

An aerial photograph of a mountain range with a winding road, overlaid with a geometric pattern of triangles. The text is centered over the image.

SUSTAINABLE FUTURE.

NOREBO 可持续将来

NOREBO INTRODUCTION

NOREBO 简介

FOUNDED IN 1997,
 NOWADAYS NOREBO IS
 ONE OF THE LARGEST
 HARVESTING COMPANIES
 IN THE WORLD AND THE
 LEADER IN SEA
 FROZEN FILLETS
 PRODUCTION IN RUSSIA
NOREBO 成立于 1997
年，如今是世界上最大
捕捞公司之一，也是
俄罗斯海域冷冻鱼
片生产领导者

Norebo consists of: Norebo由以下公司组成:

Harvesting companies: (捕捞公司)

In the north-west (Murmansk) and in the Far East of Russia (Petropavlosk-Kamchatsky, Vladivostok, Sakhalin).

俄罗斯西北 (摩尔曼斯克) 及远东 (堪察加彼得巴甫洛夫斯克、海参崴、萨哈林)

Production and infrastructure: (生产设施)

Fish processing factory in Murmansk, packing and distribution factory in Klin (Moscow region), canned fish factory in Kaliningrad region, sea container terminal in Petropavlosk-Kamchatsky and Murmansk, Shipyard, Shipping and Reefer transportation company.

摩尔曼斯克鱼类加工厂、克林 (莫斯科地区) 包装和配送工厂、加里宁格勒地区鱼罐头厂、堪察加彼得巴甫洛夫斯克和摩尔曼斯克海运集装箱码头、造船厂、航运和冷藏运输公司。

Sales companies: (销售公司)

Norebo RU.

Norebo does business with partner companies: (伙伴公司业务)

Partner companies in Europe, Hong-Kong and Africa. 欧洲、香港及非洲伙伴公司

Own fleet: (自有船队)

Consists of more than 50 medium tonnage and heavy capacity fishing vessels 超过超过50艘中等吨位和重型渔船

Distant fishing ground: (远洋捕捞及地区)

Norebo is the only Russian company catching in distant fishing ground, under Russian government granted quota: Norebo是俄罗斯政府授权配额、唯一进行远洋捕捞的俄罗斯公司

- Morocco 摩洛哥
- South Pacific (Chile) 南太平洋 (智利)
- South Atlantic (Antarctica) 南大西洋 (南极洲)

Norebo is №1 company for cod and haddock harvesting in the world.

We catch between 80-130K of Atlantic cod,
20-30K of Haddock and 170-200K of Alaska pollock annually.

The leader in the production of sea frozen fillets in Russia.

Pelagic species such as: Mackerel, Herring, Horse Mackerel, Sardine
annual catch 320-350K

