Sustainable Insight
A roadmap to responsible soy
Approaches to increase certification and reduce risk
In collaboration with IDH, WWF, FMO and IFC
May 2013
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Soy is one of the world’s most important and profitable agricultural commodities. But it is also controversial because its production is associated with significant environmental and social problems including deforestation and poor working conditions.

Many of these problems could be addressed by increasing the amount of soy that is certified against social and environmental production standards. Currently only 2-3 percent of global soy production is certified under a market recognized scheme. This paper has been prepared by KPMG International, in collaboration with The Sustainable Trade Initiative (IDH), WWF, FMO (the Netherlands Development Finance Company), and IFC (a member of the World Bank Group).

Introduction

It seeks to address key questions including:

- What is driving the growth of the global soy industry?
- What sustainability challenges does the soy industry face?
- How can mainstreaming the supply of certified soy address these challenges?
- Does certification of soy make business sense for producers?
- What barriers are preventing the mainstreaming of certified soy?
- How can these barriers be overcome?
- What should corporate end-users of soy do now?
Executive Summary

Global demand for soy set to soar
• Demand for soy is set to soar as population growth and the growth of the global middle class drives demand.

• Demand from the animal feed sector is a key driver as is the growth of the biofuel industry, driven by some countries’ commitments to biofuel use.

Soy faces sustainability challenges
• Soy production has been implicated in the degradation of ecologically sensitive areas and in poor labor practices.

• According to WWF, soy farming is the direct driver of at least half of native vegetation clearance in some of the world’s most threatened regions.

• Soy also plays an indirect role in deforestation in the Amazon by providing an incentive for forest clearance.

• Labor conditions have been an issue with some cases of forced labor documented.

Compliance with national law is a problem
• There is evidence to suggest that a large proportion of small-scale soy producers in Brazil and Argentina are not compliant with national legal requirements on labor conditions, forest management, and basic farm health and safety requirements.

Why responsible soy matters
• Increasing the production of certified soy will help to address the industry’s environmental and social challenges.

• Sourcing certified soy will help to reduce reputational and commercial risks faced by soy end-users such as food companies and manufacturers of animal feed and biofuels.

Four key barriers to certified soy
• KPMG has identified four key barriers preventing the growth of soy certification:
  - weak market demand for certified soy
  - variable availability of certified soy
  - fragmentation of the certification landscape
  - the cost of certification for producers.

Certification makes business sense for producers
• KPMG analysis suggests that the average payback period for producers’ investment in certification may be as little as 3 years. The best-prepared large producers can recoup their investment within 1 year while less-prepared medium-sized producers may achieve return on investment in less than 5 years.

Certification brings further benefits to producers
• Further benefits of certification for producers include access to growing markets for certified soy and access to discounts on agricultural inputs and finance.

An action plan to drive the growth of certified soy
• Addressing the four key barriers to certified soy production is not a job for producers alone.

• It needs a collaborative approach from both producers and end-users, traders and processors, investors and certification bodies, and governments and consumers.

• See action plan on page 16.

End-user strategies
• End-user companies such as manufacturers of food, animal feed and biofuel, arguably face the greatest risks from slow progress towards certification.

• KPMG recommends that these companies evaluate the issues and potential impacts, and develop a response strategy and plan of action.

• See framework of actions on page 18.
Global demand for soy set to soar

Soy is one of the world’s most valuable food crops, yielding more protein per hectare than almost any other crop. As the world’s population continues to grow larger and wealthier (the total world population is forecast to reach nine billion by 2055), protein demand is expected to grow steadily.

Previously ‘poor’ consumers are moving up the ‘protein ladder’ from a predominantly vegetarian diet to one that includes fish, poultry and meat. By 2025 demand for pork and beef is expected to grow by more than 20 percent and demand for chicken by nearly 30 percent, according to the Food and Agricultural Policy Research Institute (FAPRI).

Soy is likely to play an important role in meeting this implied resource challenge, primarily through forming one of the key components in animal feed.

