

# Risky Business

Why smart investors must avoid unsustainable seafood operations

How overfishing and changes in EU fisheries laws affect the investment environment in fishing and seafood sectors



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# Summary

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**Financial institutions should become more informed of both the risks associated with unsustainable investments in the fishing sector and the regulatory priorities of the fisheries management system that underpins the economic developments within the industry.**

This briefing focuses on five principal areas of European Union (EU) policy in which the regulatory and investment environment governing fisheries has recently changed. These changes will affect the profitability of fishing companies and the market environment for the seafood supply chain.

In 2013/14, the EU revised its Common Fisheries Policy (CFP) amidst widespread concern that its policies were driving unsustainable investments into an oversized fishing fleet, and hence failing to prevent overfishing.

If effectively implemented, these new policies will shake-up the industry, and create substantial changes to the investment environment of the entire seafood supply chain. Access to fishing opportunities and public investments in fishing will be refocused to promote selective, low-impact and often smaller-scale fishing operations, while excess fishing capacity will be withdrawn from the fleet. Fishing opportunities for overfished stocks will be further reduced with the intention to speed up the recovery of fish stocks in the medium- to long-term.

## **This will increase the investment risks for businesses that engage in:**

- seafood supply chains that rely on fish from overexploited stocks – currently including, for instance, cod and whiting from waters west of Scotland and the Celtic Seas;
- unselective and destructive fishing, such as bottom trawl fisheries for deep-water species and purse seine tuna fisheries using fish aggregation devices;
- the EU's distant-water fleet, as tighter regulation and higher fee payments increase the cost of fishing; and
- vessel construction, which increases fishing capacity beyond the regulatory limits.

## **While new business opportunities should arise for:**

- selective, low-impact fishing operations benefitting from greater access to fishing opportunities, including handline fisheries for mackerel and pole and line fisheries for tuna; and
- the majority of EU fishermen who use passive gears and small vessels up to 12 metres in length, such as artisanal handline fisheries for sea bass, as these stand to gain from greater government support and access to fishing opportunities.

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# Introduction

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The EU is a significant global player in terms of its fisheries sector and seafood markets: it currently ranks fifth amongst the world's biggest seafood producers and leads the list of global importers when measured in terms of total value of imported fishery and aquaculture products.

The recent changes in the EU's main regulatory framework for fisheries – the Common Fisheries Policy (CFP),<sup>1</sup> the Common Market Regulation (CMO)<sup>2</sup> and the European Maritime and Fisheries Fund (EMFF)<sup>3</sup> – will affect the operations of fishing fleets and seafood companies and associated sectors – food processing, retailers, food services and restaurant, ship building, logistics and port services – and, above all, may positively benefit fishing communities all around Europe.

This briefing summarises some of the regulatory and operational changes that are likely to affect the investment environment in which EU seafood companies operate. We highlight five key areas of policy that Greenpeace believe will affect the profitability of fishing and seafood companies.

1. Fishing opportunities will be reduced for overfished stocks
2. Low-impact fishing should be incentivised and given preferential access to fishing opportunities
3. The 'no-discards' policy will make unselective fishing more costly
4. Higher sustainability standards will apply to EU's distant-water fleet
5. Fishing capacity has to be reduced to sustainable levels.

We intend this to serve as a reference for the finance community for future investment in the fishing sector. It will also help investors understand the underlying risks within an industry that has caused unprecedented levels of overfishing and environmental damage in our seas.

## Why did the EU reform its fisheries policy?

In 2008, the European Commission warned that the results of failing policies and lack of political will were "poor economic efficiency, high environmental impact, high fuel burn and low contribution of European fisheries to food supply." The total landings from EU fisheries had decreased by 30 percent during the preceding decade, employment had fallen by 40 percent and, by 2009, the sector was operating at an economic loss of almost 5%.<sup>4</sup>

In 2011, the European Commission tabled reform proposals, leading to the adoption of a new set of laws, which entered into force in 2014. This new Common Fisheries Policy regulates the activities of all EU fishermen and their vessels, regardless of whether they fish within or outside EU waters. It also regulates the marketing of seafood products and public investments in the fishing sector.