Norebo 是世界第一大鳕鱼和黑线鳕捕捞公司，每年捕捞 8-13万吨大西洋鳕鱼，2-3万吨黑线鳕和 17-20万吨阿拉斯加狭鳕，俄罗斯海域冷冻鱼片生产领导者。

中上层鱼类，例如：鲭鱼、鲱鱼、竹荚鱼、沙丁鱼，年捕捞量 32-35万吨。

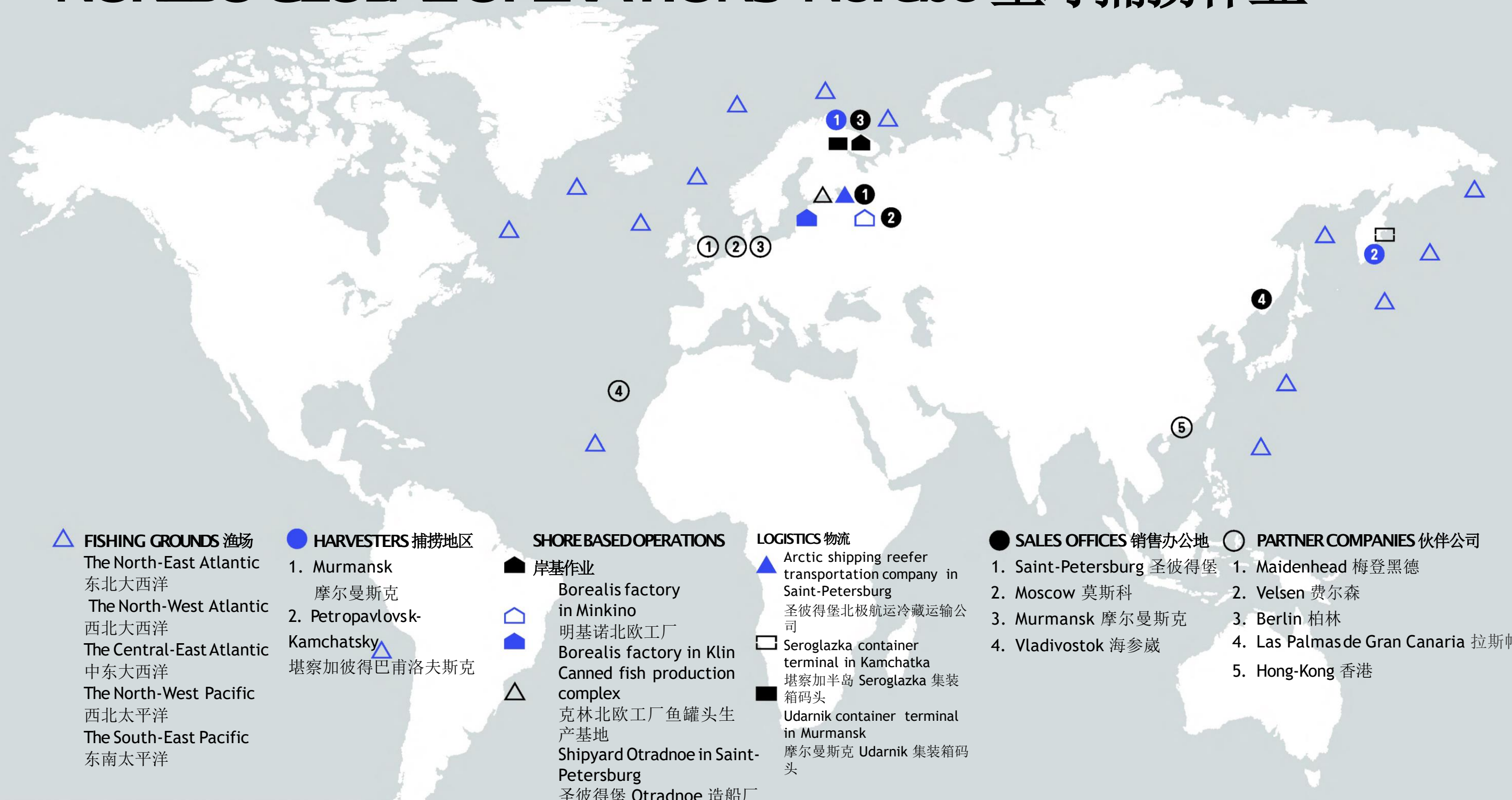


NOREBO invests into shipbuilding to replace old vessels with modern ones: these vessels boast superior design, innovative engineering solutions and high-tech equipment, all of which Norebo deems vital for ensuring high quality fish processing, the highest levels of safety, and comfortable conditions for the crew.

NOREBO 投资造船业，用现代化船舶取代旧船：这些船舶拥有卓越的设计、创新的工程解决方案和高科技设备，Norebo 认为所有这些对于确保高品质鱼类加工、最高水平的安全性和船员舒适的生活条件至关重要。



NOREBO GLOBAL OPERATIONS Norebo 全球捕捞作业



-  **FISHING GROUNDS 渔场**
- The North-East Atlantic
东北大西洋
- The North-West Atlantic
西北大西洋
- The Central-East Atlantic
中东大西洋
- The North-West Pacific
西北太平洋
- The South-East Pacific
东南太平洋

-  **HARVESTERS 捕捞地区**
- 1. Murmansk
摩尔曼斯克
- 2. Petropavlovsk-Kamchatsky
堪察加彼得巴甫洛夫斯克

- SHORE BASED OPERATIONS**
-  **岸基作业**
- Borealis factory in Minkino
明基诺北欧工厂
-  Borealis factory in Klin
克林北欧工厂鱼罐头生产基地
-  Shipyard Otradnoe in Saint-Petersburg
圣彼得堡 Otradnoe 造船厂

- LOGISTICS 物流**
-  Arctic shipping reefer transportation company in Saint-Petersburg
圣彼得堡北极航运冷藏运输公司
-  Seroglazka container terminal in Kamchatka
堪察加半岛 Seroglazka 集装箱码头
-  Udarnik container terminal in Murmansk
摩尔曼斯克 Udarnik 集装箱码头

-  **SALES OFFICES 销售办公地**
- 1. Saint-Petersburg 圣彼得堡
- 2. Moscow 莫斯科
- 3. Murmansk 摩尔曼斯克
- 4. Vladivostok 海参崴

-  **PARTNER COMPANIES 伙伴公司**
- 1. Maidenhead 梅登黑德
- 2. Velsen 费尔森
- 3. Berlin 柏林
- 4. Las Palmas de Gran Canaria 拉斯帕尔马斯
- 5. Hong-Kong 香港

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产 • Geography of operation 捕捞作业地理位置



RUSSIA PRODUCTION OF FISHMEAL AND OIL 俄罗斯鱼粉鱼油生产

- SPECIES FOR REDUCTION (NORTH ATLANTIC/ MOROCCO-MAURITANIA/S.PACIFIC) 用于生产鱼类品种 (北大西洋/摩洛哥-毛里塔尼亚/南太平洋)



| 用于生产鱼类品种 | 加工方式 | 加工类型/原料类型 |
|---|-----------------------------|---|
| Species for reduction | Processing | type of processing/ Type of raw material |
| Blue Whiting 蓝鳕鱼 | production on board | Whole Round target species 全程整鱼 |
| Mack/Herr 鲭鱼/鲱鱼 | production on board | trimming, whole round 边角料, 全程破损鱼 |
| Cod/Haddock 鳕鱼/黑线鳕 | production on board | trimmings after processing HG and fillets 去内脏和切片后边角料 |
| West Africa small pelagic 西非小型中上层鱼类 | production on board | by-product, whole round broken fish 副产品, 全程破损鱼 |
| South Pacific Chile HM, Mack 南太平洋智利竹荚鱼、鲭鱼 | production on board 工船加工 | whole round broken fish, by-catch, small fish 全程破损鱼, 捕捞副产品, 小鱼 |

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产



- **RUSSIAN FAR EAST 俄罗斯远东**

OKHOTSK SEA 鄂霍次克海

BERING SEA 白令海

KURIL ISLANDS 千岛群岛

JAPANESE EEZ (PACIFIC SIDE)

日本专属经济区（太平洋一侧）

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

- **SPECIES FOR REDUCTION** (FAR EAST LAND FACTORIES)
- 用于生产鱼类品种 (远东陆地工厂)



| 用于生产鱼类品种 | 加工方式 | 加工类型/原料类型 |
|---------------------------|------------------------|---|
| Species for reduction | Processing | Processing/ Type of raw material |
| Alaska Pollock 阿拉斯加狭鳕鱼 | land factories 陆地工厂 | trimmings after processing HG and fillets 去内脏和切片后边角料 |
| Pacific sardine 太平洋沙丁鱼 | land factories 陆地工厂 | Whole Round target species 全程整鱼 |
| Pacific salmon 太平洋鲑鱼 | land factories 陆地工厂 | trimmings after processing HG and fillets 去内脏和切片后边角料 |