Currently about 70 percent of soy produced is used in animal feed. The high protein content of soy improves feed-to-meat ratios, particularly in poultry and pigs, but also in fish.

Demand from the animal feed sector has been a key driver behind the rapid expansion of soy production in recent years, from 155 million tons in the 1998/1999 season to an estimated 265 million tons in the 2011/2012 season—a 70 percent increase in just over 10 years. The role of soy in animal feed was reinforced when in 2001 the European Union (EU) banned the use of meat and bone meal in animal feed following the bovine spongiform encephalopathy (BSE or “mad cow disease”) crisis.

The use of soy oil in biodiesel has been the second biggest driver of soy demand. The growth in biodiesel production in turn has been driven by biofuel targets set by both the US and the EU. In the EU, 10 percent of all petrol and diesel used in transport must be biofuel-derived by 2020; in the US 36 billion gallons of renewable fuel are to be used annually by 2022. The consumption of soy oil for the purposes of biodiesel in the EU has grown from 0.6 million tons in 2006 to an estimated 1.1 million tons in 2011, or a growth of 90 percent over just five years. Soy now accounts for 11 percent of the feedstocks used in the production of biodiesel in the EU.
While demand for soy is riding high, its reputation is arguably at risk because soy is implicated in the degradation of ecologically sensitive areas and in poor labor practices.

“The responsibility of soy production in its current form has been widely questioned,” says Cassio Moreira, Program Coordinator for Agriculture and the Environment, WWF-Brazil.

“For example, soy has been identified as one key driver of the destruction of the Brazilian savannah, notably the Cerrado, the biologically richest savannah in the world, and the Brazilian rainforest. In addition, labor conditions on soy farms in Latin America and emerging Asia have been criticized.”

Brazil and Argentina account for nearly half of global soybean production. Most of the recent growth in production has been due to increasing the areas under cultivation in Brazil and Argentina, rather than yield improvements.

10 million hectares of new land for soy production were added in Brazil between 2000 and 2010 (an area roughly equal to the size of South Korea), a growth of 73 percent; eight million hectares were added in Argentina, a growth of 75 percent. It is estimated that up to half of this area may have been newly deforested. This expansion has been driven by a combination of factors, including the building of roads to connect isolated areas to ports, and government subsidies to soy producers. New breeds of soy that perform well in areas previously unsuitable for soy production, such as the tropical and acidic Cerrado, have also played a part.

According to Moreira of WWF, soy farming is the direct driver of at least half of native vegetation clearance in some of the world’s most threatened regions, such as the Brazilian Cerrado and Chaco Province in northern Argentina. In other areas, such as the Amazon, soy plays a more indirect role in deforestation.

“Even where soy farmers are not the primary clearers of forest land, there is still a strong link between soy and deforestation,” according to KPMG’s Jerwin Tholen.

“Cattle farmers may clear the land, but the reason it pays them to do so is that there is likely to be a subsequent buyer for that land after they move on – and that subsequent buyer could be the soy farmer. In Brazil’s Mato Grosso state, for example, clearing forest to create pasture can increase the land value by a factor of five, while upgrading the land to soy production doubles the price again.”

In addition to the issue of deforestation, soybean monoculture can cause soil erosion and nutrient depletion. Our research suggests this can be an problem in Argentina especially, where land is commonly leased by farmers under short term contracts of 1 or 2 years, rather than being owned outright. These short term arrangements provide producers less incentive to maintain soil quality,” says Jerwin Tholen of KPMG.

Labor conditions have also been an issue with some cases of forced labor documented, particularly in emerging producing countries such as India and China.
There is evidence to suggest that a large proportion of small-scale soy producers are not compliant with national legal requirements on labor conditions, forest management, and basic farm health and safety requirements. For example, a survey by Icone in Brazil found that most of the producers interviewed were not compliant with the Brazilian requirement to reserve part of their land for indigenous vegetation.¹⁶

The road to legal compliance can be arduous and costly for producers. Returning illegally deforested land to forest status can mean significant income losses. Paying full taxes and social security for workers that were previously employed informally can also add several percentage points to operating costs. These costs, coupled with the difficulties governments face in enforcing laws, provide a disincentive for producers, particularly smaller ones, to strive for legal compliance.

