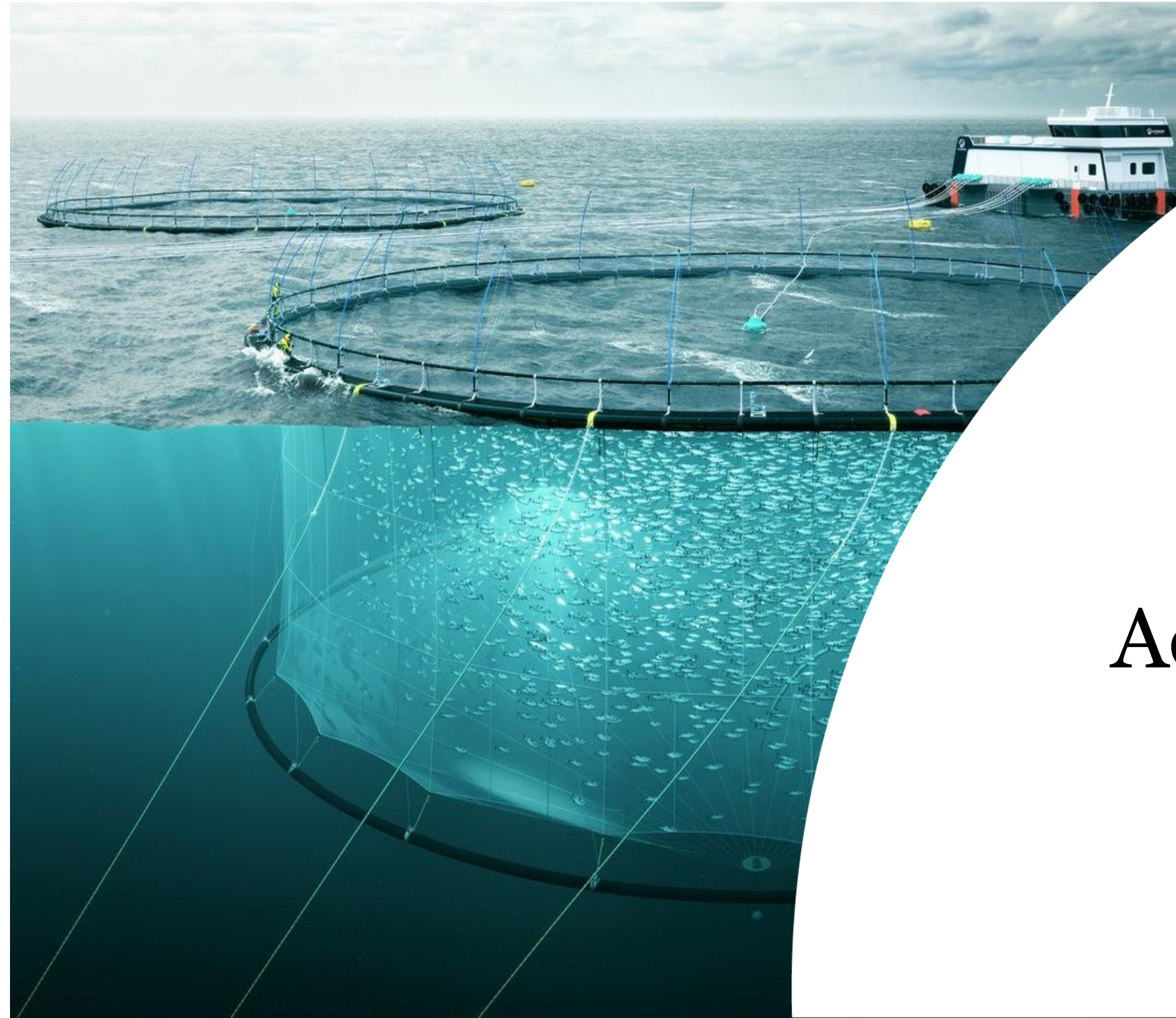
Better Ideas in Action

Business Update



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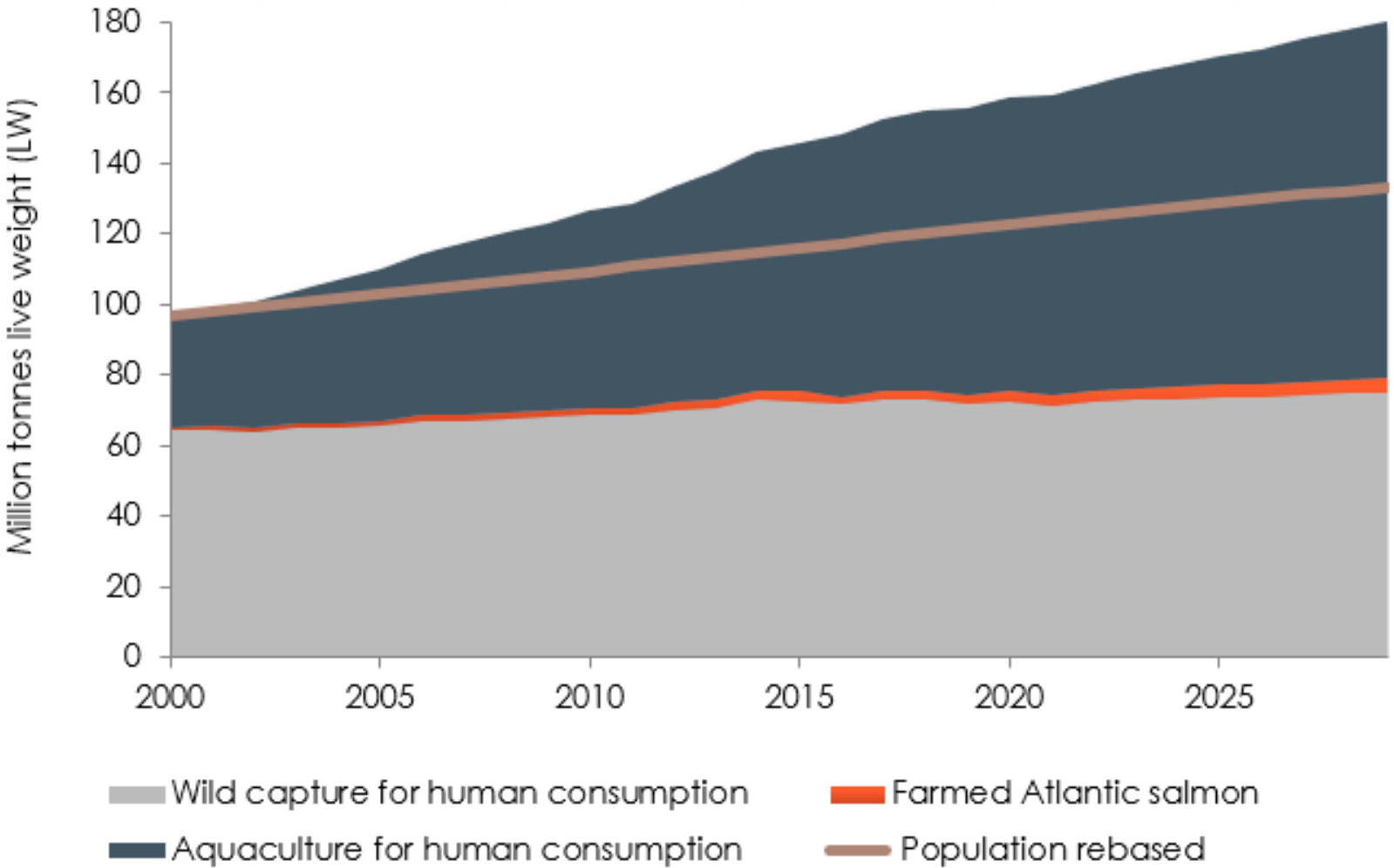
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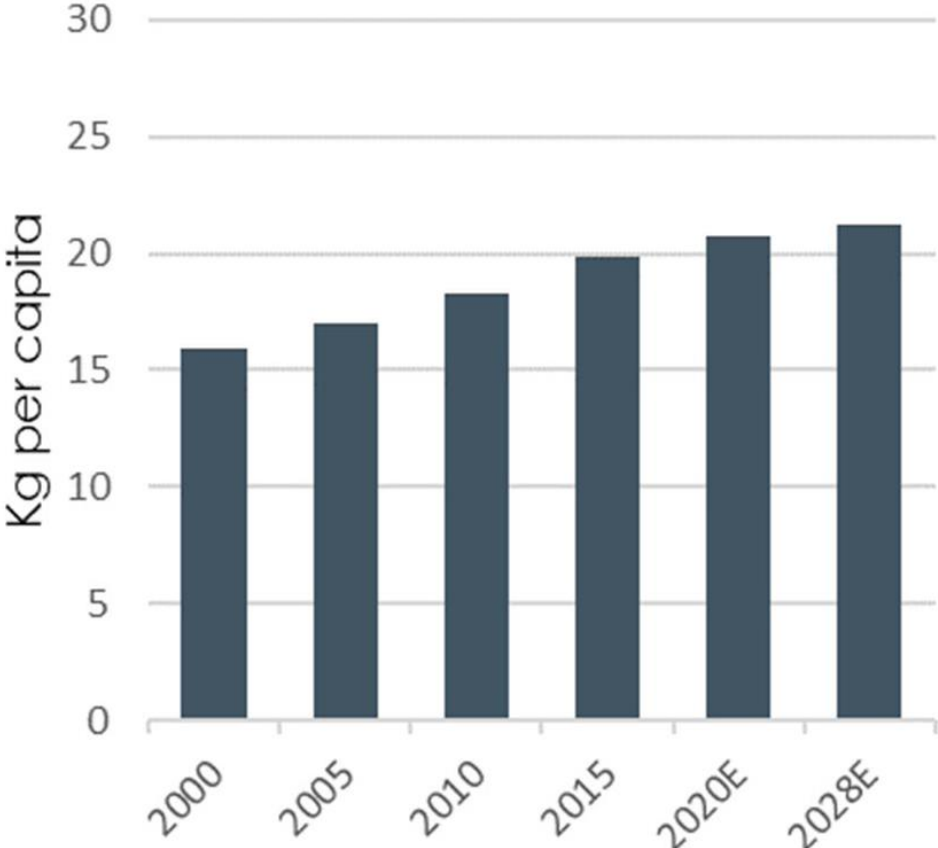
GTFL