FM AND OIL PRODUCTION

鱼粉鱼油生产

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

按鱼类品种划分西部鱼粉产量

West production FM by species

| | | 2019 | 2020 | 2021 | 2022 | 2023* |
|--------|---------------|---------------|---------------|---------------|---------------|---------------|
| 鳕鱼/黑线鳕 | A.Cod/Haddock | 7,379 | 7,131 | 6,753 | 8,015 | 7,000 |
| 蓝鳕鱼 | Blue Whiting | 2,885 | 3,489 | 4,842 | 4,795 | 4,600 |
| 其他 | Other | 23 | 4 | 737 | 1,235 | 1,300 |
| | | 10,287 | 10,624 | 12,332 | 14,045 | 12,900 |

生产商排名

百分比

TOP PRODUCERS % of total

NOREBO 60%

Balance is spread b/ween many companies 40%

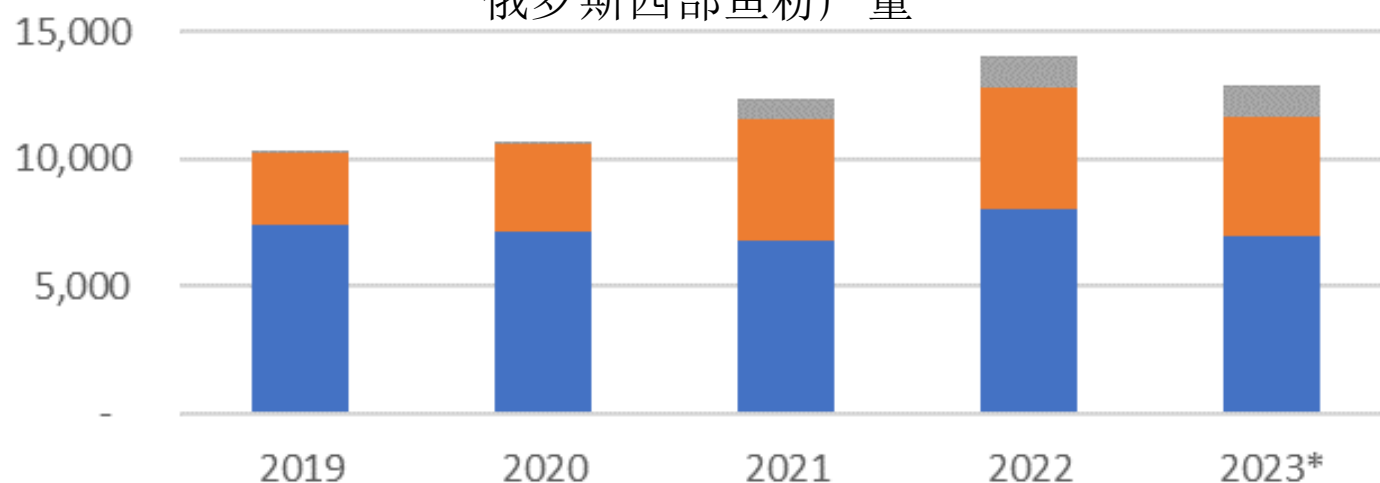
其他公司间分配



南太平洋

Russia West production FM

俄罗斯西部鱼粉产量



鳕鱼/黑线鳕 ■ A.Cod/Haddock ■ Blue Whiting ■ Other 其他
蓝鳕鱼

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

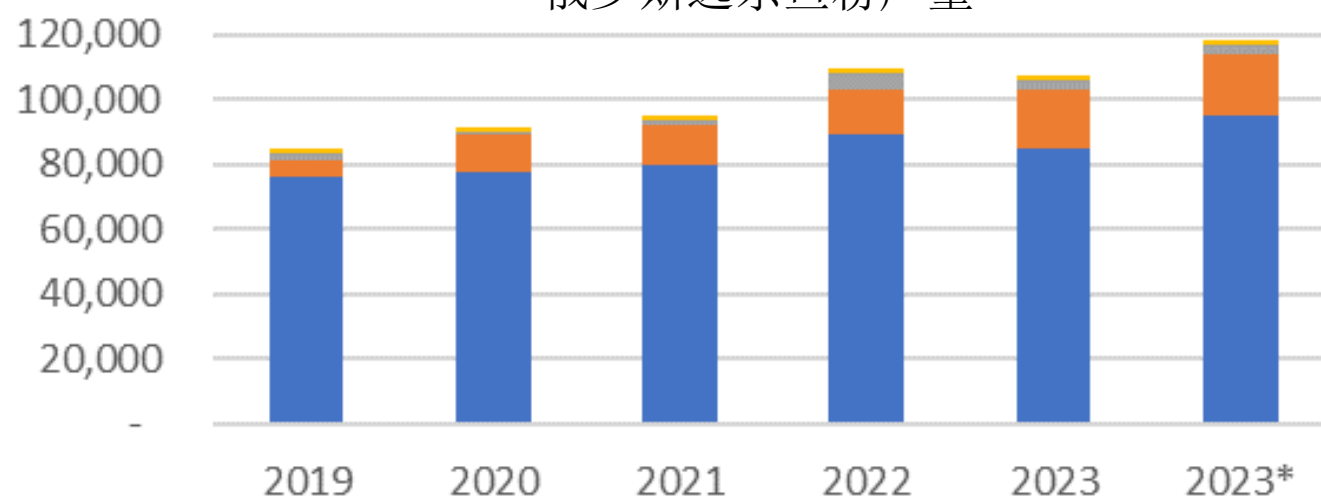
• FAR EAST ONBOARD BY SPECIES 远东工船加工品种

| SPECIES 品种 | 2019 | 2020 | 2021 | 2022 | 2023 | 2023* |
|--------------------|---------------|---------------|---------------|----------------|----------------|----------------|
| 阿拉斯加狭鳕鱼 APO | 76,421 | 77,857 | 79,575 | 89,576 | 84,764 | 95,000 |
| 太平洋沙丁鱼 PAC SARDINE | 5,102 | 11,161 | 12,338 | 13,707 | 18,490 | 19,000 |
| 鲱鱼 HERRING | 2,155 | 1,067 | 1,841 | 4,609 | 2,658 | 2,700 |
| 其他 OTHERS | 1,270 | 1,494 | 1,664 | 1,674 | 1,502 | 1,550 |
| Total 总计 | 84,949 | 91,579 | 95,418 | 109,566 | 107,414 | 118,250 |