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1 Regulation No. 1380/2013 on the Common Fisheries Policy and associated rules.

2 Regulation No. 1379/2013 on the common organisation of the markets in fishery and aquaculture products and associated rules.

3 Regulation No. 508/2014 on the European Maritime and Fisheries Fund and associated rules.

4 EU Scientific, Technical and Economic Committee for Fisheries (2011) The 2011 Annual Economic Report on the EU Fishing Fleet (STECF-11-16).

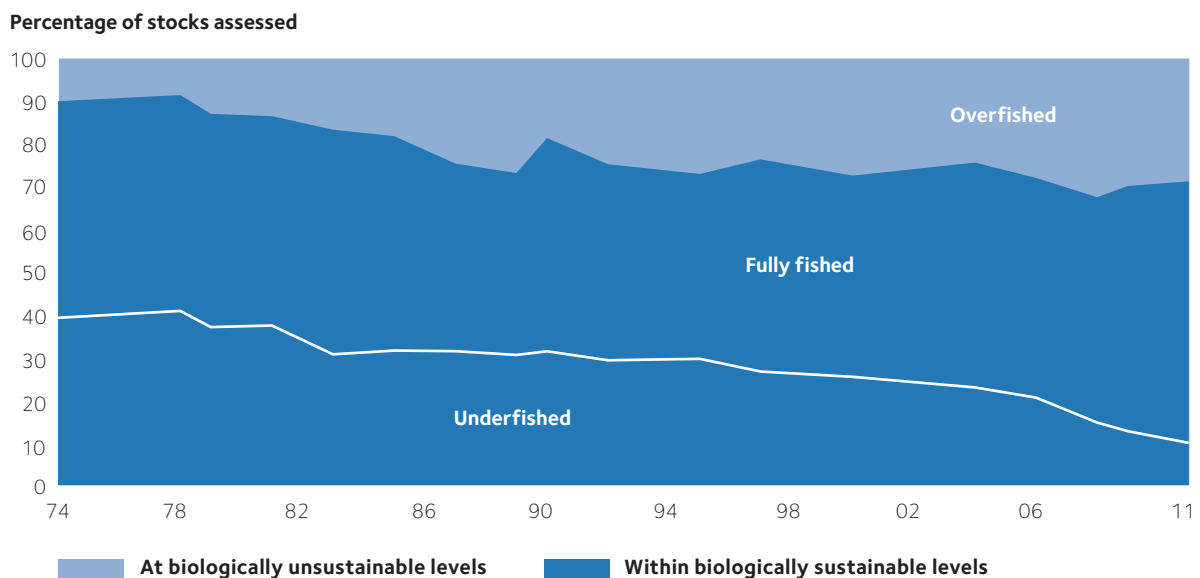
# Overfishing causes downtrends in productivity

According to the latest report from the Food and Agriculture Organisation (FAO) of the United Nations (UN), around 90 percent of global fish stocks are either fully exploited (61.3%) or overexploited (28.8%) (Figure 1). The situation in Europe is more acute, with 41 percent of stocks in the Atlantic and adjacent waters considered overfished, and rampant overfishing affecting at least 91 percent of assessed stocks in the Mediterranean and Black Sea.

In 2010, there were around 3.2 million fishing vessels active at sea globally, around 75 percent more than three decades ago. However, the reported global marine catch has stagnated at a level of around 80 million tonnes (Figure 2).<sup>5</sup> The FAO and World Bank have stated that current catch volumes could be achieved with just half the current fishing effort.<sup>6</sup> In fact, they estimate that overfishing is costing the world economy at least US\$50 billion (approximately €40 billion<sup>7</sup>) per year in lost revenues. The FAO stresses that rebuilding overfished stocks could increase production by 16.5 million tonnes and annual rent by at least US\$32 billion (approximately €25.6 billion).<sup>8</sup>

In summary, overfishing is unsustainable and uneconomical. Excess fishing capacity is eroding the present and future productivity of fish stocks, i.e. the resource base of the sector.

