Net-Works is an inclusive business model that collects discarded fishing nets through coastal communities and recycles them into carpet tile. This programme was made possible through close partnerships and collaboration between Interface, one of the world’s largest manufacturers of commercial carpet tile; the Zoological Society of London (ZSL), an international conservation charity, and Aquafil, a yarn producer and supplier. Net-Works enables fishing communities in developing countries to sell waste nets back into a global supply chain.

Interface receives a fully recycled source of nylon for carpet tile production, and the local community receives long-term incentives to protect their natural environment. To date, Net-Works has collected 66,860 kgs of discarded fishing nets across 14 collection sites in The Philippines. As a simple description, these nets are enough to go around the world over 1.5 times. If not collected, these nets can persist for centuries, taking a serious toll on the environment and marine life.
**Context**

Interface is one of the world’s largest manufacturers of commercial carpet tile. Its founder, Ray C. Anderson, served as co-chair of the President’s Council on Sustainable Development during President Clinton’s administration, from 1997-1999. For 41 years, the company has consistently led the industry through innovation, and now leads the industry in environmental sustainability. It has made a commitment to build environmental considerations into its business decisions. It is setting the pace for development of modular carpet using materials and processes that take less from the environment by implementing “Mission Zero,” a 20-year-old company-wide promise to eliminate any negative impact it has on the environment by the year 2020.

Aligned with Interface’s Mission Zero goal to source 100% recycled material for its carpet tiles, Net-Works has a presence as an innovative, cross-sector initiative designed to tackle the growing environmental problem of discarded fishing nets in some of the world’s poorest coastal communities. The Net-Works programme evolved from a need to find a better way of doing business.

At the core of the Net-Works programme is a uniquely collaborative partnership, a dedicated working group made up of key decision makers at Interface and ZSL. By working together in close partnership, Interface and ZSL are creating a solid business solution with long-term positive impacts on marine and freshwater ecosystems while also providing financial opportunities to some of the poorest people in the world.

Whilst ZSL brings expertise in conservation and community engagement, Interface brings its knowledge around supply chains, engineering knowledge, sustainability expertise and the commercial skills to develop an inclusive business. ZSL has a long track record of working with communities on conservation projects. Conserving marine habitats is a main focus of ZSL’s work, with a mission target to protect and restore 1 million km² of coastal and marine habitats by 2026. The partnership ensures that the communities that Net-Works engage with receive the financial benefits for their role in net collection, giving them an incentive to take care of their natural environment long term.
HOW DOES IT WORK?

Net-Works enables fishing communities in developing countries to sell waste nets back into a global supply chain. Interface receives a fully recycled source of nylon for carpet tile production, and the local community receives long-term incentives to protect their natural environment.

So far, the programme has been established in 14 rural coastal areas in the central Philippines, including Danajon Bank and the nearby Bantayan Islands. Each of those 14 areas has its own community bank. Net-Works is expanding and has recently started collecting in Northern Iloilo, also in the central Philippines. In addition, since 2015, Net-Works is in the process of replicating its model in other countries.

Step-by-step process

Net-Works created a fairly traded supply chain for Nylon 6 fishing nets which uses an inclusive business model to benefit poor communities and the environment in the long-term through these six steps:

1. **Collecting & cleaning**
   The local communities collect, aggregate and clean discarded Nylon 6 fishing nets.

2. **Buying**
   The nets are then sold through Net-Works, providing participants with a supplemental income.

3. **Baling**
   The core partners have developed a mechanical baling machine which compresses and packs the nets without electricity.

4. **Shipping**
   The nets are then shipped to Aquafil as the yarn producer and supplier.

5. **Regeneration**
   Aquafil’s ECONYL® Regeneration System turns the Nylon 6 from the waste nets into 100% recycled carpet yarn.