**Aquaculture
Business**

Growing aquaculture



Development of global average fish consumption



Salmon Prices Over the Last Few Years

Salmon Prices (\$ per kg) since Jan 2013



Salmon prices have increased from 2.5 USD per kg in 2013 to 8.93 USD per kg in Nov 2023

Source : <https://tradingeconomics.com/commodity/salmon>



Major Players in the industry

MOWI

- Record-high revenue of EUR 1358.6 million (EUR 1257.1 million) on all-time high harvest volumes of 135 000 GWT (133 808 GWT) in Q3 2023
- Operational EBIT of EUR 203 million Q3 2023.
- Operational EBIT for Norway EUR 2.15/kg (overall group EUR 1.5/kg)
- 2024 full year harvest volume guidance of record-breaking 500 000 GWT which is a new milestone for Mowi.

SalMar

- Operating revenue Q3 2023- 7512 million NOK vs 4898 million NOK in Q3 2022.
- Operational EBIT for the group was NOK 2,300 million in Q3 2023. Total harvest was 78,100 tonnes.
- Operational EBIT per kg was NOK 29.5
- Sales and Industry continued its solid operational performance.
- The standing biomass in Norway at the end of the third quarter 2023 is estimated to be 3% higher than the end of third quarter 2022.

Better Ideas in Action

Norway

Norway Aquaculture Industry Update

- After protracted negotiations Resource rent tax has been finalized at @ 25% as compared to the initial suggestion of @40%.
- The Tax is only applicable only for the sea based face of salmon farming.
- There are still some uncertainties on what sales price or income the tax will be based on.
- The average price of salmon (NASDAQ Salmon Index) for 2023 was NOK 78 per kg, compared to NOK 67 per kg the year before.
- Given the projected harvest volume, Companies are also looking at capex very closely and have planned investments.
- Our major customers have started placing orders and our Q4F24 reflects robust booking.

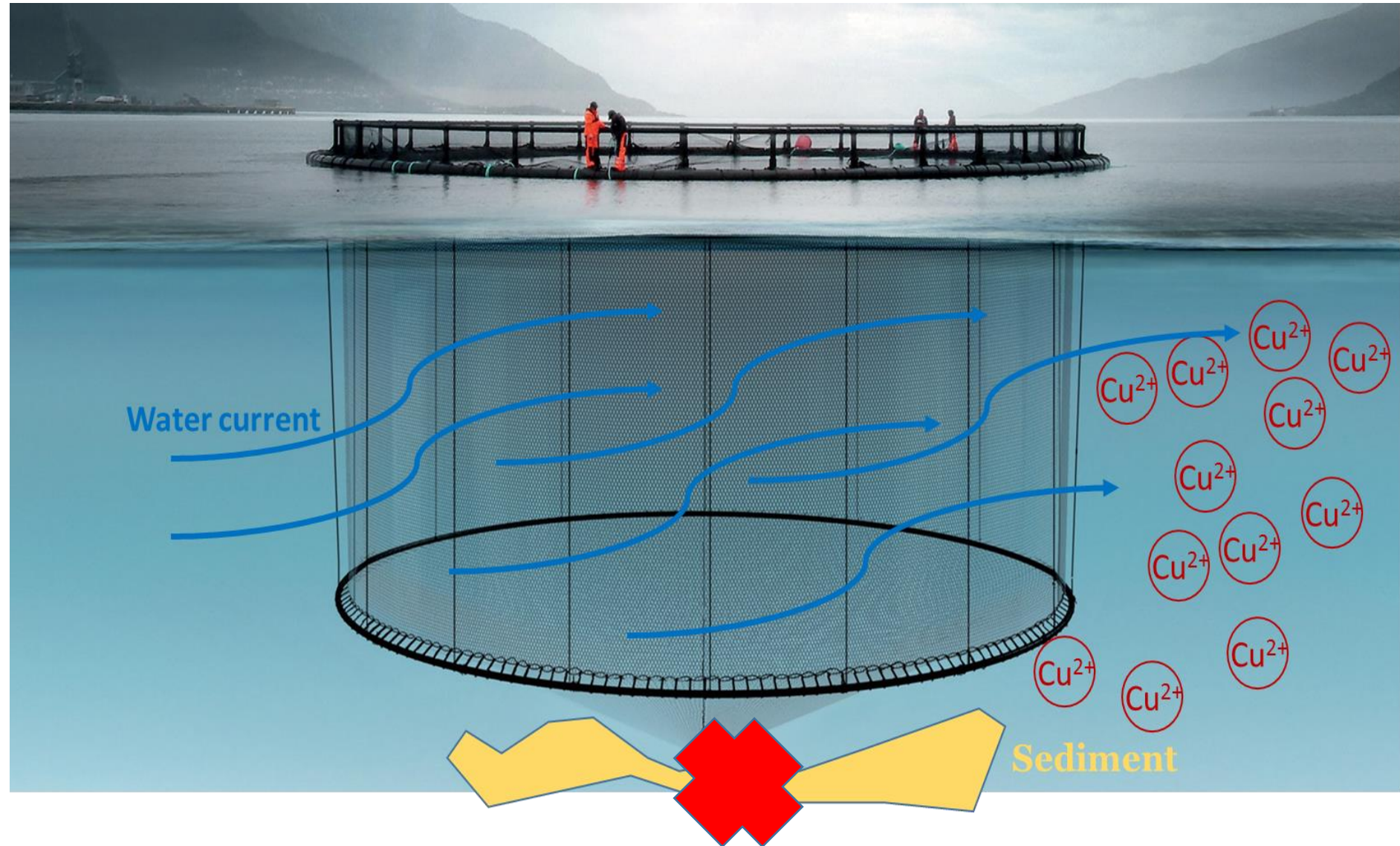
Aqua Cages – Way Forward- Norway

- Strategy to convert Large aquaculture companies in Norway from generic nylon cages to Value Added products.
- Penetration into Top 6 Aquaculture companies in Norway (accounting to 60% of total Norwegian Salmon production) who are almost exclusive clients in Scotland , Canada and Chile .
- Set up trials in Norway with several companies of the leading farming companies. Promising initial results . Some of these top 6 are not currently GTFL customers in Norway. This can open 2 significant initiatives in the largest market:
 - Entry into new customers and growth of share
 - Significant upgrade from traditional products to patented products

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

V2 Nets –Norway



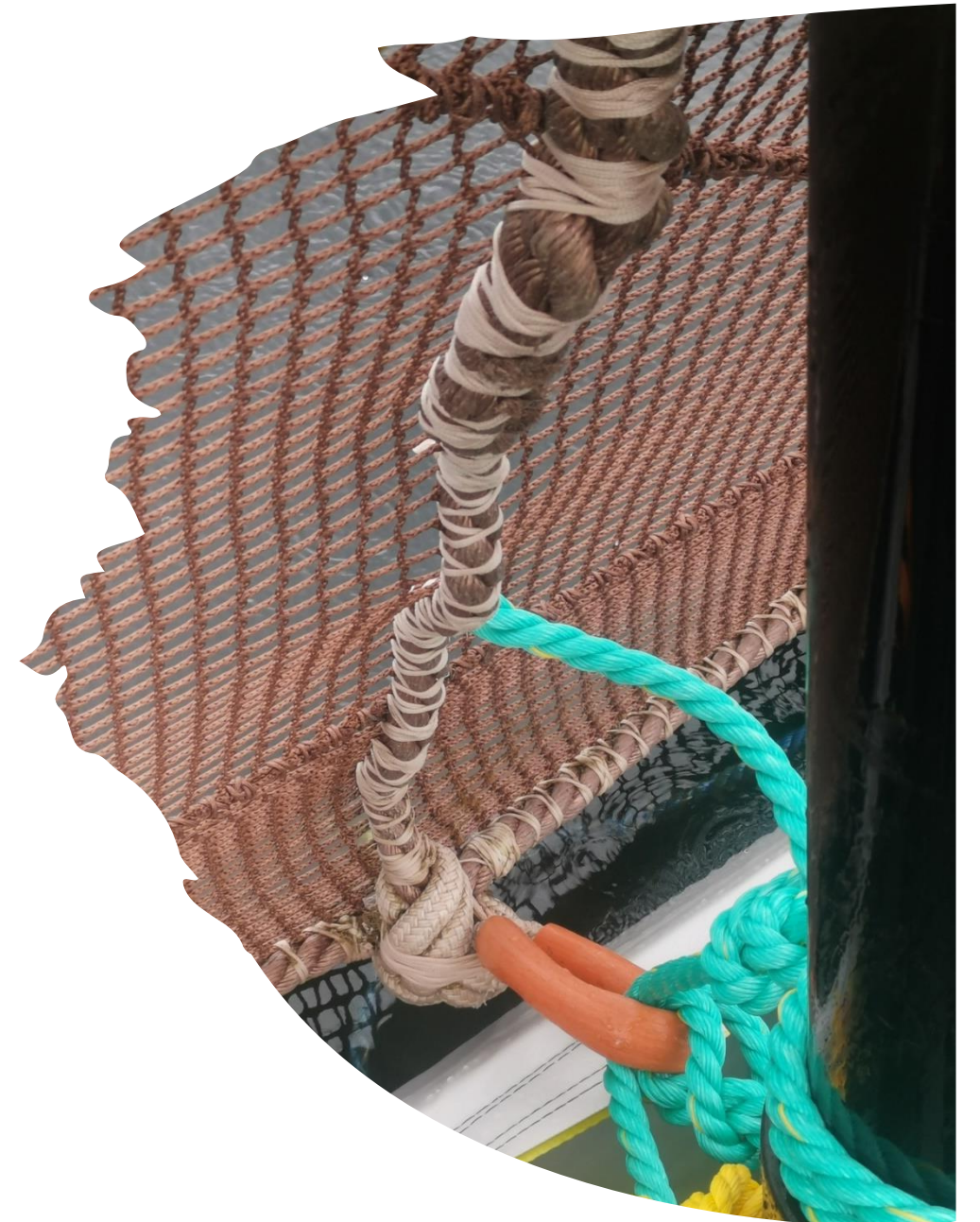
Site manager feedback – All nets has good shape, and mortalities finds its way up to LiftUP.