**Figure 1: Global trends in the state of world marine fish stocks, 1974-2011.**  
Source: FAO (2014) *The State of World Fisheries and Aquaculture 2014*.



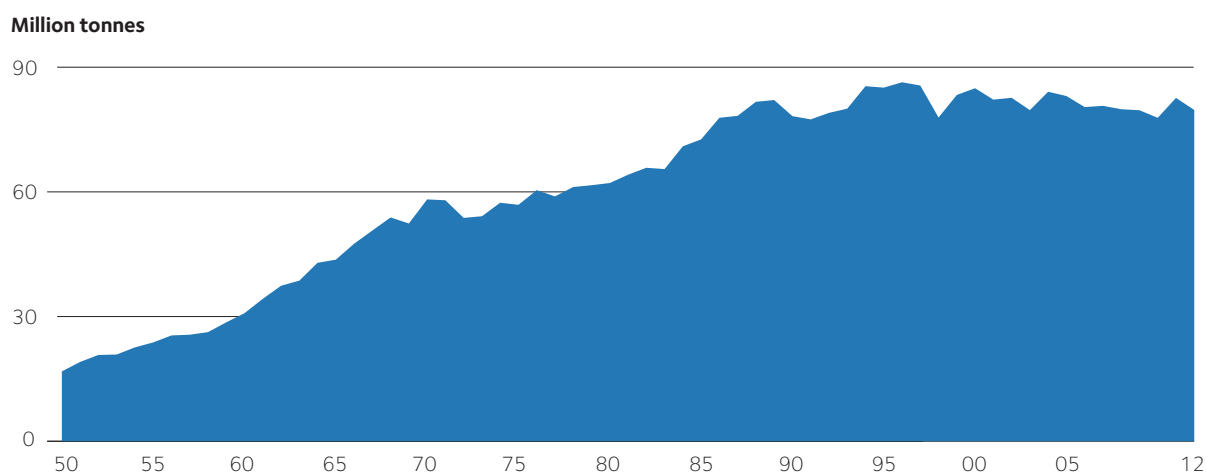
Notes: Dark shading – within biologically sustainable levels; light shading – at biologically unsustainable levels.

The light line divides the stocks within biologically sustainable levels into two subcategories: fully fished (above the line) and underfished (below the line).

- 5 Food and Agriculture Organisation (FAO, 2014) *The State of World Fisheries and Aquaculture 2014*. Rome. 223pp.
- 6 World Bank & FAO (2009) *The Sunken Billions: The Economic Justification for Fisheries Reform*.
- 7 US\$1 = €0.8002, 30-day average until 19 November 2014. Same for subsequent conversions.
- 8 Food and Agriculture Organisation (FAO, 2014) *The State of World Fisheries and Aquaculture 2014*. Rome. 223pp.