6. **Production**
   Interface purchases this 100% recycled yarn and turns it into beautiful carpet tile.
The impacts

Net-Works empowers communities. Through collection of the fishing nets, fishers and community members, who often live close to the poverty line, can earn a supplemental income. Net-Works is closely integrated with valuable community banking systems that support and strengthen the local, developing economy and provide new financial opportunities for residents. Community banking empowers programme members to establish forms of micro-insurance, savings and loans for the benefit of both individuals and the community.

Net-Works also helps to ensure that end-of-life fishing nets, now an additional source of revenue for residents, will no longer be discarded in the natural environment. Net-Works not only brings Interface one step closer to its goal of closed-loop manufacturing, but also brings ZSL closer to its conservation goals of improving coastal environments, including villages, beaches and waters as well as conditions for marine life.

Results and progress

To date, Net-Works has collected 66,860 kgs (147,401 lbs) of discarded fishing nets across 14 collection sites in Danajon Bank and the Bantayan Islands. As a simple description, these nets are enough to go around the world over 1.5 times. If not collected, these nets can persist for centuries, taking a serious toll on the environment and marine life.

From the nets collected, 51.8 tonnes of nets have been shipped to Aquafil and absorbed into Interface’s supply chain for use in its products. In the Philippines, there were 29,634 kgs of nets collected in 2014.

Beyond the nets, the community is provided with access to finance through Community Banks (COMSCAs) or local microfinance initiatives. There are 508 members of COMSCAs available to date. Regular COMSCA or microfinance meetings provide a platform to engage the community around conservation – whether on tackling plastic waste or wider interactions between the community and the local ecosystem.
The challenges

There are at least three different challenges that Net-Works attempts to tackle:

1. Closing the loop on marine plastics

There are 640,000 tonnes of fishing gear abandoned in the oceans each year. Net-Works provides a valuable supply chain solution to the problem of marine waste. The programme incentivizes net collection, reduces the damaging effects of ghost fishing and enables participants to take an active role in improving the condition of their natural ecosystems.

2. Access to finance

54.8 million people rely on the oceans for their livelihoods, and up to one billion people depend on fish for a healthy balanced diet. Waste becomes a source of wealth as Net-Works enables access to local savings groups. These community banks provide opportunities for participants to build savings for their future, to access microloans in times of need, and to learn more about financial security.

3. Sustainable manufacturing

As a company, Interface has committed to eliminate its dependence on virgin fossil fuels. As part of Mission Zero, Interface has set a goal to eliminate its environmental impact by 2020. Net-Works provides an opportunity to access a new source of post-consumer nylon to feed into a supply chain, and increases the capacity to produce 100% recycled nylon yarn products.
Net-Works aspires to create an inclusive business model, a sustainable, social enterprise that engages the poorest sectors of society into a global supply chain. It provides positive impact for people, for the environment and for business.

Artisanal fishing can be very opportunistic and dependent on the level of catch. Net-Works offers a pro-poor solution in that it provides a supplemental income through the nets. It also empowers the local community through access to regular savings and loans – hence offsetting the unpredictable nature of artisanal fishing.

Net-works has also built the programme such that it is financially sustainable. The revenue from the sale of the nets supports the operational costs of the programme, while still keeping as much of the value of the nets within the communities. In particular, the COMSCA model community banks are self-administered and self-governing. Once set up they benefit from the Net-Works supply chain, but are not dependent.

In fact, Interface and ZSL are continuously scouting additional locations around the world for potential Net-Works expansion in the coming years. Net-Works committed to expand to three countries in three years; expanding in the Philippines, launching in Cameroon in 2015 and launching an additional hub in 2016.

This case study was developed in collaboration with Interface. For more information on the initiative visit: www.net-works.com.

Do you have an innovative initiative that contributes to preventing or reducing marine litter? Please visit www.marinelitternetwork.org and share information or contact:

Heidi Savelli
Programme Officer, Marine Litter
United Nations Environment Programme
Email: gpml@unep.org