The Argentinian and Brazilian governments are making efforts to put compliance within reach for the majority of producers. They have made legal requirements more practical, and set up processes for producers to take incremental steps towards full compliance. The new Forest Code in Brazil, which seeks a compromise between environmental and economic objectives, is an example of this. New deforestation is prevented while existing agricultural producers are either given amnesty (the small producers) or presented with a clear and pragmatic process for restoring deforested land (the larger producers).
The GMO issue

While most efforts towards making soy cultivation more responsible have focused on issues related to deforestation, labor relations and carbon emissions, another concern relates to the use of genetically modified organisms (GMOs). The use of genetically modified (GM) soy has been the subject of heated debate, and anti-GMO campaigners insist that GM soy can never be considered ‘sustainable’.

In Argentina, nearly all soy grown is GM, while in Brazil around 75 percent of soy was expected to be GM in the 2011/12 harvest. The main arguments against the use of GM soy relate to uncertainty over the impact of GM crops on human health and on the environment. Regarding the latter, anti-GMO campaigners argue that soy could negatively impact biodiversity through accidental cross-pollination resulting in the supplanting of unmodified species by more competitive GM hybrids. The proponents of GM soy argue that it results in a net environmental benefit through the reduced need for fertilizers, and increased yields.

A joint review of the literature on the environmental impacts of GM soy, conducted in 2011 by the University of Wageningen and the consultancy companies CREM BV and Aidenvirionment, showed that the evidence on the environmental impact of GM soy is mixed.

The study found that, due to a lack of open pollination as found in GM corn, GM traits are unlikely to spread in environmental areas outside of the direct production area, but also that GM soy may have contributed to the spread of herbicide-resistant weeds. Yields are not always structurally higher for GM soy compared to non-GM soy, but the report concludes that GM soy probably contributes to the spread of zero-tillage, an agricultural practice that results in greater nutrient retention in the soil.
Why responsible soy matters

The urgency of the problems around the rapid expansion of soy cultivation demands an urgent response, according to Jan Nicolai, Senior Soy Program Officer at IDH. “Acting across the supply chain to develop a market for more responsibly produced soy is crucial to addressing deforestation, labor standards, chemical use and other issues. Soy certification is still in its early stages but it is putting in place processes and incentives for continuous improvement that have potential to deliver real progress.”

Using certified soy also provides companies that finance soy production – or produce soy-derived food, animal feed or biofuels – with an opportunity to reduce their reputational risk.

In recent years, NGOs and activists have conducted high profile international campaigns to draw global attention to damage done to Asian tropical rainforests by the palm oil industry. Several high profile companies and brands have been targeted. The palm oil campaigns have prompted many companies to review their palm oil sourcing policies and pay attention to their supply chains.

“Global NGO and activist campaigns have targeted palm oil in recent years, but attention is also being paid to soy. Rapid increases in soy production and its environmental and social impacts mean that soy is a potential target for campaigners. This poses a risk to companies that use soy, particularly large food producers,” says Jerwin Tholen of KPMG.

“Big companies understand that they are responsible for protecting the worlds’ most important ecosystem services for their long term profitability. Of course, they are also vulnerable to public perceptions, and the high costs of product recalls. More generally, companies that are forced to make sudden changes to secure responsible supply in reaction to public pressure may end up spending more than companies that develop a strategy for doing so. We are beginning to see more corporate attention being paid to the soy supply chain.”