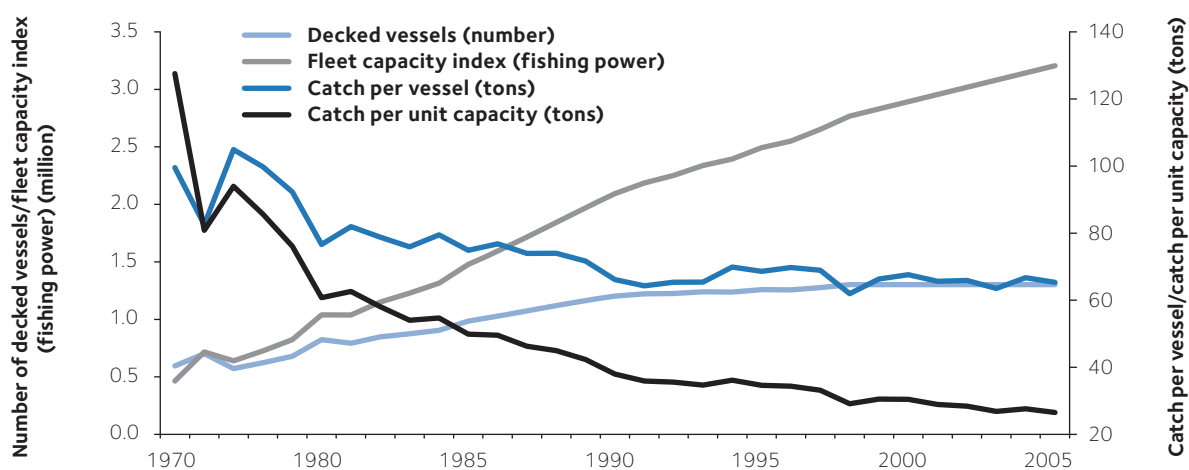
**Figure 2: World marine catches.**

Source: FAO (2014) The State of World Fisheries and Aquaculture 2014.



**Figure 3: Productivity, in terms of catch per vessel/unit capacity, of the world fishing fleet has been in decline since the late 1970s, while the number of vessels and fleet capacity has increased.**

Source: FAO 2009 The Sunken Billions.



# The paradox of overfishing

For decades, many fishing operations have invested in bigger, more powerful vessels equipped with ever advancing technology to improve navigation, to locate shoals of fish, to guide fishing gear and sort and store catches. Often, they have done so with the help of public subsidies or bank loans that are usually secured via a lien against the potential access to fishing opportunities.

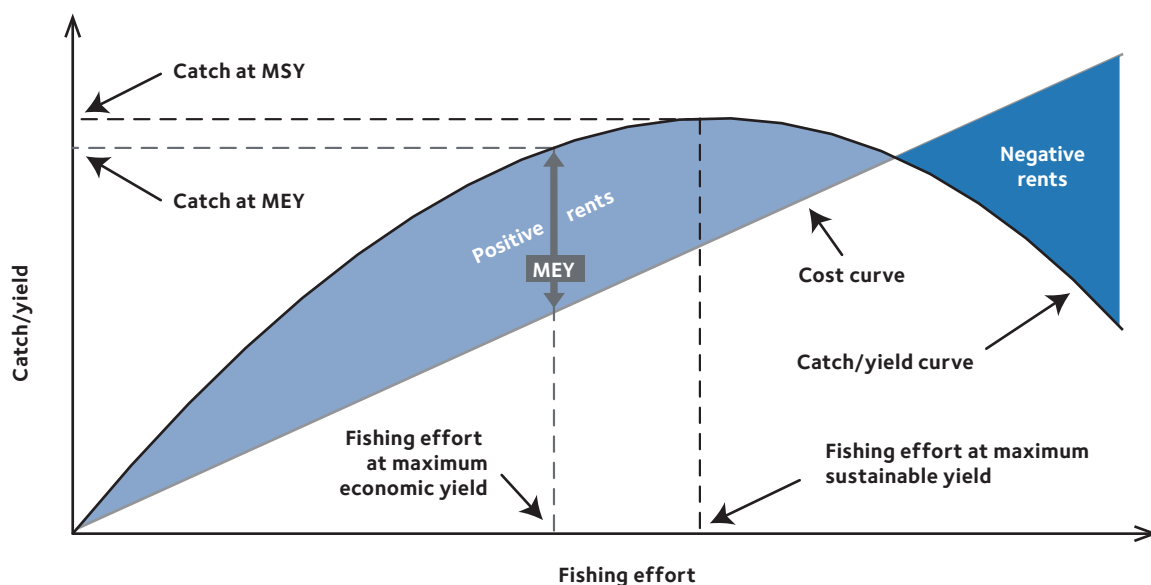
However, as fishing capacity and power increased, fish stocks plummeted, catch per unit effort decreased and competition within the sector became a threat to its economic viability. While this over-investment in fishing was perhaps most pronounced in the EU, it is consistent with global trends as shown in Figure 3.