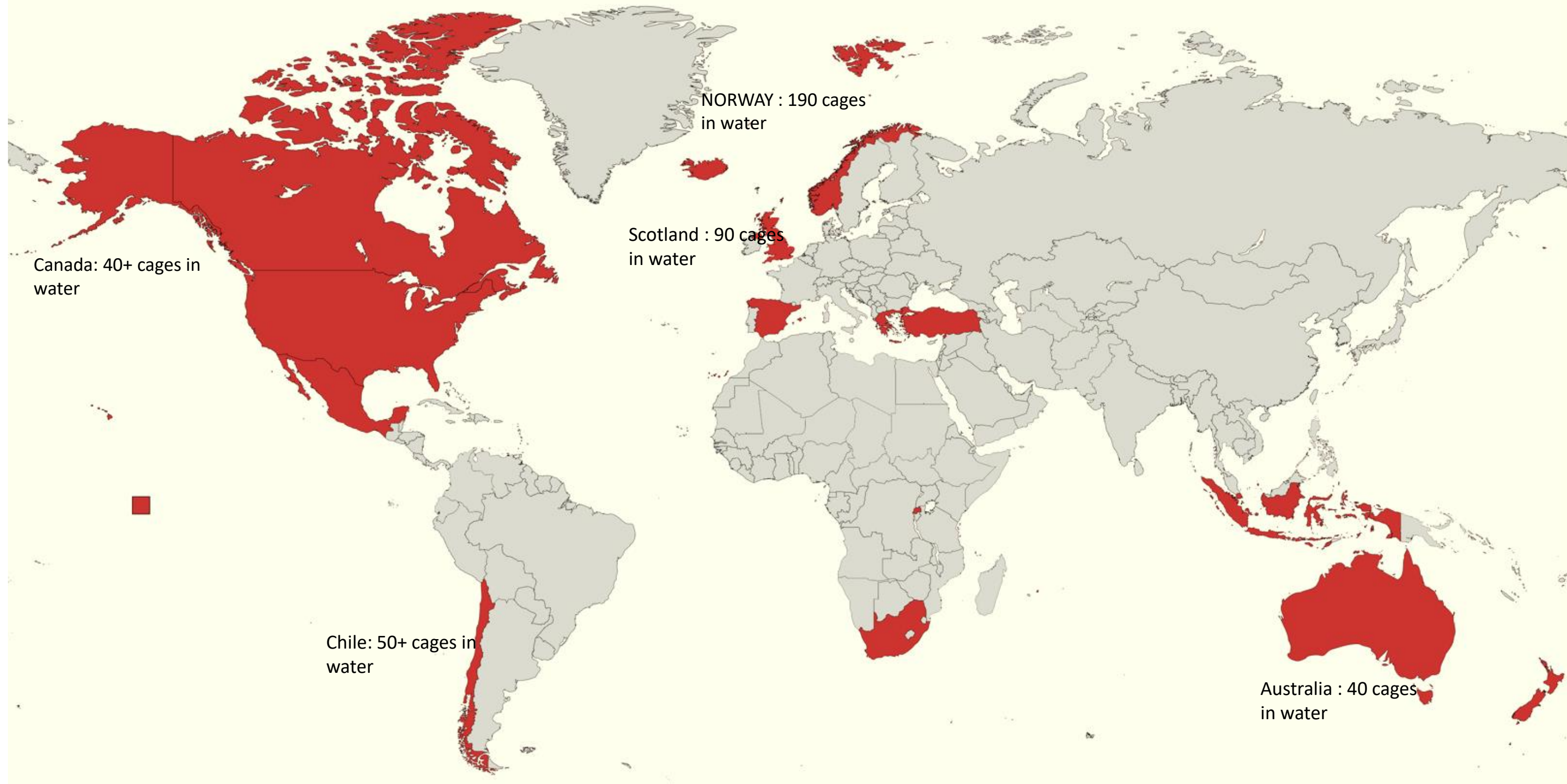
Service Company feedback – Easy to handle and install



Mowi Team – Nice, tight and firm shape in high currents also



SUSTAINABLE SOLUTION FOR AQUA FARMING – V₂ NETS



Better Ideas in Action

Predator Cage
Solutions

Sapphire - CFR

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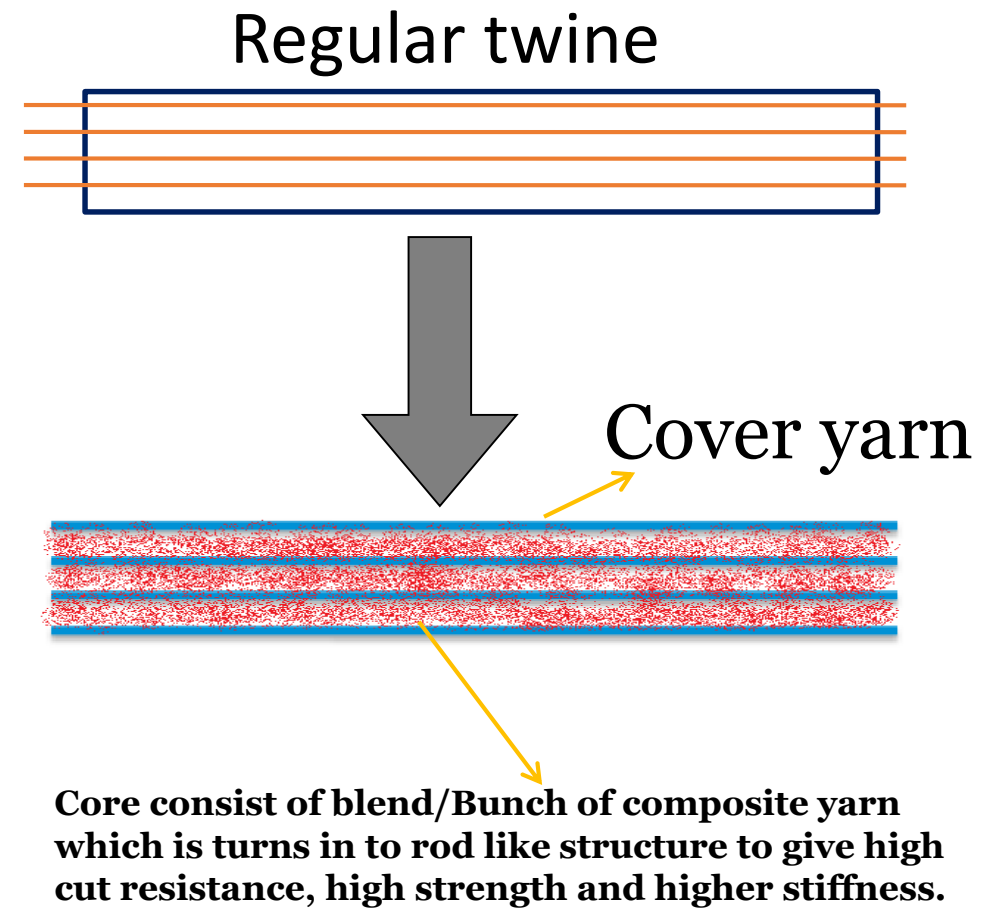
Sapphire CFR Nets* – New age Predator Net

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



CFR Highlights

- Success of CFR in Scotland with biggest Salmon Farm
- Spread of CFR to other customers in Scotland for better predation protection.
- Breakthrough with Biggest farm in Norway with CFR as part of conversion from Nylon to Advanced HDPE based solutions
- Breakthrough and repeat business in Faroes top 2 customers
- Repeat business in Faroes Island for V2 CFR
- Conversion from conventional nets to CFR in Canada with biggest West coast customer
- Successful upgrade of Sealpro nets to CFR in Scotland
- Expect higher pace of conversion from conventional nets to CFR in 2024-25