For example, the Consumer Goods Forum – a network of over 400 retailers and other organizations with combined sales in excess of €2,500 billion (US$3,300 billion) – has committed to help achieve zero net deforestation by 2020. It is working on a sourcing code for soy which its members can choose to adhere to. Certifying soy production could play an important role in reducing the socio-environmental impacts of the soy industry and improving its level of responsibility.

Certification initiatives such as Utz Certified, the Rainforest Alliance and the Round Table for Sustainable Palm Oil have already demonstrated with other commodities such as cocoa, tea and coffee, how certification can build responsibility into agricultural production in a way that is globally recognized and commercially viable.

In the case of the soy industry, a number of certification and labeling organizations are active. The Roundtable on Responsible Soy (RTRS), International Sustainability & Carbon Certification (ISCC), ProTerra, and 2BSvs (the Biomass, Biofuels, Sustainability voluntary scheme) are the leading market recognized schemes. These schemes differ in terms of criteria and audit standards.

“WWF considers RTRS as the reference for responsible soy due to its strong and balanced socio-environmental criteria, its multi-stakeholder, democratic and transparent structure, and its solid audit principles. RTRS is also not perfect and demands continuous improvement just like the other schemes,” says WWF’s Moreira.

Much has been achieved in the last decade in terms of creating a certification and labeling environment for soy production, but the long-term goal of ‘mainstreaming’ certified soy production remains a long way off. Currently only 2 to 3 percent of global soy production is certified. This means soy lags behind other commodities where levels of certified production are far higher. For example, 14 percent of global palm oil production is now certified, 50 percent of non-farmed whitefish, and 16 percent of coffee.
Sustainable Insight: A roadmap to responsible soy: Approaches to increase certification and reduce risk

KPMG has identified four key barriers preventing the growth of soy certification:

- weak market demand for certified soy
- variable availability of certified soy
- fragmentation of the certification landscape
- the cost of certification for producers.

**Weak market demand**

“The biggest single reason that soy certification is lagging is that soy remains a largely invisible ingredient in the final product,” says KPMG’s Jerwin Tholen. “Consumers do not ‘see’ soy on the supermarket shelves in the way they see fish, cocoa, tea or coffee.”22,23

Demand therefore has to come from the end-users of soy including manufacturers of food, animal feed, and biofuel. Here there has been some initial progress. For example, the EU has acknowledged the importance of certification and provides tax rebates on biodiesel produced from certified soy and other certified oil crops. Some retailers in the Netherlands have required their meat suppliers to provide meat produced only with certified soy feed by 2015.

“Demand is vital to create a healthy business case for soy farmers to invest in responsible compliance,” says Jan Nicolai, Soy Program Director at IDH. “Recently signed covenants with Dutch, Belgian and Scandinavian animal feed producers secure a northern European demand for responsible soy.”

Yet such commitments represent only a small share of market demand in Europe and outside Europe there is a lack of engagement of major consumer countries including the US and China. China alone represents 25 percent of global soy demand.24

Says Jerwin Tholen of KPMG: “In Europe, certification is advanced because it represents a way for European companies to meet public demands for transparency and socio-environmental standards. It is a demand driven by risk aversion. In the US there is less demand for certification because the US produces nearly all of its soy domestically so there are fewer environmental and social issues.”25

Four key barriers to mainstreaming certified production
“Without demand, there isn’t going to be supply,” says Agustin Mascotin, Executive Director of RTRS. “Nor will producers receive a premium for certified soy.”

The level of price premium for RTRS certified soy is determined by market conditions and therefore not guaranteed. Some 25 percent of the soy certified by the RTRS label had not yet been sold at the time of publishing this paper (May 2013), although the certificates are valid for two years and RTRS expects that the remaining certified product will be sold before expiry.

**Variable availability of certified soy**
KPMG’s research reveals concern within the soy industry about the balance between the supply of certified soy and demand. Certified soy is not always available at the right time, in the right region at the right quality and in the right quantities. This imbalance is in part due to the ‘wait and see’ approach of traders and processors. In cocoa, coffee and, increasingly, in palm oil, traders and processors have played an active part in connecting end-users to certified supply, even taking an active role in the certification process. This approach is thus far lacking in the soy industry.