Russia Far East FM production

俄罗斯远东鱼粉产量



■ APO 阿拉斯加狭鳕鱼
■ PAC SARDINE 太平洋沙丁鱼
■ HERRING 鲱鱼
■ OTHERS 其他

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

- FAR EAST ONBOARD FM 远东工船生产鱼粉



鱼粉生产商前7排名

TOP 7 producers of FM

| | |
|--------------------|-----|
| RFC | 20% |
| PILENGA/GIDROSTROY | 19% |
| NOREBO | 19% |
| OKEANRYBFLOT | 13% |
| SIGMA | 12% |
| DOBROFLOT | 4% |
| NBAMR | 3% |

7 companies represent 90% of total FM production in FAR EAST
远东地区7家公司鱼粉产量占比90%

产量占比

| | |
|---------------------|-----|
| PERCENTAGE OF TOTAL | 90% |
|---------------------|-----|

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

- FAR EAST LAND FACTORIES 远东陆地工厂**



| 远东陆地工厂鱼粉产量 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------|------|-------|-------|--------|--------|
| Land Far East | N/A | 5,000 | 5,000 | 12,000 | 20,000 |

MAIN PLAYERS 主要生产商

| 位置 | 公司 | 鱼类品种 |
|----------------------------------|--------------|---------|
| LOCATION | Company | SPECIES |
| South Kurils 南千岛群岛 | PILENGA/ | APO/ |
| | GIDROSTROY | SARDINE |
| Petro-Kamchatskiy 堪察加彼得巴甫洛夫斯克 | YUZHNO-KURIL | APO/ |
| | KOMBINAT | SARDINE |
| | KZ LENINA | APO |