Sapphire CFR



Sapphire X18

www.garwarefibres.com



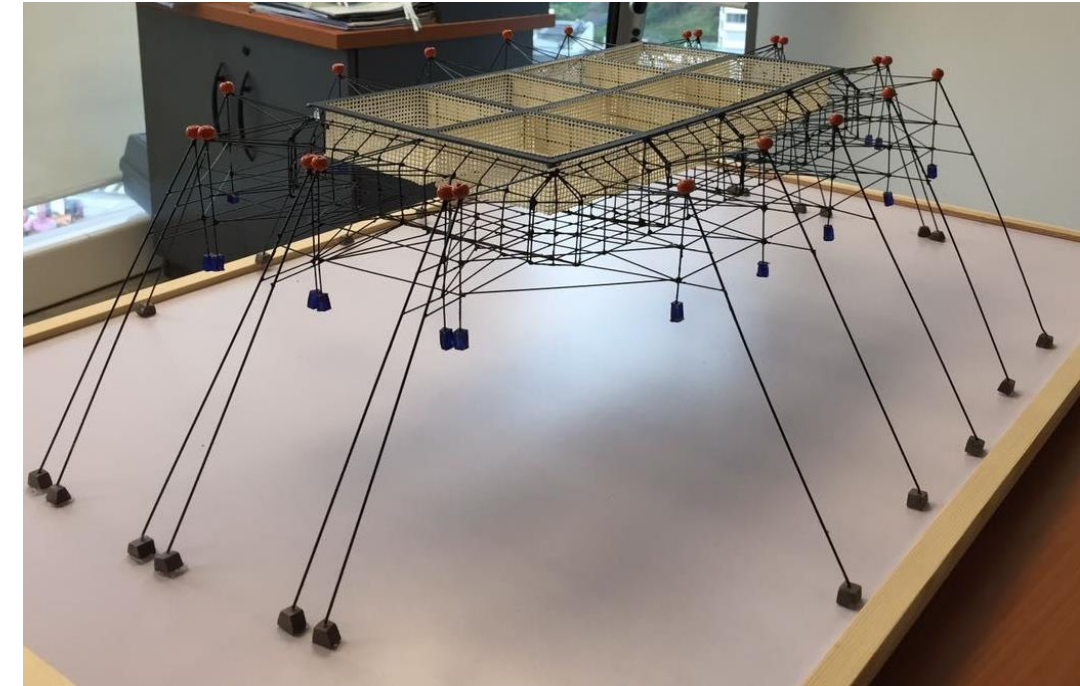
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Voice of Customer: On Umbrella Design

- Traditionally in Chile Umbrella design is used For Predator Nets.
- Major reason due to less stiffness in netting allowing predator to push the Pred net towards cage and also to twist the net to break.

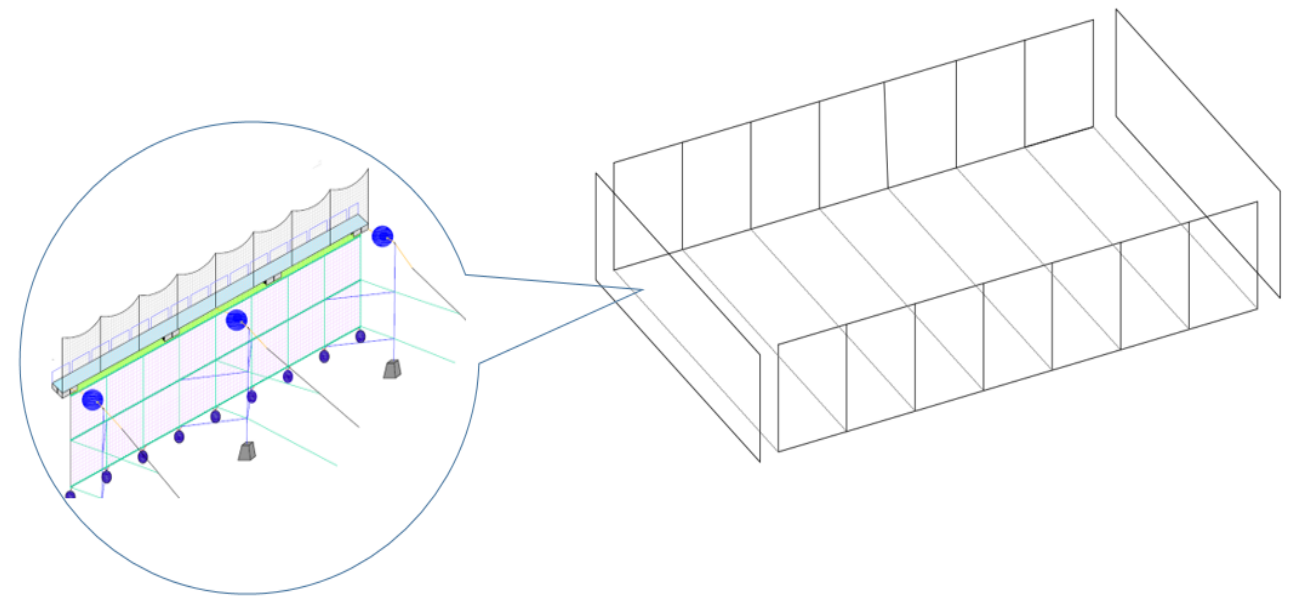
Focus on Voice of customer for Pred nets:

- Stiffer netting with better cut resistance
- Reduction in Diver time for installation and inspection
- Ease in operations- Harvest, Service boats
- Reduce rigging
 - Ropes when cut by divers , ends up at shore



Drop Down Vs Umbrella Design

- Four Chilean customers are now Using Drop down design and are planning to convert more sites to dropdown design.
- They have identified **50%** reduction in installation time.
- Joining of panels can be done on walk ways in case of drop down design as compared to Umbrella design
- **90%** divers time reduction in maintenance and repair cost compared to UHMPE
- No requirement for removal of rigging lines for boats as against Umbrella design.
- Overall there is a huge savings in operational cost by conversion into dropdown design as against the umbrella design.



Operational Benefits of X18 drop down

- Lower risk of damage by vessels
- Less material required; Less square meters to clean
- Reduce Predation- No release of ropes during operations
- Simple mooring system – less ropes and lines required
- Easy to handle
- Can make flexible dimensions compared to extruded net

Operational Benefits of X18 drop down

- At Netloft , Easy
 - for washing due to stiffness and open mesh
 - Repair and handling compared to extruded net

Non Salmon

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Non Salmon

Expansion in Non Salmon Species – a key agenda for growth

- 6 New customers added in:
Panama, Mexico, Indonesia, Turkey, Srilanka, Brunei.
- 2 Active enquiries in Vietnam & Algeria
- Breakthrough with Top Tilapia Farms in Kenya
- Repeat orders in Indonesia.
- Repeat business in Turkey with value added products of V2 and Plateena Neo

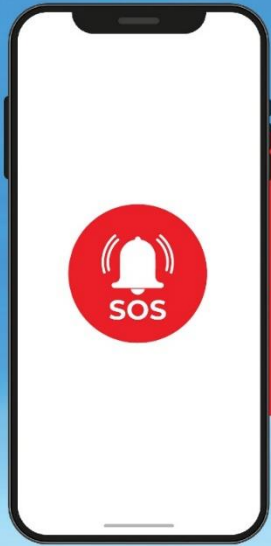
Non Salmon Highlights

- Customer base expansion in different geographies of Non Salmon (LATAM to SEA)
- Targeting organized players in each market and competing with local competition with Value benefits and solutions
- Repeat order from these market – a testimonial for benefits experienced
- Customized product solutions to capture the opportunity and improve on return profile in line with Salmon Market

Better Ideas in Action

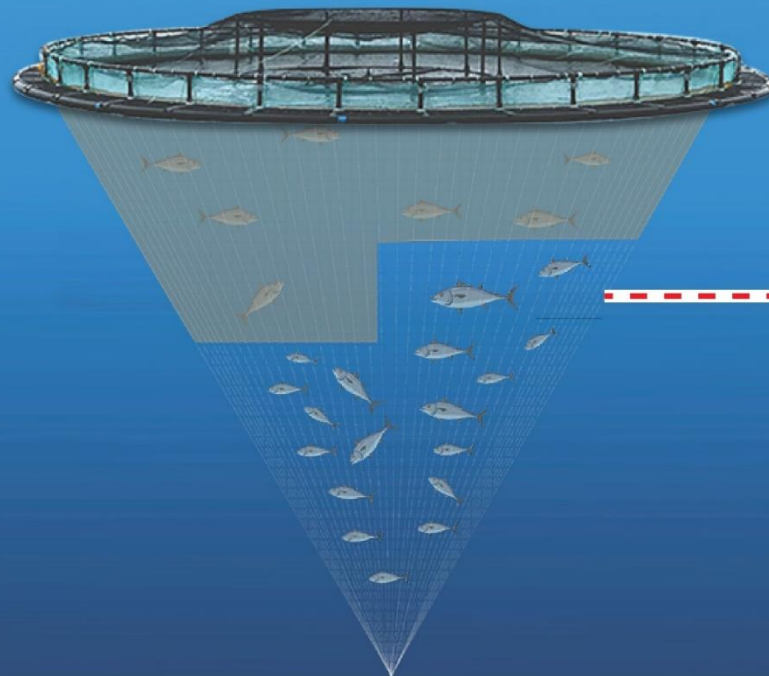
New Product
Development

IntelliNet



NOVEL BUILT-IN IOT TECHNOLOGY
ALLOWS THE CAGE NET TO SPEAK
TO THE FISH FARMER 24/7

IntelliNet - PANELS CONNECTED
WITH RESPONSE MECHANISM



24
TOTAL NET PANELS

1
TOTAL BROKEN PANELS

0
TOTAL PATCHED PANELS

PATCHING RATE
0%

Aquaculture Net Details	
TYPE	NAME
STAR	KONTTLESS- HEXAGONAL NET

Aquaculture Net Breakage Details	
LAST PATCHING DATE	STATUS
	OK

Panel Status (In %)