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**The supply chain for soy is complex**

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Source: KPMG, Responsible Soy - Cost / benefit analysis of RTRS certification in Argentina and Brazil, 2012
Fragmented certification landscape

There is no shortage of certification initiatives around certified soy. A plethora of labels has emerged in recent years to provide assurances on issues ranging from biodiversity conservation, to labor conditions and greenhouse gas emissions.

However, the existing certification regimes for soy products do not yet offer full mutual recognition. Soy beans, when crushed, produce meal and oil in roughly a 80:20 proportion. While soy meal certification is dominated by RTRS, certification of soy oil is dominated by multi-crop labels such as ISCC and 2BSVs. This means that producers may have to invest in complying with two or more separate certification processes in order to receive premiums on both soy meal and oil.

The situation is improving as the certification bodies work on mutual recognition regimes. ISCC now accepts soy oil crushed from soybeans produced by RTRS producers, and RTRS has announced its collaboration with GMP+, a certification scheme that covers food safety in the meat value chain. However, continuous improvement and further collaboration between standard setters is required to overcome the distinctive differences between schemes.

Cost of certification for producers

Compliance with the certification regimes incurs costs for producers. They include annual audits, control systems to monitor compliance with certification criteria, investments in community relations, and fees paid to the certifying organizations.

These costs can be significant, particularly for smaller producers. In addition, certification can require substantial amounts of time to be invested in record keeping.

A key factor for small producers is their pre-existing level of compliance with national law on issues such as deforestation and labor practices. Soy certification is dependent on full compliance with national laws, so producers that are some way short of legal compliance will face greater costs in achieving certification and therefore require greater incentives.

The new Forest Code in Brazil has added flexibility and is likely to reduce the cost of compliance for Brazilian producers. However, for producers to invest in certification, a return on that investment needs to be made more certain.
KPMG has undertaken in-depth research into the costs and benefits of certification under the RTRS label, the multi-stakeholder international roundtable established in 2006. The study was commissioned by IDH and co-funded by WWF, IFC and FMO and provides the first published quantitative analysis of the business case for RTRS certification for soy producers in Argentina and Brazil.

Experience and data on certification are still limited because RTRS certification was only recently introduced (the first RTRS soy was produced in 2011). However, KPMG has developed a comprehensive dataset by aggregating input from a range of businesses and non-commercial organizations, including producers, traders, crushers and NGOs. By making the analysis public, KPMG and its partners hope to reduce uncertainty and strengthen the case for certification in the soy industry.

KPMG’s analysis shows that producers will receive payback on their investment in certification at different times, depending on the sophistication of internal controls and the size of the business.

The average payback period is as little as 3 years for producers larger than 2,500 hectares that are able to sell their full crop as certified. The best-prepared large producers can recoup their investment within 1 year while less-prepared medium-sized producers can achieve return on investment in less than 5 years.

KPMG’s analysis assumes a price premium of US$1.5 per metric ton of certified soybeans, and moderate levels of discounts on farm inputs and financing.

The price premium modeled is realistic and conservative. For certified soy meal, the actual premium paid is currently around US$3 to US$4 per ton. For certified soy oil, premiums tend to be higher because refiners in the EU receive a tax rebate when they use certified soy oil in the production of biodiesel. Yet even under the less favorable premium assumptions of the KPMG business case, certification is shown to be a profit driver in the short- to medium-term.