Since the 1950s, fisheries managers have borrowed from the discipline of economics to design a number of fisheries management concepts. Perhaps the most widely used is that of the Maximum Sustainable Yield (MSY), which refers to the largest average yield (catch) that can theoretically be taken from a stock over an indefinite period under constant environmental conditions, while maintaining population size at the point of maximum growth. If exploitation rates are increased beyond this MSY threshold, the yield will begin to decrease with obvious negative impact on the economics of relevant fishing operations.

A second borrowed management threshold is the Maximum Economic Yield (MEY), which is the point at which the largest positive difference between total revenues and total costs of fishing is reached (including the cost of labour and capital). MEY is typically achieved at catches that are 10-20% smaller than MSY.

Paradoxically, the EU has until recently followed a management system that ignored both MSY and MEY. In fact, the EU is still fishing many stocks at rates far higher than the MSY threshold. The new rules require governments to reduce fishing pressure to below the MSY threshold, but continue to ignore MEY, despite the fact that it would be economically and ecologically beneficial.

**Figure 4: Maximum Sustainable Yield (MSY) and Maximum Economic Yield (MEY).**  
Source: FAO 2009. *The Sunken Billions*.



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# Key areas in the new Common Fisheries Policy that affect the investment environment in the fisheries sector

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The new CFP reform addressed every aspect of fisheries management. This briefing focuses on five principal areas in which far-reaching changes were adopted and are likely to affect the investment environment and profitability of fishing companies in the coming years.

## 1. Fishing opportunities will be reduced for overfished stocks

The new CFP requires EU governments to lower fishing pressure below the MSY threshold, which will allow fish stocks to recover or maintain a biomass level that can sustain maximum sustainable yields (MSY) (see Box 2). This is a major departure from previous targets that were merely aimed at preventing the ultimate disaster of stock collapse.

Between 2015 and 2020, further reductions in total allowable catches are required for all stocks that are currently overfished (Article 2 of the CFP Regulation). This includes, for example, many bottom living species (e.g. haddock, whiting, plaice and sole) in the waters west and south west of Scotland and Ireland, in the Irish Sea, Bay of Biscay and Iberian Sea, cod in both the North Sea and Baltic Sea, as well as almost all stocks in the Mediterranean Sea, including seafood staples like hake and anchovy.

As stocks recover, the cost of fishing is likely to decrease as the catch per unit effort (i.e. the total catch divided by the total amount of effort used to harvest the catch) increases and the quality of the products (e.g. the size and maturity of the fish) improves. This should bring long-lasting economic benefits for the whole industry, often within a comparatively short timeframe of around five years. The exact recovery potential and timeframe depends on factors that are unique to each fishery, as well as the adequacy of compliance with the new rules by the Member State.

## 2. Low-impact fishing should be incentivised and given preferential access to fishing opportunities

The new CFP requires Member States to put in place incentives, including those of an economic nature, to promote selective and low-impact fishing. The rules specifically foresee that access to fishing opportunities is reorganised, moving from an allocation system that is predominantly based on historic catch levels to one that is performance-based and incentivises low-impact fishing (Articles 7 and 17 of the CFP Regulation). The rules also foresee that governments will draw up specific action plans for the development, competitiveness and sustainability of their small-scale coastal fishing sector (Article 18 of the EMFF Regulation).

If effectively implemented, these provisions will shake-up the fishing industry and substantially change the investment environment in the whole seafood supply chain. Present systems of managing access benefit the companies that have fuelled the unsustainable expansion in fishing capacity and overexploitation of stocks; whereas the mandatory use of transparent and objective social, environmental and economic criteria should in future ensure preferential access for fishermen using sustainable, low-impact fishing methods, while broadening access for micro- and small-scale fishing enterprises.