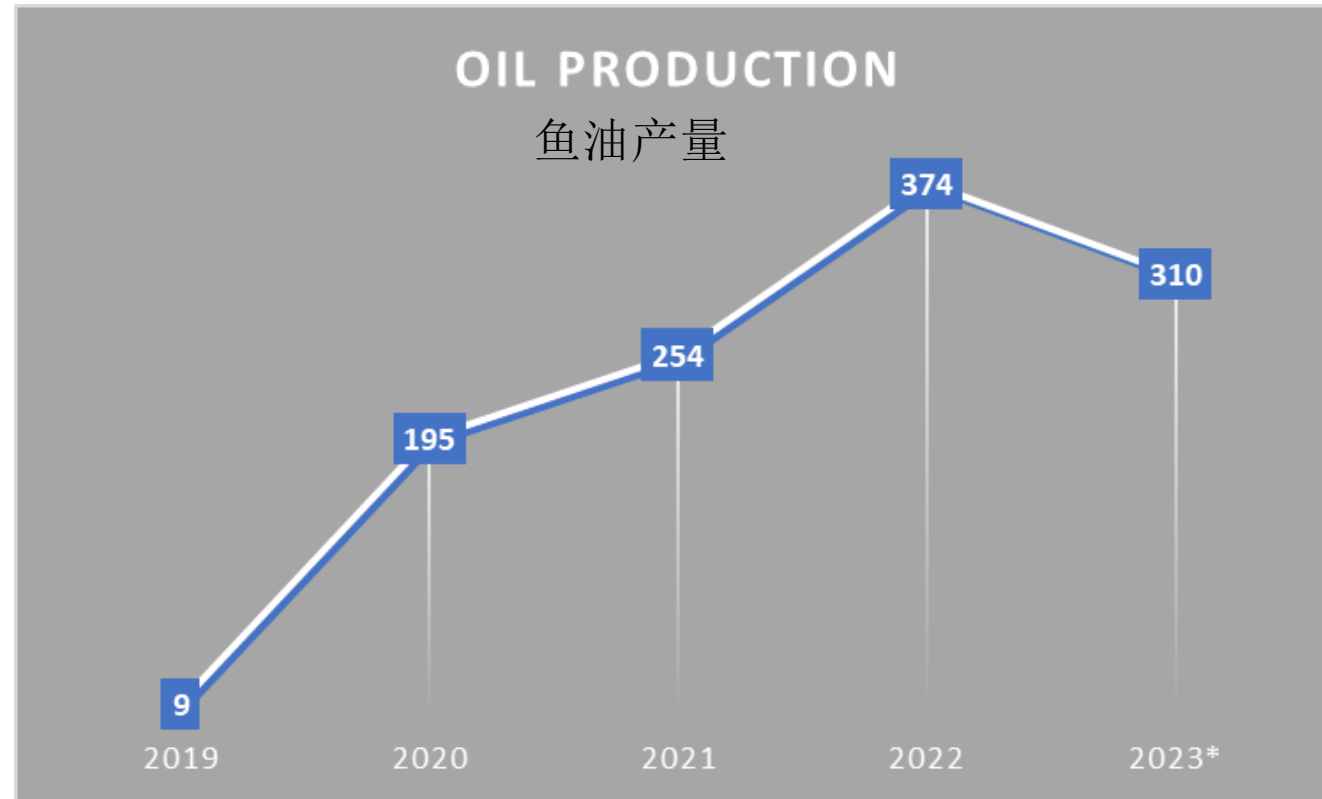
阿拉斯加狭鳕鱼/沙丁鱼

阿拉斯加狭鳕鱼/沙丁鱼

阿拉斯加狭鳕鱼

RUSSIA PRODUCTION OF FISH OIL 俄罗斯鱼油生产

- NORTH ATLANTIC/ MOROCCO-MAURITANIA OIL PRODUCTION 北大西洋/摩洛哥-毛里塔尼亚鱼油产量



头部生产商

品种

Top Producer

Species

GROUP FOR
NOREBO

55% Mackerel trimming
45% Cod/Haddock

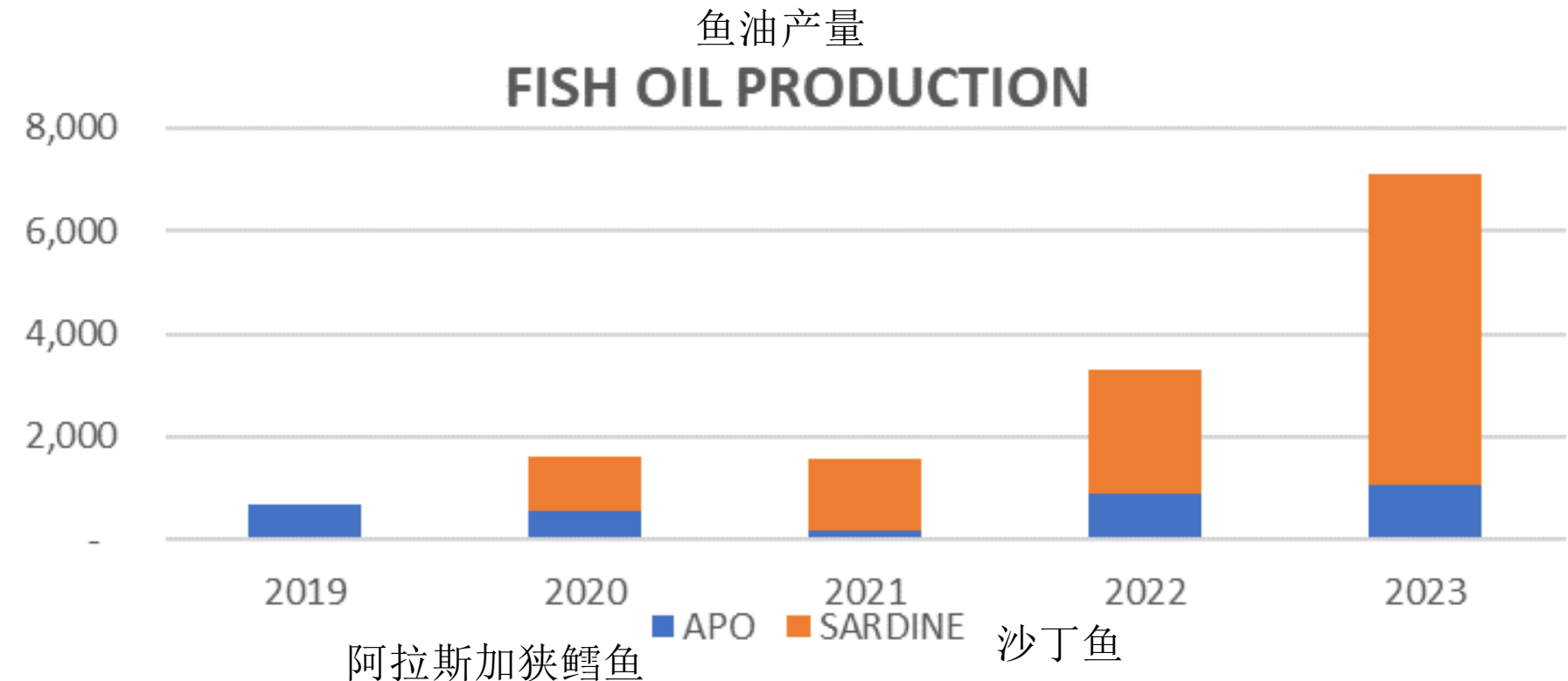
55% 鲭鱼边角料
45% 鳕鱼/黑线鳕

RUSSIA PRODUCTION OF FIS OIL 俄罗斯鱼油生产

- **FAR EAST ONBOARD OIL PRODUCTION BY SEPCIES 远东工船按品种生产鱼油**

| 品种 | Species | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------|---------|------|-------|-------|-------|-------|
| 阿拉斯加狭鳕鱼 | APO | 681 | 557 | 186 | 896 | 1,051 |
| 沙丁鱼 | SARDINE | | 1,079 | 1,368 | 2,406 | 6,069 |
| 总计 | TTL | 681 | 1,636 | 1,555 | 3,302 | 7,120 |

阿拉斯加狭鳕鱼
沙丁鱼
总计



With the progress of renewing fleet, the production of Alaska Pollock Oil will continue.

随着船队更新，阿拉斯加鳕鱼油生产将持续下去。

Production of Sardine Oil will also continue with installation of Oil separation lines on board of existing fleet

沙丁鱼鱼油生产也将持续下去，在现有船队上安装鱼油分离生产线

RUSSIA PRODUCTION OF FISH OIL 俄罗斯鱼油生产

- **FAR EAST LAND FACTORIES OIL PRODUCTION 远东陆地鱼油生产**



We estimate that production of oil by PILENGA/GIDROSTROY and YKRK in 2023 is about 7,000 mt, processing Alaska Pollock and Pacific Sardine

我们估计2023年 PILENGA/GIDROSTROY 和 YKRK 鱼油产量约为 7,000 吨，加工阿拉斯加狭鳕和太平洋沙丁鱼。

We expect further increase of production in South Kuril by these two companies as well as several new participants, which invest in land processing in South Kurils.