- Working Panels: 96%
- Broken & Patched Panels: 0%
- Broken But Not Patched Panels: 4%

Total Panels	Breakages
24	0

SIDE-1 SIDE-2 **SIDE-3** SIDE-4 BOTTOM

IntelliNet – Concept to Reality



Concept trial at Institute of Marine Research, Norway



Planned Trial of Full Cage in Chile



Under discussion for a Prototype for 6 months in
scotland

IntelliNet Update – Full Cage Installation in Chile



INTELLINET AT CHILE
SITE



INSTALLATION IN
PROCESS



INSTALLATION
COMPLETE AND FISH
STOCKED



INTELLINET
CONNECTED

IntelliNet Update – Full Cage Installation in Chile



A SMALL LAB EXPERIMENT TO THE FIRST FULL SCALE INTELLINET CAGE IN A SPAN OF 2 YEARS

IntelliNet - Benefits

1

Reduction in fish escape

2

Reduction in diver's time

3

Immediate notification of
Breakage

4

Ease of finding the break

5

Quick response time to act



SUSTAINABILITY



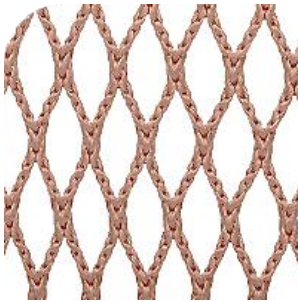
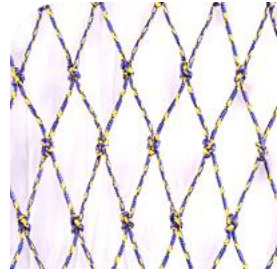

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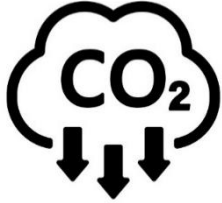


Better Ideas in Action



GTFL's Strong External Actions on Sustainability

V2 Technology		Seal Pro: Anti-Predator Nets for Seals	
 Cu^{2+}	<ul style="list-style-type: none">V2 Technology reduces copper release in the environment significantly as compared to paint coated nylon cages	 	<ul style="list-style-type: none">Sapphire PE nets have increased salmon farm protection leading to a reduction in seals culling

HDPE Products	
	<ul style="list-style-type: none">We are a pioneer in HDPE products and champion the replacement of nylon products with HDPE.HDPE production saves several MT equivalent of CO₂ vs Nylon

GTFL – Pioneer in HDPE Solutions for Aquaculture

Environmental Impact

Garware Technical Fibres has provided more than 25,000 metric tons of HDPE netting solutions to the aquaculture industry, this directly translates to a **reduction of 122.5 million Kilograms of CO2 equivalent**. This saving in the carbon footprint is equivalent to approximately 1.35 million passenger flight trips from Santiago to Puerto Montt.

Plastics Europe has published a document in 2014, Eco-profiles and Environmental Product Declarations of the European Plastics Manufacturers, which shows the Global Warming Potential (GWP - Kg CO2 equivalent) per kilo of **Nylon resin is 6.7** while that of **HDPE resin is 1.8**.

<https://plasticseurope.lca-data.com/ILCD/>

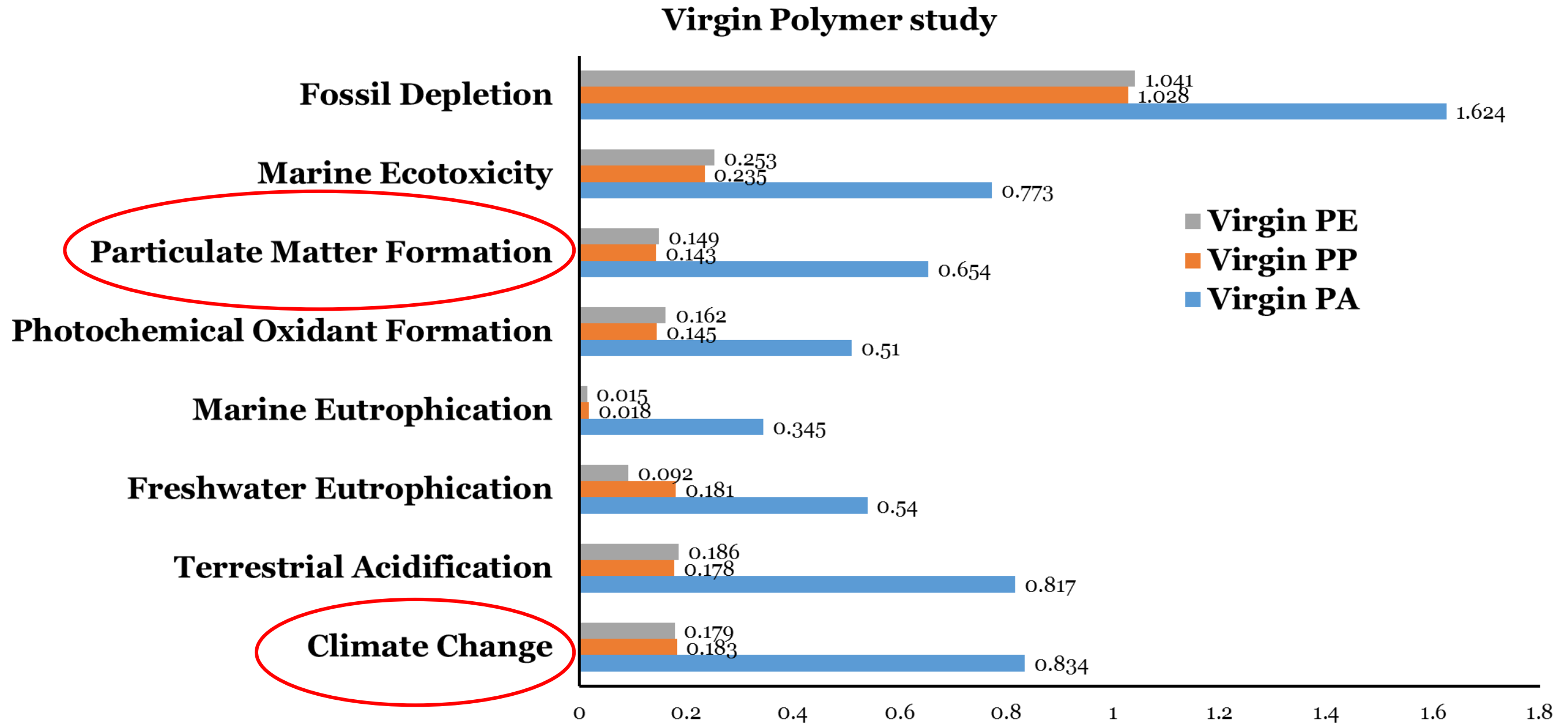








Trial of the Industry's First Certified Bio-Based Cage Net in New Zealand

Up to 70% Reduction in GHG emissions compared to regular aquaculture cage nets

Environmental impact – Nylon vs HDPE



GTFL's Strong Internal Actions on Sustainability

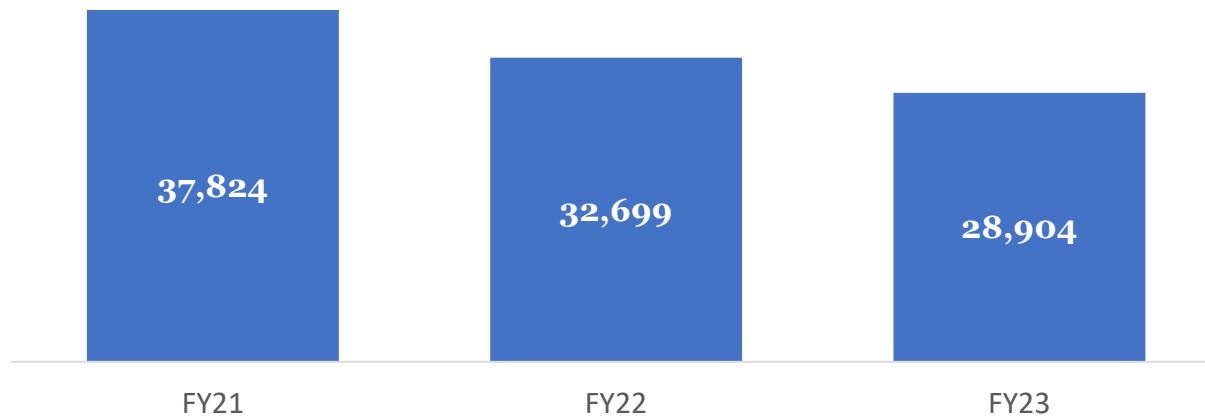
<h2 style="text-align: center;">Water</h2>		<h2 style="text-align: center;">Green House Gas Emission</h2>	
	<ul style="list-style-type: none"> • Every year we are reducing our water consumption per MT of production. • Honoured with various awards for our efforts • 100% treatment and recycling of waste water generated in production process 		<ul style="list-style-type: none"> • Annually increasing our usage of renewable sources of energy • Trial of the industry's first certified bio based cage which will reduce utilization of fossil fuels thereby reducing GHGs
<h2 style="text-align: center;">Biodiversity Preservation</h2>		<h2 style="text-align: center;">Reduce, Reuse and Recycle</h2>	
	<ul style="list-style-type: none"> • Recycling of the equivalent quantity of plastic material as that consumed for handling and packaging of products through authorized recyclers • Tree plantations every year at various locations 		<ul style="list-style-type: none"> • Improvement in Coal consumption/Ton by improving boiler efficiency • Continuous reduction in the RM waste generated during the manufacturing