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Dimitris Zannes, a low impact fisherman from the island of Andros in Greece, uses fishing nets which are left out at sea with mesh sizes big enough to let all juvenile fish swim through the net unharmed. He is concerned that if we continue to treat the sea like an industry and take more fish than is sustainable, we will bankrupt her and the fishing sector.



### **3. The ‘no-discards’ policy will make unselective fishing more costly**

A new no-discard policy will be phased in between 2015 and 2019, which means that, over time, all fish managed under quota and caught in the process of fishing must be brought to port and not wastefully discarded overboard. Generally, all fish will be counted against the quota and fishermen will be allowed to sell most of it. However, if fishermen fail to improve the selectivity of their gear, a greater proportion of their landings will consist of small and/or poorer quality, low-price fish, counting against their quota and taking away storage space for higher quality, higher value catches. Fishermen using bottom trawlers and other unselective fishing gear are likely to be impacted by this rule, while those using more selective fishing methods, like line and trap fishing, are likely to be less affected.

Some governments might seek to soften the economic impact of the no-discard policy, e.g. by publicly funding equipment to help sort and store catches on board vessels. But the main emphasis of the law is on improving selectivity and shifting support to selective alternative fishing methods that already exist.

### **4. Higher sustainability standards will apply to the EU’s distant-water fleet**

The EU catches about 1.2 million tonnes of fish per year abroad in international waters and the waters of non-EU countries – almost one quarter of its total catch. The majority of vessels participating in the EU’s distant-water fisheries are either purse seiners or long-liners targeting tuna and similar migratory fish species, or pelagic trawlers targeting mackerel, sardines and herring, or bottom trawlers targeting various ground-dwelling fish.

Under the new rules, the distant-water fleets must comply with standards equivalent to those of the EU’s domestic fisheries. This is likely to require investments, resulting in higher operating costs to comply with applicable standards (e.g. labour and fisheries management). Vessel owners must also increase their contributions towards fee payments made by the EU for fishing in the waters of other nations.



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The *Albacora Uno* is a massive purse seiner using a highly unselective method of fishing overfished tuna stocks with fish aggregation devices. This fishing method is associated with high by-catch rates of vulnerable sharks species and other non-targeted tuna species. The vessel is owned by Albacora S.A. in Spain, but is mainly fishing in the Western Central Pacific.



## 5. Fishing capacity has to be reduced to sustainable levels

The EU has also strengthened its rules on fleet management. It requires Member States to adopt action plans to eliminate excess fishing capacity where a fleets' ability to catch fish is disproportionately large when compared to the available fishing opportunities.

EU fishing capacity increased to the extent that in 2010 experts recommended that it should reduce its fishing capacity by 30% from 2007 levels in the short-term (by 2017 at the latest), and by 40% in 2022, in order to compensate for technological improvement.<sup>9</sup>

In November 2014, at least 7 countries in the EU, including Italy, France and Spain, have already indicated that reductions in the fishing capacity of their fleets will be needed. However, economic and biological indicators suggest that more fleets in the EU are operating at excess capacity, causing unsustainable rates of stock exploitation and eroding the potential maximum economic yield of associated fisheries.

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**9 Studies in the Field of the Common Fisheries Policy and Maritime Affairs Lot 4: Impact Assessment Studies related to the CFP. Final report Fish/2006/09. European Commission. March 2010.**