我们预计这两家公司以及在南千岛群岛投资陆地加工的几家新公司将进一步增加当地的产量。

THE DIRECTIONS OF TRADE

贸易走向

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

• NORTH ATLANTIC MOROCCO-MAURITANIA SOUTH PACIFIC 北大西洋/摩洛哥-毛里塔尼亚/南太平洋



100% of production of **FM** and **OIL** in the West part is supplied to Russia domestic market

西部鱼粉鱼油产量百分之百供应俄罗斯国内市场



Reasons:

Proximity to aquafeed and agree feed markets in West part of Russia and good demand in Russian West

原因:

靠近俄罗斯西部水产饲料和其他饲料市场，西部需求旺盛

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

• RUSSIAN FAR EAST 俄罗斯远东

90% of production of FM from FAR EAST is exported:

远东90%鱼粉产量出口至:

- China is the main market 中国主要市场
- Japan takes 2,000-3,000 mt annually 日本每年2-3千吨
- Korea takes around 500 mt annually 韩国每年5百吨



North Pacific

北太平洋

Oil is a developing item, and export market in 2022 was less attractive, than Russian domestic, that's why less export and more sales to Russia.

鱼油是一个开发中的项目，2022的出口市场吸引力不如俄罗斯国内市场，这就是为什么出口少俄罗斯国内销售高。

2023 shows different market conditions, so export was dependent on MOA license availability, if MOA is in place then Oil is exported to China.

2023年市场状况改变，出口取决于农业部许可证，如果有许可证，则可以出口至中国。

Other markets are still under trial, like export to Chile or South Asian Countries.

其他市场仍在试验中，例如出口到智利或南亚国家。

QUALITY PARAMETERS

质量参数

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

RUSSIAN FAR EAST QUALITY PARAMETERS: FM APO 远东质量参数：阿拉斯加狭鳕鱼鱼粉

Two types based on raw material for reduction: 两种生产原料：

- Trimmings after HG processing 去内脏边角料
- Trimmings after Fillets processing 去鱼片后边角料



去内脏边角料 去鱼片后边角料

| | | HG type | Fillets type |
|--------|---------------|---------|--------------|
| 粗蛋白质 | Crude Protein | 60-62% | 64-66% |
| 湿度 | Moisture | 6-8% | 6-8% |
| 脂肪 | Fat | 6-8% | 6-8% |
| 灰分 | Ash | 20-25% | 20-25% |
| 挥发性盐基氮 | TVN | 50-70 | 50-70 |

RUSSIA PRODUCTION OF FISHMEAL 俄罗斯鱼粉生产

RUSSIAN FAR EAST QUALITY PARAMETERS: FM SARDINE 俄罗斯远东质量参数:

Fresh catch reduction as Whole Round 全程新鲜捕捞生产



| | 整鱼 | Round fish |
|--------|---------------|------------|
| 粗蛋白质 | Crude Protein | 65-67% |
| 湿度 | Moisture | 6-8% |
| 脂肪 | Fat | 10-13% |
| 灰分 | Ash | 12-15% |
| 挥发性盐基氮 | TVN | 50-70 |

RUSSIA PRODUCTION OF FISH OIL 俄罗斯鱼油生产

RUSSIAN FAR EAST QUALITY PARAMETERS: OIL SARDINE

俄罗斯远东质量参数：长头小沙丁鱼

Fresh catch reduction as Whole Round 全程新鲜捕捞生产



| 分析项目 | 单位 | 测试结果 | 分析方法 |
|--|---------|-------------|--------------------|
| Item of analysis | Unit | Test result | Method of analysis |
| 湿度 Moisture(135C,2hr) | % | 0.18 | AOAC 930.15 |
| 粗脂肪（乙醚提取物）Crude Fat(Ether extract) | % | 98.43 | AOAC 2003.05 |
| 镁 Mg. Magnesium | ppm | 127.58 | AOAC 990.08 |
| 磷 P. Phosphorous | ppm | 24.00 | AOAC 990.08 |
| 酸价（脂肪）Acid Value(on fat) | mgKOH/g | 1.22 | AOCS Cd 3d-63 |
| 欧米伽3脂肪酸 Omega-3 fattyacids | % | 28.54 | AOCS Ce 1b-89 |
| 过氧化值 Peroxide Value | meq/Kg | 14.40 | AOCS Cd 8-53 |
| 游离脂肪酸 Free fatty acids(as oleic, on fat) | % | 0.61 | AOCS Cd 3d-63 |
| 不溶解杂质 Insoluble Impurity | % | 0.03 | AOCS Ca 3a-46 |
| 色度 Degree of color(Lovibond) | | 11.70 | AOCS Td 1A-64 |
| 碘值 Iodine Value | | 179.17 | AOAC 993.20 |
| 不皂化物 Unsaponifiables | % | 0.66 | AOCS Ca 6b-53 |
| 饱和脂肪酸 Saturated fattyacids | % | 25.11 | AOCS Ce1b-89 |
| 不饱和脂肪酸 Unsaturated fattyacids | % | 69.13 | AOCS Ce1b-89 |

EPA /DHA 18/11

RUSSIA PRODUCTION OF FISH OIL

俄罗斯鱼油生产

RUSSIAN FAR EAST QUALITY PARAMETERS: OIL APO 俄罗斯远东质量参数：阿拉斯加鳕鱼鱼油

TRIMMINGS AFTER HG AND FILLETS (MAINLY LIVER) 去内脏和切片后的边角料（主要是肝脏）



| 分析项目 | 单位 | 测试结果 | 分析方法 |
|--|---------|-------------|--------------------|
| Item of analysis | Unit | Test result | Method of analysis |
| 湿度 Moisture(135C',2hr) | % | 0.09 | AOAC 930.15 |
| 粗脂肪（乙醚提取物）Crude Fat(Ether extract) | % | 99.99 | AOAC 2003.05 |
| 镁 Mg, Magnesium | ppm | 118.46 | AOAC 990.08 |
| 磷 P, Phosphorous | ppm | 8.38 | AOAC 990.08 |
| 酸价（脂肪） Acid Value(on fat) | mgKOH/g | 0.54 | AOCS Cd 3d-63 |
| 欧米伽3脂肪酸 Omega-3 fattyacids | % | 19.60 | AOCS Ce 1b-89 |
| 过氧化值 Peroxide Value | meq/Kg | 19.91 | AOCS Cd 8-53 |
| 游离脂肪酸 Free fatty acids(as oleic, on fat) | % | 0.27 | AOCS Cd 3d-63 |
| 不溶解杂质 Insoluble Impurity | % | 0.05 | AOCS Ca 3a-46 |
| 色度 Degree of color(Lovibond) | | 5.90 | AOCS Td 1A-64 |
| 碘值 Iodine Value | | 147.23 | AOAC 993.20 |
| 不皂化物 Unsaponifiables | % | 0.70 | AOCS Ca 6b-53 |
| 饱和脂肪酸 Saturated fattyacids | % | 16.72 | AOCS Ce1b-89 |
| 不饱和脂肪酸 Unsaturated fattyacids | % | 78.50 | AOCS Ce1b-89 |