### The business case: five common producer types can expect attractive return on investment from certification

<table>
<thead>
<tr>
<th>Type of producer</th>
<th>Area (ha)</th>
<th>Info management system</th>
<th>Premium</th>
<th>Input discount</th>
<th>Finance discount</th>
<th>Pay-back period (yrs)</th>
</tr>
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<tbody>
<tr>
<td>Brazil - Large producer</td>
<td>30,000</td>
<td>Strong</td>
<td>1.50</td>
<td>1.2%</td>
<td>50bp</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Argentina - Medium producer - Close to certification</td>
<td>2,500</td>
<td>Strong</td>
<td>1.50</td>
<td>1.2%</td>
<td>50bp</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Brazil - Medium producer - Close to certification</td>
<td>2,500</td>
<td>Strong</td>
<td>1.50</td>
<td>1.2%</td>
<td>50bp</td>
<td>2.5</td>
</tr>
<tr>
<td>Argentina - Medium producer - Far from certification</td>
<td>2,500</td>
<td>1.50</td>
<td>1.2%</td>
<td>50bp</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Brazil - Medium producer - Far from certification</td>
<td>2,500</td>
<td>1.50</td>
<td>1.2%</td>
<td>50bp</td>
<td>4.6</td>
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</table>

Source: KPMG, Responsible Soy - Cost / benefit analysis of RTRS certification in Argentina and Brazil, 2012

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Certification brings further benefits to producers

Certification can help producers secure future access to markets, such as the EU, where a growing number of end-users are committing to certified soy. Certified producers may also benefit from implementing improved agricultural practices in fertilizer use and crop rotation, which may result in reduced input use, fewer incidents of chemical spills, and productivity improvements. Hard evidence on the value of these benefits is sparse, but it is likely they could be significant for smaller farms that have not benefited from large-scale investment and professionalization.

Discounts on agricultural inputs and finance are further potential benefits for producers of certified soy. KPMG’s research suggests that banks as well as suppliers of seed, fertilizer, fuel and other inputs, believe certified soy producers represent reduced risk. Some producers that meet certain criteria are already gaining access to farm inputs and financing at a discount as a result. In Brazil, certification can help producers gain access to subsidized loans through several government schemes.

An action plan to drive the growth of certification

“The main challenge for the soy industry is a cultural challenge,” says Agustín Mascotena of the RTRS. “Everyone in the value chain needs to stop looking for ‘guilty parties’ and start looking for common solutions. They need to incorporate the concept of responsibility that is part of sustainability in every part of the business.

“We need more public commitment from all participants in the value chain, and we need more government involvement and support. We need more support not only from the consumer countries but also from the supplier countries. But I think supplier country support in particular is going to come, as RTRS continues to demonstrate the positive effects of certification.”

Addressing the four key barriers to responsible soy production is not a job for producers alone. It needs a collaborative approach from both producers and end-users, traders and processors, investors and certification bodies, and governments and consumers.

On the following pages, KPMG sets out a blueprint of the key actions that need to be taken by all players in order to mainstream the market for certified soy.
## Roadmap