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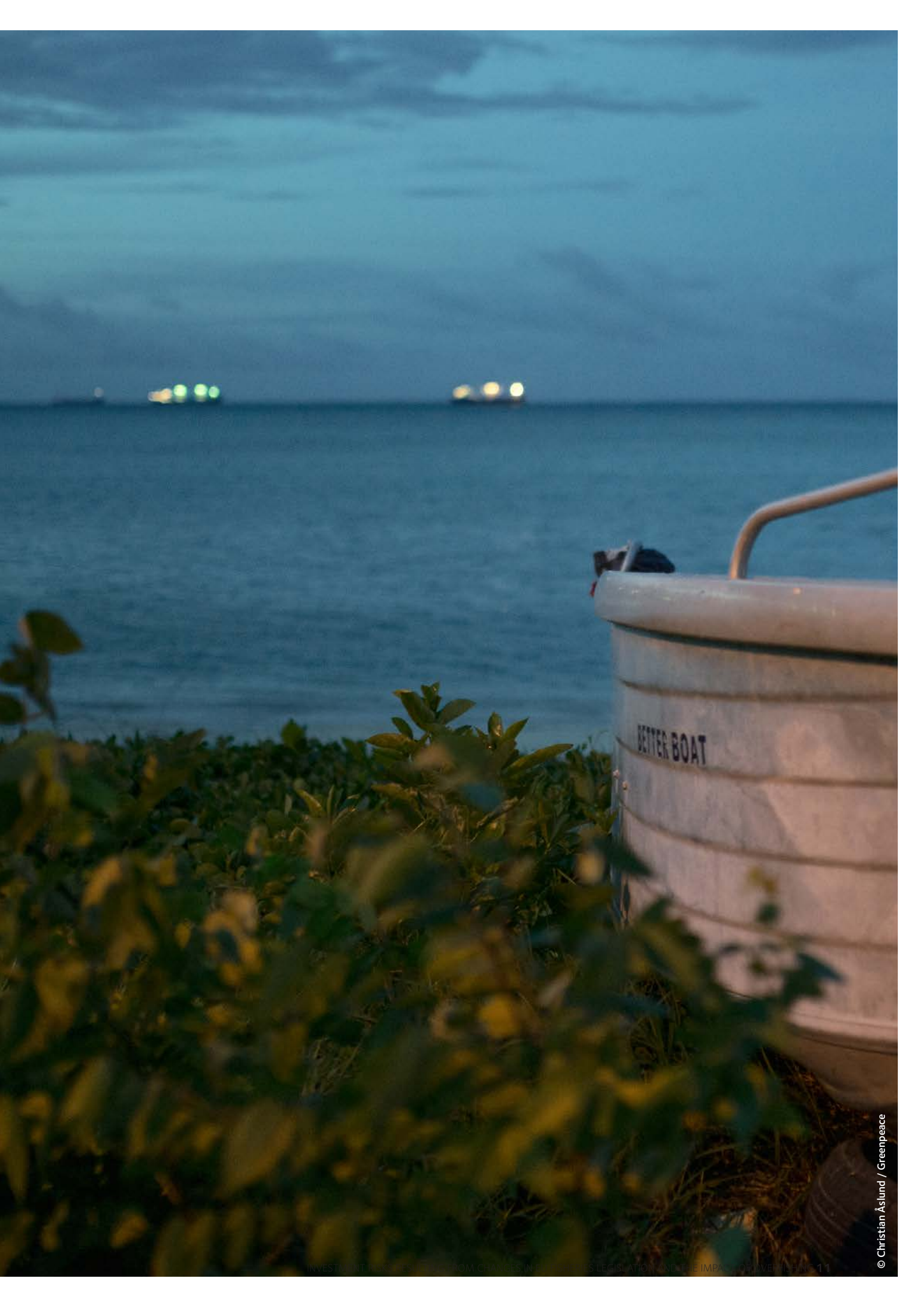
# Conclusion

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Overfishing and the associated over-investment in fishing capacity are costly from both an ecological and economic point of view. As a result of recent changes in the EU's Common Fisheries Policy and growing public attention to the problem of unsustainable fishing, the fishing industry has come under pronounced scrutiny. Governments have committed to recover the health of fish stocks, eliminate excess fishing capacity and transition towards sustainable, low-impact fishing.

Greenpeace calls on investors to support this transition towards low-impact fishing and to divest from schemes and business that increase or maintain overcapacity and drive unsustainable rates of fishing.

We further encourage investments in coastal communities that promote and support the transition towards stock recovery and low-impact fishing, particularly businesses where the owners are working on their vessels and where businesses help to maintain long-term local employment in coastal communities.



Published in 2015  
by Greenpeace France  
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France

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