EPA /DHA 13/ 6



**SUSTAINABILITY
CERTIFICATION**

可持续性认证

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

- NORTH ATLANTIC/ MOROCCO-MAURITANIA/ S.PACIFIC 北大西洋/摩洛哥-马里塔尼亚/南太平洋



A.COD AND HADDOCK IS MSC CERTIFIED

鳕鱼和黑线鳕MSC认证

BLUE WHITING IS NOT CERTIFIED AND NOT IN THE PIF PROGRAMM. NOREBO IS PLANNING CERTIFICATION OF ITS OWN OPERATION FOR **FRIEND OF THE SEA (FOS)**

蓝鳕鱼未认证，不在PIF计划中。Norebo计划对自身捕捞作业进行FOS认证
MOROCCO-MAURITANIA OPERATION IS NOT UNDER CERTIFICATION

PROGRAMM

摩洛哥-马里塔尼亚捕捞作业不在认证计划下

SOUTH PACIFIC OPERATION: NOREBO IS THE SOLE QUOTA HOLDER GRANTED BY SPRFMO TO RUSSIAN GOVERNMENT. NOREBO OPERATION IS CERTIFIED BY **FRIEND OF THE SEA (FOS)**

南太平洋捕捞作业：Norebo是专属配额拥有者，由南太平洋地区渔业管理组织授权于俄罗斯政府；其捕捞作业有FOS认证



南太平洋

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产



RUSSIAN FAR EAST 俄罗斯远东

ALASKA POLLOCK FISHERIES: CERTIFIED BY **MSC**

阿拉斯加狭鳕鱼渔业: **MSC**认证

PACIFIC HERRING: NOREBO IS CERTIFIED BY **FRIEND OF THE SEA (FOS)**

太平洋鲱鱼: **FOS**认证

PACIFIC SARDINE: NOREBO IS CERTIFIED BY **FRIEND OF THE SEA (FOS)**

太平洋沙丁鱼: **FOS**认证

PACIFIC MACKEREL: NOREBO IS CERTIFIED BY **FRIEND OF THE SEA (FOS)**

太平洋鲭鱼: **FOS**认证



EL NINO 2023 EFFECT

2023年厄尔尼诺效应

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

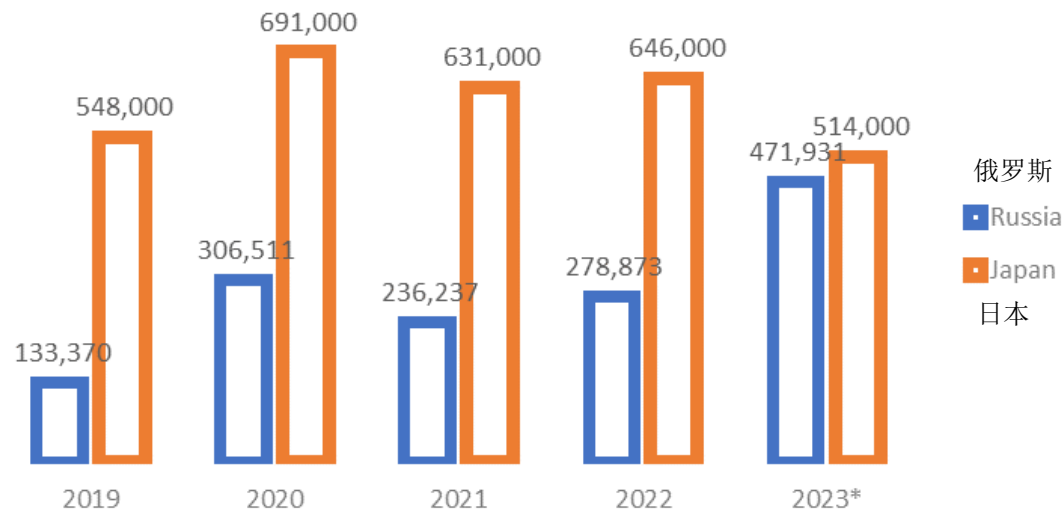
RUSSIAN FAR EAST 俄罗斯远东



North Pacific
北太平洋

太平洋沙丁鱼捕捞量

Catch Pacific Sardine



Short supply of FM&Oil from Peru triggered Chinese fishmeal plant in Liaoning and Shandong to start buying frozen Pacific Sardine from Russian Fleet, to process into fishmeal and oil.

秘鲁鱼粉鱼油供应短缺，辽宁和山东鱼粉厂从俄罗斯采购冻沙丁鱼生产鱼粉鱼油。

Good demand for frozen sardine induced Russian vessels to relocate the fleet for Sardine fishing. Hydrologic conditions in North-West Pacific during summer-autumn have been favorable for high level stock of sardine.

冻沙丁鱼良好需求促使俄罗斯方面重新部署沙丁鱼捕捞船队。夏秋季西北太平洋水文条件有利于沙丁鱼大量繁殖。

Russian Fleet has caught record high quantity of sardine in 2023, comparable to annual catch of Japan. By Nov 2023 Russia 471K vs Japan 514K.