GTFL Plant – Sustainability Initiatives

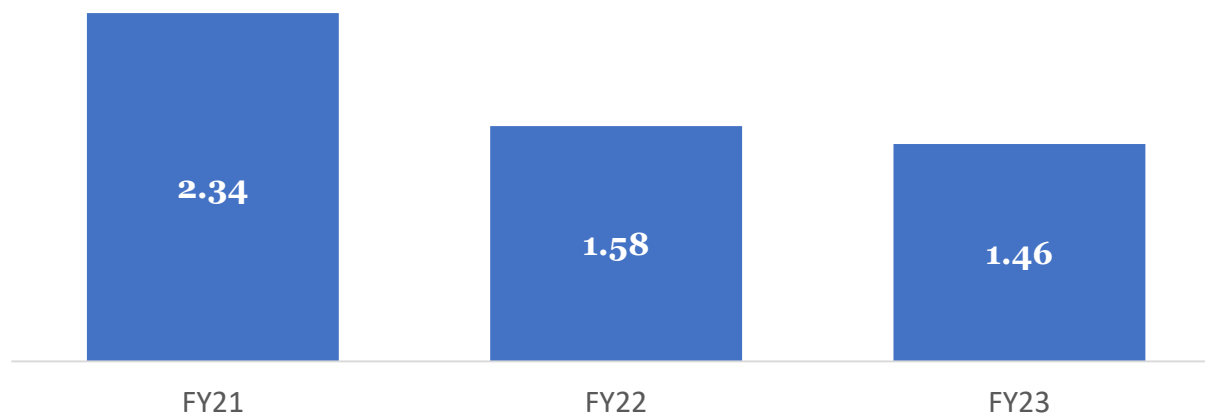
Continuously minimizing GHG emission

Performance

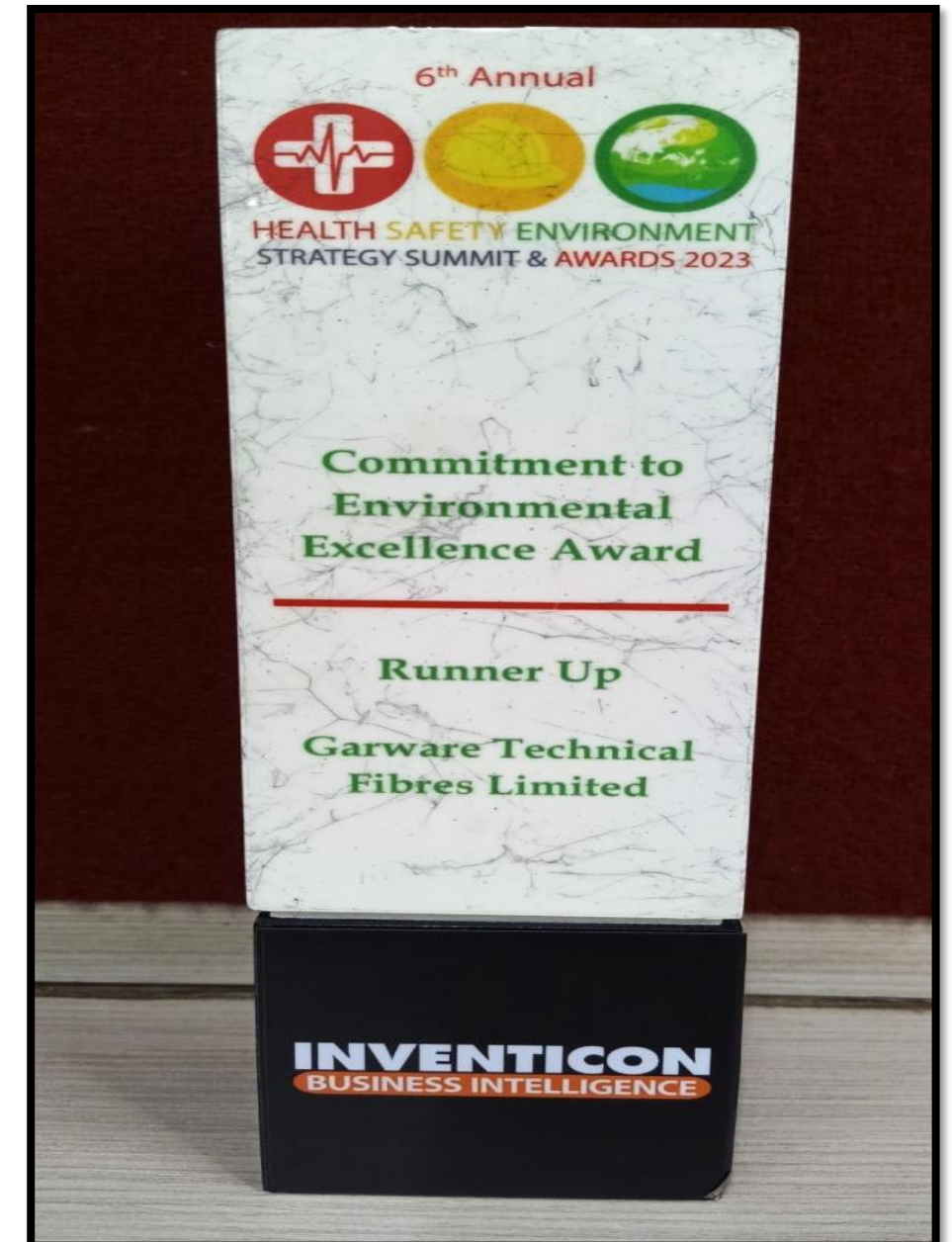
Overall GHG emission, MT of CO2 equivalent



GHG emission intensity, TCO2 eq per MT of production



Awards

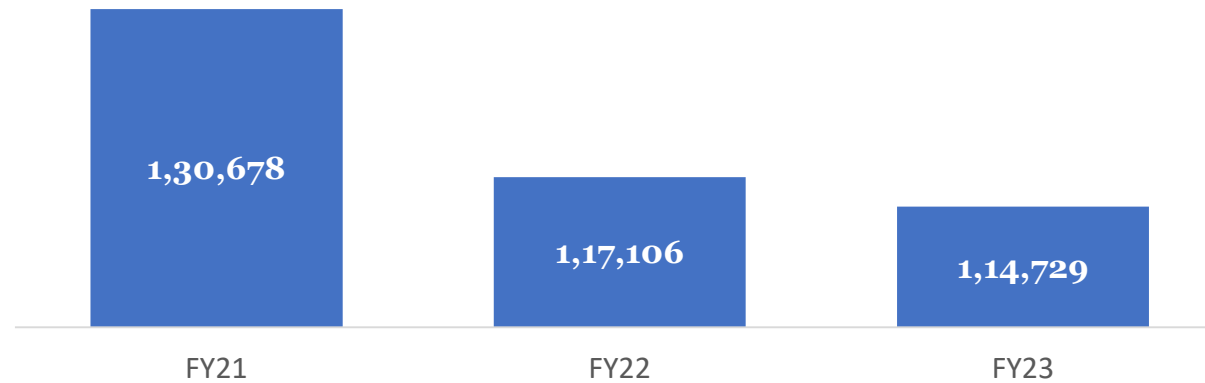


GTFL Plant – Sustainability Initiatives

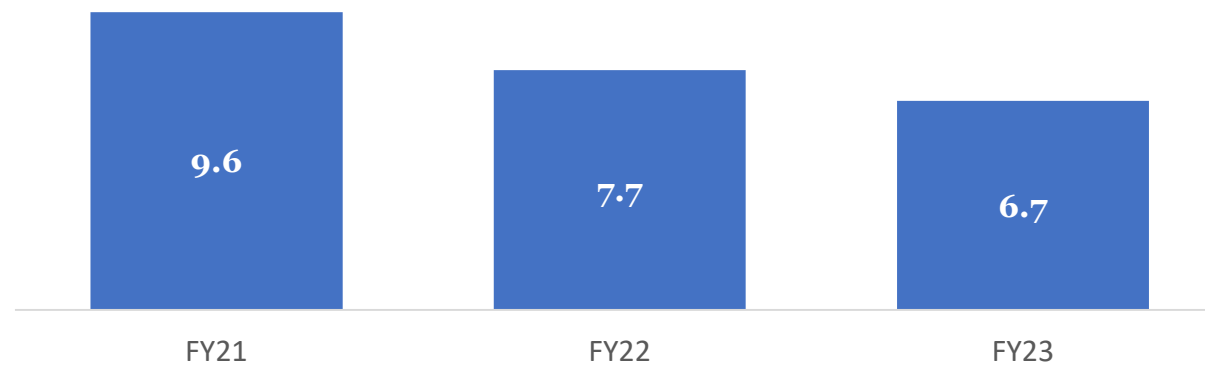
Continuously minimizing water consumption