<table>
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<th>Governments</th>
<th>Producers</th>
<th>Standard setting bodies</th>
</tr>
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<tbody>
<tr>
<td><strong>Increase demand for certified soy</strong></td>
<td>Specify certified soy in government-procured meat, food and fuel products.</td>
<td></td>
<td>Collaborate to make the case for certified soy to food/animal feed/biofuel manufacturers and consumers.</td>
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<tr>
<td><strong>Overcome variation in availability of certified soy</strong></td>
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<tr>
<td><strong>Overcome fragmentation of the certification landscape</strong></td>
<td>Governments of soy producing countries to enforce national laws, as the distance to certification once national compliance has been reached is relatively small. Use government training (agricultural extension) programs to explain to producers the benefits of certification and the practical steps involved to reach certification. Provide financial incentives for certified producers, for example through tax rebates.</td>
<td></td>
<td>Collaborate to improve inter-recognition between different certification standards in order to reduce costs, optimize premiums for producers, while streamlining track-and trace-infrastructure in a process of continuous improvement.</td>
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<tr>
<td><strong>Reduce the costs of certification / improve the business case</strong></td>
<td>Governments of soy producing countries to enforce national laws, as the distance to certification once national compliance has been reached is relatively small. Use government training (agricultural extension) programs to explain to producers the benefits of certification and the practical steps involved to reach certification. Provide financial incentives for certified producers, for example through tax rebates.</td>
<td>Develop a basic certification standard for smaller producers that assures compliance on key responsibility issues but reduces the burden of monitoring. Provide free training and support to smaller producers.</td>
<td>Collaborate in producer groups and with certification bodies to negotiate discounts with audit providers and agricultural input companies. Use certification as a lever in negotiations with lessors by arguing that certification results in better soil management and that, as a result, the value of their assets is maintained or improved. Standard setting bodies should develop an evidence base for this.</td>
</tr>
<tr>
<td>Financiers</td>
<td>Traders/processors</td>
<td>End-users</td>
<td>Retailers/Consumers</td>
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<tr>
<td>Incorporate certification as a pre-condition for providing finance to companies in the soy supply-chain, including animal feed companies, biodiesel companies, fast-moving consumer goods (FMCG) companies, and tradersprocessors. Some banks currently do this in relation to palm oil (RSPO) certification.</td>
<td>Commit to sourcing 100 percent certified soy and communicate the benefits to consumers. Incorporate certified soy use as a brand value/benefit, including on-pack communication.</td>
<td>Demand and pay for certified soy from suppliers of soy-derived products.</td>
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<td></td>
<td>Develop financing products aimed at covering the up-front costs of certification, which can be provided either to producers directly, or to supply chain companies that set up producer support programs.</td>
<td>Set up programs to actively support producer certification by doing one or more of the following: - raise awareness among producers of the benefits of certification - sign advance purchase agreements - co-invest in the up-front costs of certification Focus first on growing regions that produce mainly for the European market (‘supply sheds’), a transition model that has met with success in the palm oil sector. Over time, develop flows of ‘origin preserved’ certified soy that can be traced back to its origin, starting with ‘supply sheds’ described above.</td>
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<td></td>
<td>Encourage and work with standard setting bodies to increase collaboration and mutual recognition between standards.</td>
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<tr>
<td></td>
<td>Screen soy producing clients for national compliance and agree timeline for compliance as a pre-condition for extending financing unless national legislation prohibits the extension of financing to non-compliant producers. Provide financing discounts to certified producers.</td>
<td>Commit to paying a reasonable premium for certified soy.</td>
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</table>
Conclusion: response strategy and plan of action

Soy has an important role to play in feeding and fuelling a growing global population, but the industry faces significant environmental and social challenges that are likely to intensify as production increases.

Certification of soy offers a potential solution to these challenges and, as KPMG’s analysis shows, there is a business case for soy producers to invest in certifying their production.

Some end-users of soy – including manufacturers of food, animal feed and biofuel – have committed to increase sourcing of certified product. However, the overall pace of change within the industry is slow, leaving companies exposed to reputational and commercial risks.

Various barriers are impeding accelerated growth in responsible soy production and addressing these barriers requires action from all stakeholders including governments, investors, soy producers, traders and processors, end-users, retailers and consumers.

End-user companies such as manufacturers of food, animal feed and biofuel, arguably face the greatest risks from slow progress towards certification. KPMG therefore recommends that these companies in particular should evaluate the issues and potential impacts, and develop a response strategy and plan of action. Below we present a framework of actions to assist companies in that response:

**Understand exposure**

01. Conduct a risk assessment to assess your company’s exposure to reputational, commercial and associated operational risks. Identify weak points and risk hot spots within your soy supply chain.

02. Explore the longer term risks. For example, increasing global demand for soy and declining yields could lead to security of supply issues; an increase in demand for certified soy combined with limited availability of certified product could lead to price increases.

03. Analyze the potential impacts of identified risks on your business.

04. Decide on the most appropriate response strategy, e.g. should you adopt a short term or long term approach?
## Develop a strategic response

05. Identify potential responses, e.g. do nothing; substitute soy with alternatives that have a lower risk profile; commit to partial or full (100 percent) use of responsible soy over a pre-defined timeline.