2023年，俄罗斯船队捕捞沙丁鱼数量创历史新高，与日本捕捞量相当。截至2023年11月，俄罗斯捕捞47.1万吨，日本捕捞51.4万吨。

RUSSIA PRODUCTION OF FISHMEAL AND OIL

俄罗斯鱼粉鱼油生产

RUSSIAN FAR EAST 俄罗斯远东

We estimate that around 200,000 mt frozen sardine will be landed to Dalian/Qingdao to be processed into FM and OIL till end Dec 2023.

估计到2023年12月底有20万吨冻沙丁鱼达到大连和青岛用于生产鱼粉鱼油

Estimated production FM&OIL by fishmeal plants processing Russian frozen Sardine 俄罗斯冻沙丁鱼鱼粉鱼油估计产量:

- FM apprx 44,000 mt 鱼粉产量约4.4万吨
- OIL apprx 30,000 mt 鱼油产量3万吨



NOREBO ANTARCTIC KRILL



NOREBO IS LAUNCHING A NEW PROJECT: ANTARCTIC KRILL

THE OPERATION STARTS IN JANUARY 2024

- ❖ VESSEL: TRAWLER-FREEZER “KOMANDOR”
- ❖ LENGTH OVERALL: 121.4M
- ❖ BREADTH: 18.5M
- ❖ GROSS TONNAGE: 8913
- ❖ DEADWEIGHT: 4065TN

EQUIPPED WITH ADVANCED MACHINERIES FOR PRODUCTION IN LARGE SCALES:

- FROZEN KRILL
- KRILL MEAL
- KRILL OIL



NOREBO IS LAUNCHING A NEW PROJECT: ANTARCTIC KRILL

The screenshot shows the CCAMLR website header with the logo and name 'Commission for the Conservation of Antarctic Marine Living Resources'. It includes a search bar and a navigation menu with items like 'About CCAMLR', 'Conservation measures', 'Science', 'Fisheries', 'Compliance', 'Data', 'Meetings', 'Publications', and 'Circulars'. There are also language options for English, Français, Русский, and Español.

“KOMANDOR” IS IN THE LIST OF APPROVED VESSELS FOR CATCHING ANTARCTIC KRILL (CCAMLR source)

FISHING QUOTA GRANTED BY RUSSIAN GOVERNMENT:

120,000NMT FOR YEAR 2024

Krill Notifications - Summary

N&E Summary Krill Summary

CCAMLR Season

2023/24 Apply

| Vessel Name | Member | Subarea 48.1 | Subarea 48.2 | Subarea 48.3 | Subarea 48.4 |
|------------------------|--------------------|--------------|--------------|--------------|--------------|
| Antarctic Endeavour | Chile | N | N | N | |
| Fu Xing Hai | China | N | N | N | N |
| Long Fa | China | N | N | N | N |
| Hua Xiang 9 | China | N | N | N | N |
| Shen Lan | China | N | N | N | N |
| Sejong | Korea, Republic of | N | N | N | |
| Sae In Champion | Korea, Republic of | N | N | N | |
| Sae In Leader | Korea, Republic of | N | N | | |
| Antarctic Endurance | Norway | N | N | N | N |
| Jan Mayen | Norway | N | N | N | N |
| Antarctic Sea | Norway | N | N | N | N |
| Saga Sea | Norway | N | N | N | N |
| Komandor | Russian Federation | N | N | N | N |
| More Sodruzhestva | Ukraine | N | N | N | |
| Total Members | | 6 | 6 | 6 | 3 |
| Total Vessels | | 14 | 14 | 13 | 9 |
| Total Withdrawn | | | | | |

* Legend:
 N = Notified
 W = Withdrawn formally by Member or due to non-payment of fishery notification fees

NOREBO IS LAUNCHING A NEW PROJECT: ANTARCTIC KRILL

FEDERAL SERVICE FOR VETERINARY AND PHYTOSANITARY SURVEILLANCE
Federal State Budgetary Establishment
«NATIONAL CENTER FOR SAFETY OF AQUATIC FISHERIES PRODUCTS AND AQUACULTURE»

REGISTRATION CERTIFICATE

This is to certify that

KOMANDOR
Name of enterprise or vessel

Petropavlovsk-Kamchatskiy
Location of enterprise or port of registry of vessel

JSC AKROS
Name of Company-Owner of enterprise or vessel

***Kamchatskiy Kray, Petropavlovsk-Kamchatskiy,
bld. 13, 131, Mishennaya str.***
legal address of the organization

Is assigned with Registration Number **RU-041/ZJ6395**
For export to the People's Republic of China

the following fish products:

Fish meal
Fish oil
Krill meal
Shrimp oil

This Certificate confirms that the enterprise/vessel with the requirements of official documents of the People's Republic of China for the release of safe aquatic products and aquaculture and provides for periodic confirmation of the

VESSEL REGISTRATION FOR EXPORT TO CHINA (RU-041/ZJ6395)

- FISHMEAL
- FISH OIL
- KRILL MEAL
- SHRIMP OIL

NOREBO IS LAUNCHING A NEW PROJECT: ANTARCTIC KRILL

KRILL MEAL IS PLANNED TO BE PRODUCED AS:

- ❖ FEED GRADE
- ❖ FOOD GRADE

NOREBO IS IN THE PROCESS OF APPLICATION TO OBTAIN MOA LICENSE FOR KRILL MEAL, EXPECT JAN 2024

OPERATION IS BEING APPROVED BY FRIEND OF THE SEA (FOS)

Certificate No. LAFOS0017-2023-A
CERTIFICATE
Friend of the Sea



NOREBO IS LAUNCHING A NEW PROJECT: ANTARCTIC KRILL

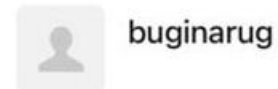
PLS CONTACT ME FOR FURTHER ENQUIRIES

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WHATSAPP: +852.9616.6061

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