Performance

Total water consumption, KL per day



Water consumption, Litres per MT of production



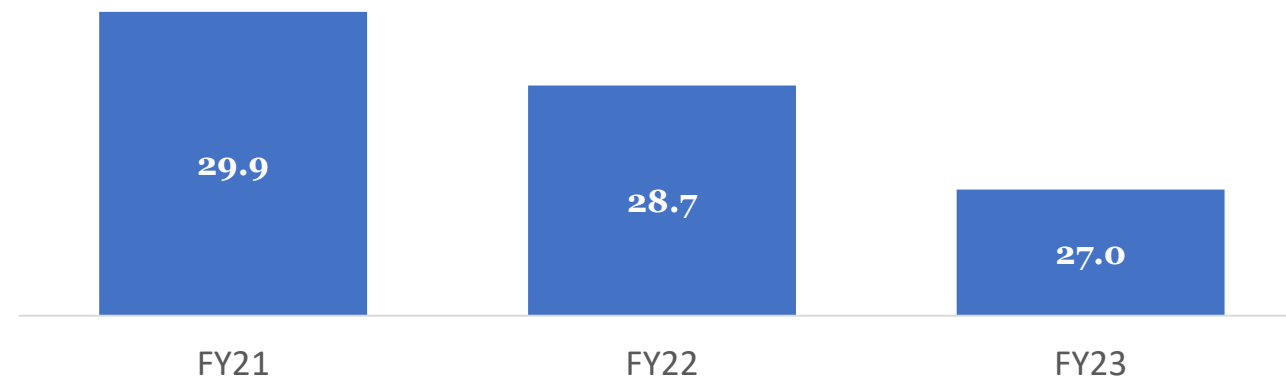
Awards



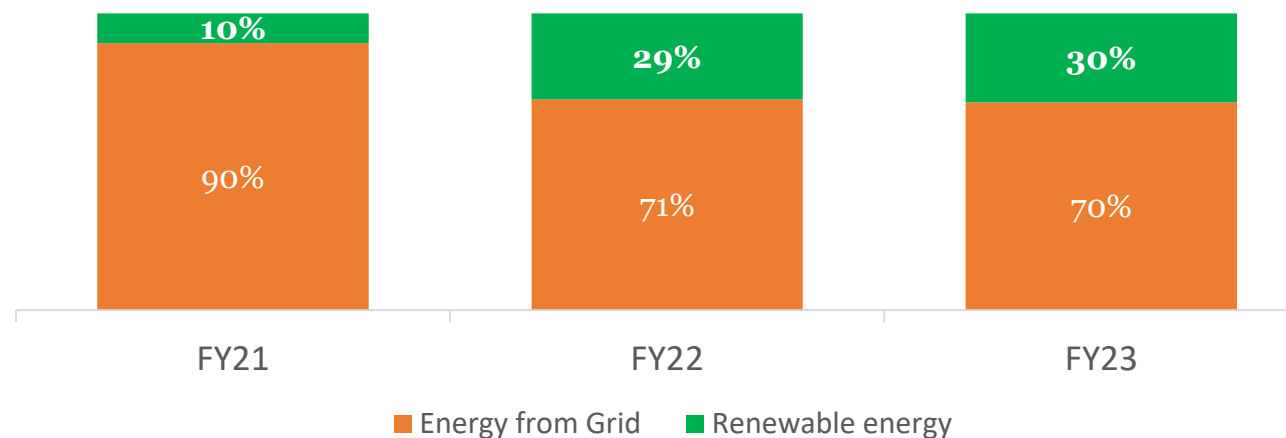
GTFL Plant – Sustainability Initiatives

Continuously minimizing energy consumption Performance

Total electricity consumption, GWh per annum



Share of Renewable Energy



Better Ideas in Action

Sports Nets



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Sports Nets -Snapshot

N Europe and Australia sports nets have picked up in Q1 with large orders.

USA sports nets is picked up in Q2. Orders received in Q3 from the largest distributor and further orders are expected in Q4

Encouraging response in USA for sports allied.

South Europe – With new resource on board, aggressively targeting new businesses in S Europe to increase the GTFL penetration.

Safety nets – Plans to enter the USA and European safety nets business are on track. Establishing the product certification and customer contact underway.

Sports Allied – New product like fence panel already developed and launched in the market.

Overall the outlook for sports segment looks positive for F24.

Sports New Allied Business

Products:

Tennis posts, pickleball posts, Soccer goal posts, kicking cage frames & cat frames

Global Market Size: 190-210Cr.

Focus Markets:

US, EU, Australia

Business Model: Distributor Led Model

Strategy: Utilize existing netting channel to gain entry and then adding new customers.

Tennis Post



Features

1. Stylish & durable for indoor & outdoor application
2. Heavy duty industrial gauge steel
3. Smooth & easy to operate
4. Powder coating to resist rust & increase durability
5. Lacing cords for net installation

Material Specifications

Post Material - Steel with Powder Coating

Winding Mechanism - Aluminium & Steel with Powder Coating

Pipe OD - 2 7/8 inch

Pipe Shape - Round & Square

Colour - Black & Green

Better Ideas in Action

GTFL
IB-Safety nets



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Safety nets Business

Products:

Safety Nets with requisite certifications (ANSI and EN)

Global Market Size: 9300 MT in F23. US \$40-45 million (approximately)

Focus Markets:

US, EU, Latin America.

Business Model: *Fabricators/Distributors driven business.*

A large, solid red curved shape that starts from the left edge and curves upwards and to the right, framing the text on the right side of the slide.

GTFL
Value Added Ropes

Value added Ropes

Products:

UHMWPE, Fabricated Slings, High Strength Polyolefin

Application Segments:

Mooring, Towing, Offshore, Transmission, Defense.

Customer segments:

*Ship Chandlers, Ship management companies,
Tug boat operators, Transmission companies etc.*

Business Model: Distributors and Direct sales to consumers

Strategy: Shift from commodity ropes to differentiated value added ropes using high strength polymers



A large, solid red curved shape that starts from the left edge and curves upwards and to the right, filling the top and right portions of the frame. The rest of the background is white.