06. Conduct a cost/benefit analysis of these alternative responses, taking into account the following elements: reputational costs, the costs of soy alternatives, the benefits of certification, the costs of certification and how these change depending on the speed at which you introduce certified soy into your products.

## Refine the response

07. Analyze the available soy certification schemes and identify the most appropriate certification strategy for your business, based on credibility, traceability, availability and cost.

08. Analyze your supply chain and identify key partners – such as traders and processors – with whom you will need to collaborate in order to implement your certified soy sourcing strategy.

09. Assess the risks and benefits of purchasing soy certificates (‘book and claim’) vs developing a fully traceable supply chain.

## Implementation

10. Establish the necessary partnerships and relationships required to implement the strategy.

11. Ensure senior management commitment and cross functional teams are in place within your business.

12. Incorporate tracking and tracing of soy into your business operations.

13. Establish internal monitoring and reporting systems on your use of certified soy and progress on delivering against commitments.

14. Implement an appropriate stakeholder communications strategy around your company’s approach to using certified soy, to include suppliers, customers, consumers and investors.
About KPMG

KPMG’s network of member firms provides Climate Change and Sustainability (CC&S) services in around 60 countries.

KPMG member firms are active in assisting clients – including corporates, policy-makers and NGOs – with the development of sustainable supply chains, and have particular expertise in soft commodities. Our member firms help clients to understand the economics of certification systems and to address the broader challenges of developing sustainable supply chains in a resource-constrained world. KPMG member firms have analyzed the business cases for certification of a number of soft commodities including cocoa and soy, as well as the economics of ecosystems services for various industrial sectors. In addition, KPMG member firms have assisted numerous clients in streamlining supply chains by simplifying the flows of goods, money and information to reduce risks and direct costs. kpmg.com/sustainability
The Sustainable Trade Initiative (IDH) accelerates and up-scales sustainable trade by building impact oriented coalitions of front running multinationals, civil society organizations, governments and other stakeholders. Through convening public and private interests, strengths and knowledge, IDH programs help create shared value for all partners. This will help make sustainability the new norm and will deliver impact on the Millennium Development Goals 1 (poverty reduction), 7 (safeguarding the environment) and 8 (fair and transparent trade).

Website: www.idhsustainabletrade.com

FMO (the Netherlands Development Finance Company) is the Dutch development bank. FMO supports sustainable private sector growth in developing and emerging markets by investing in ambitious entrepreneurs. FMO believes a strong private sector leads to economic and social development, empowering people to employ their skills and improve their quality of life. FMO focuses on three sectors that have high development impact: financial institutions; energy; and agribusiness, food and water. With an investment portfolio of €6.3 billion, FMO is one of the largest European bilateral private sector development banks.

Website: www.fmo.nl

WWF

The World Wide Fund for Nature/World Wildlife Fund (WWF) is the world’s leading environmental organization, with more than 1,300 projects operating in over 100 countries. WWF’s vision is to build a future in which people live in harmony with nature. The WWF Markets Transformation Initiative seeks to shift markets of high impact food, fiber, and biofuels commodities toward sustainable production through its more than 50 commodity experts working around the globe, transformative work with industry, engagements with more than a dozen leading global financial institutions, and involvement with multiple industry roundtables. Together with large retailers, manufacturers, traders and investors, commodities can be produced more efficiently and responsibly, achieving significant environmental results for the planet’s most critical ecosystems.

Website: www.panda.org

About IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. It helps developing countries achieve sustainable growth by financing investment, providing advisory services to businesses and governments, and mobilizing capital in the international financial markets. In fiscal 2011, amid economic uncertainty across the globe, IFC helped its clients create jobs, strengthen environmental performance, and contribute to their local communities—all while driving our investments to an all-time high of nearly US$19 billion.

Website: www.ifc.org

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To find out more about responsible soy and what it means for your company, please contact the KPMG member firm in your country (see back page).

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