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



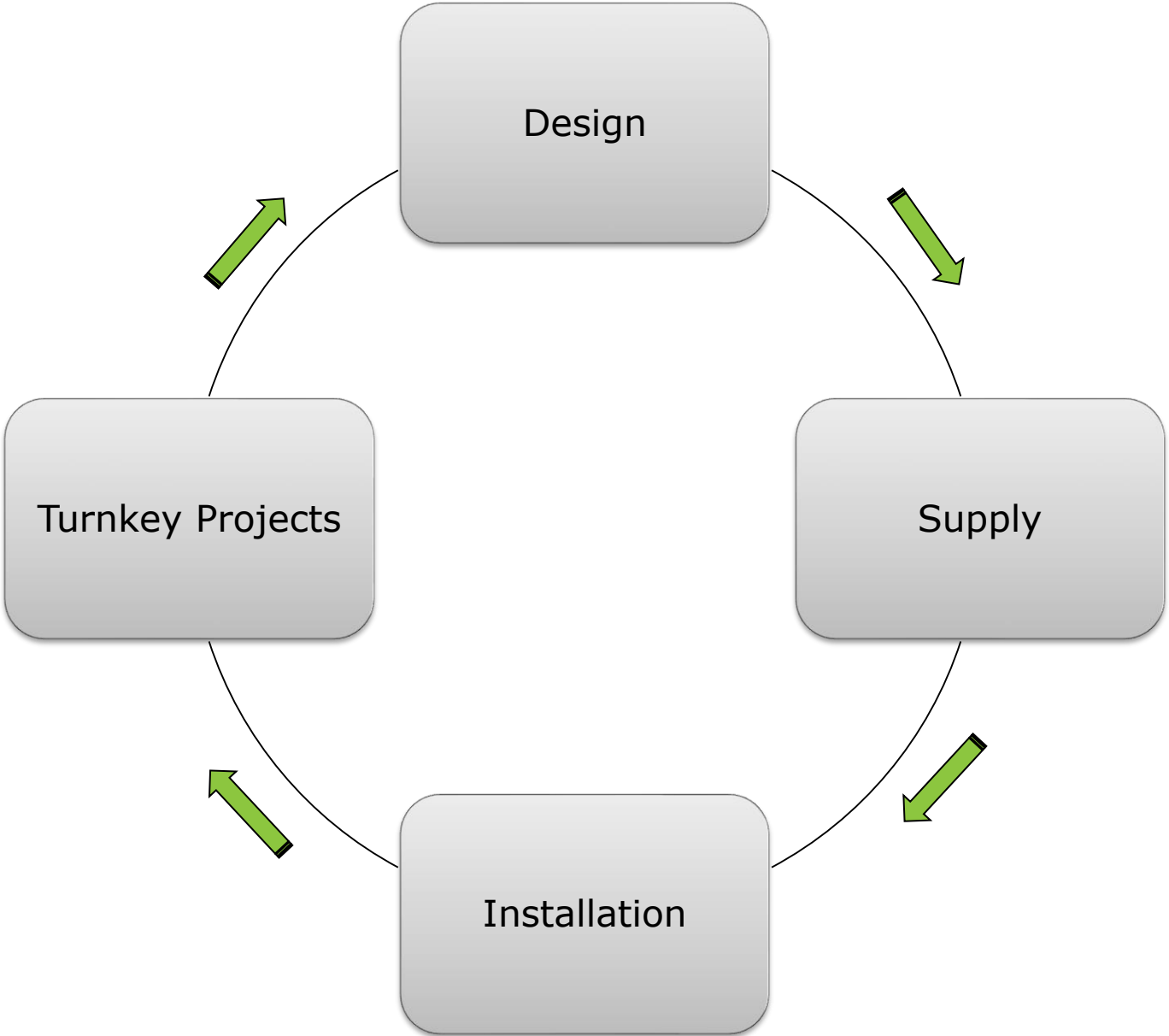
•Ports



Geosynthetics - Benefits



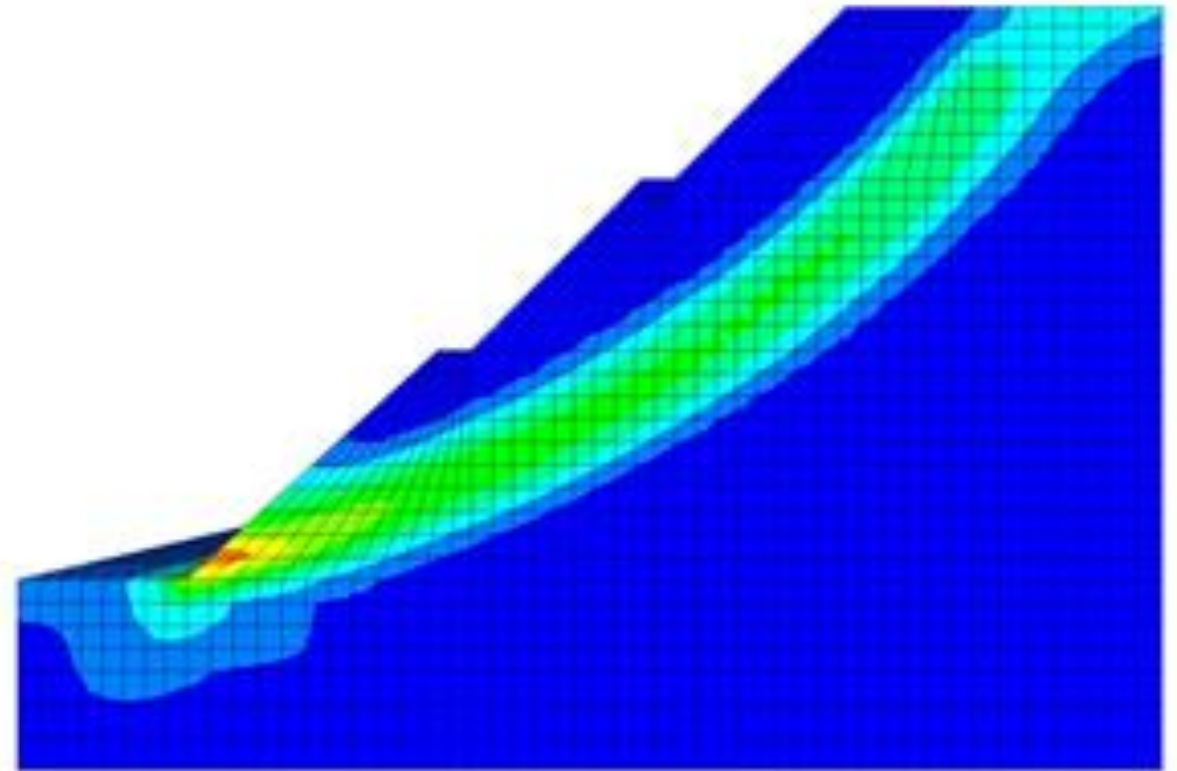
Geosynthetics Division – Business Model



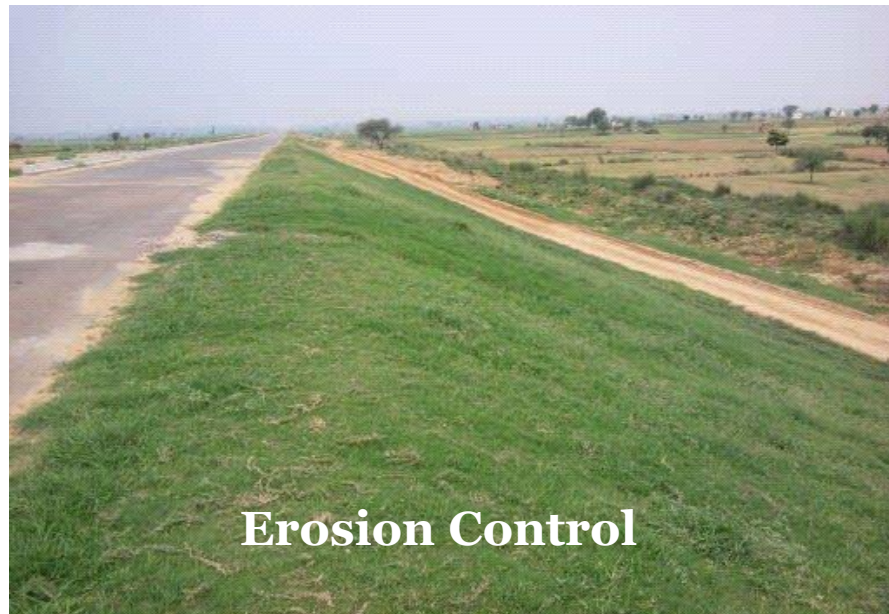
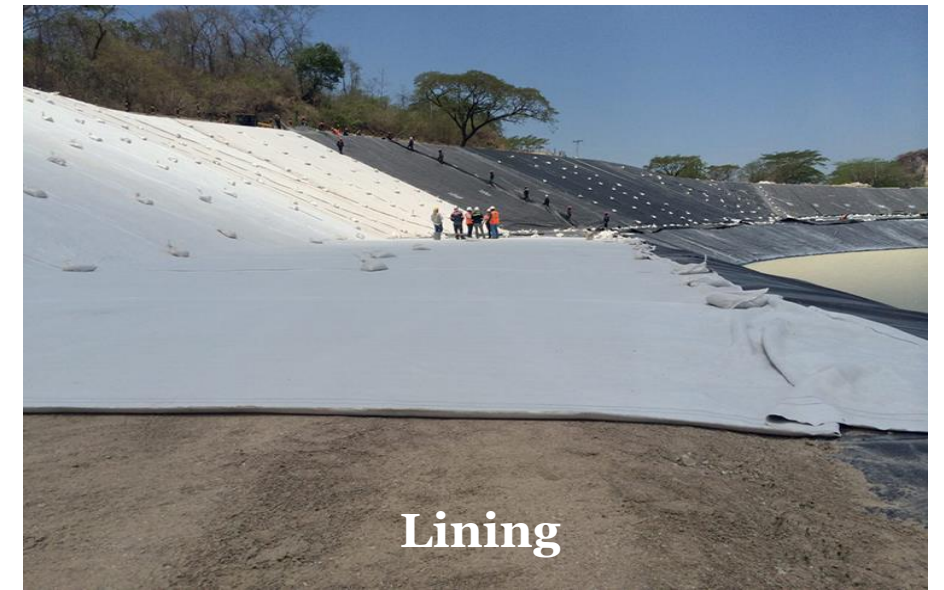
Technical Backup – In house technical team

Garware Technical Fibres Ltd. has an in house Geotechnical Design Team that consistently offers reliable, accurate and site specific designs. Designing is done over a wide spectrum of projects that include Mountainous, Riverine & Marine terrains by using globally accepted software

The quality of the technical back up offered facilitates us to secure and execute projects in a competitive environment.



Focused Applications – DOMESTIC



DOMESTIC MARKET - Rockfall & Slope Protection application

Location: Keonjhar, Odisha

Implementation of Soil Slope Stability Measures and Rockfall Protection along New Railway Broad Gauge Line



DOMESTIC MARKET - Rockfall & Slope Protection application



Location: Uttarakhand

Slope stability implementation along a critical stretch near Rishikesh

DOMESTIC MARKET - Avalanche Protection application

UT of Ladakh

Implementation of Avalanche Control Measures in UT of Ladakh



GTFL GEO Export Product Offerings

- Geotextile - Woven
 - Polypropylene
 - Polyester
- Geotextile Fabric Form
 - Geotextile bag
 - Geotextile tube
 - Saddle Bag
 - Geo-containers
- Polymer Gabion
 - PP Rope Gabion
 - Aqua-Rock Bag / Flexible Rope Net Gabion
- Rockfall Solution
 - Double Twisted Mesh Panel
 - High Strength Boulder Net
 - Smart Early Warning System
- Garmat Supreme
 - Biodegradable Coir Mats for Erosion Control
 - Polymer Mat for Erosion Control Blanket



GTFL GEO Export Product Offerings



PP ROPE GABION



AQUAROCKBAG /FRN



DT MESH PANEL



HS BOUDLER NET



EROSION CONTROL MAT



POLYMER EROSION CONTROL MATT

GTFL GEO Export Product Offerings



WOVEN GEOTEXTILE



GEOTEXTILE BAG



GEOTEXTILE TUBE



GEOTEXTILE CONTAINER



GEOTEXTILE SADDLE BAG

GTFL GEO Export Markets



SINGAPORE



THAILAND



OMAN



COLOMBIA



FRANCE



AUSTRALIA GARWARE TECHNICAL FIBRES

GTFL GEO Export Markets



COLOUMBIA

GTFL GEO Export Markets



PHILIPPINES



THAILAND

Wind Defender Application USA Landfill

Temp Cap — 1,548,160 sq.ft.



Rain Cover - 393,600 sq.ft.



Leachate Spray Curtain - 262,400 sq.ft.

Way Forward Domestic Market – Rockfall Protection and Landfills

- **Rockfall Protection**

- 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.
- Over all addressable market is between Rs 3000 to 4000 crs at an expected penetration rate of 1%.

- **Landfills**

- 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

Way Forward – Exports

- Global Market Size 10-12 Bn USD, Growing at 9% CAGR y-o-y
- Addressable market size 400 to 500 million US\$
- 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

Better Ideas in Action

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

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Thank You

