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1 Introduction

This Information Bulletin is issued as part of the Netherlands Programmes Sustainable Biomass (NPSB). The NPSB Bulletin gives an overview of recent worldwide policy developments, production, trade, certification, and use of sustainable biomass. This edition focuses on the latest policy discussions, certification developments, and most important published reports.

The mission of the NPSB is to promote the sustainable production of biomass around the world. This mission is in line with the Dutch policy facilitating the transition towards a biobased economy. In this context, the Dutch government launched two programmes in 2008: The Sustainable Biomass Fund and the Sustainable Biomass Import. These programmes cluster the experience and knowledge gained from the biomass-project portfolio supported by NL Agency. These programmes also support supplementary research to gain better understanding of over-arching questions. The NPSB evaluate project results in the broader context of developing a sustainable society. These evaluations take into consideration different facts such as growing economy, changing global relationships and evolution of markets. The NPSB also monitor the influence of policy developments on the biomass market in the Netherlands, Europe and in other countries. These activities result into valuable information for governments, stakeholders, and for the NPSB projects as well.

This Information Bulletin summarises relevant news items and reports issued in the last few months. It builds on earlier published Bulletins to keep an articulated and complete overview of the evolution of sustainability of biomass in the world. The first chapter of the Information Bulletin presents the general trends happening around the EU-RED transposition and certification development. The second chapter focuses on the main policy discussions and announcements within the EU, the Netherlands and the rest of the world. The third chapter presents the latest in sustainability certification of biomass. The fourth chapter informs on relevant happenings within international co-operation and projects. And finally, the fifth chapter summarises the latest reports and publications around sustainability of biomass.

The team of NL Agency for Sustainable Biomass
2 General trends

2.1 The European Union moves towards more sustainable biofuels
Different developments illustrate the move from the European Union towards more sustainable biofuels. More regulations come into force while existing legislation is further tightened.

2.1.1 More regulations into force

The grandfathering clause has ended on 31 March 2013, as explained in the Communication (2010/C 160/02). Under the 'grandfathering clause' biofuels that were produced in installations that were already operational on 23 January 2008 did not have to meet the 35% threshold. Since 1 April 2013, these biofuels will only be accepted as sustainable when they can display a Greenhouse Gas (GHG) value, which fulfils the requirements for achievement of the GHG minimum reduction potential. This means that no more biofuels with GHG savings less than 35% are accepted anymore in the EU markets. The ending of the grandfathering clause has immediate effect, particularly on biofuels based on soy and corn. For these materials it will be necessary with no more exceptions, to calculate GHG emissions individually for all elements of the supply chain, since the default values do not meet the required GHG savings.

On 3 March, the EU Timber Regulation (EUTR) came into effect to counter the trade in illegal timber, which also covers residues. Forest residues are considered as an important feedstock for second-generation advanced biofuels. It prohibits the placing of illegally harvested timber on the European market. Illegal is defined as contravention in the country of harvest. Anyone who first places a timber product on the EU market must apply "due diligence" to ensure that the wood they are trading is legal. Although a proof of sustainability for solid biomass is not (yet) required from a EU-RED perspective, the EUTR does give some first reporting conditions on e.g. the place or origin and traceability.

2.1.2 Tightening of existing regulation

On October 17th 2012, the EC published its new proposal to amend the Renewable Energy Directive (RED) and the Fuel Quality Directive (FQD) in relation to sustainable biofuels and bioliquids. With this proposal the EC intends to give a strong message to the biofuel industry to move towards non-food biofuels. The EC has declared its intention to limit the global land conversion for biofuel production, and raise the climate benefits of biofuels used in the EU. The general objective of the proposed amendments is to promote biofuels that will help achieve substantial emission cuts, do not directly compete with food and are more sustainable at the same time. The specific objectives of the EC proposal are fourfold:

1. Limit the contribution to national RED 10% target in 2020 from conventional biofuels that have a risk of indirect land use change (ILUC) emissions while capping the production of crop-based biofuels to 5%;
2. Improve the GHG performance of biofuels by raising the GHG savings required to biofuels produced in new installations (as of 1 July 2014);
3. Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing multiple-counting (double and quadruple) of such fuels towards national targets;

4. Improve the reporting of GHG emissions with the reporting of the estimated ILUC emissions of biofuels.

The EC proposal also declares that existing investments should be protected until 2020 despite all proposed changes. This may become a complex task as EU-wide, the biodiesel production capacity has exceeded 25 billion litres in 2011, and most of this capacity has been built to produce biodiesel mainly from food crops. A second EC proposal will be published in 2013, containing more detailed rules on implementation of the FQD (art. 7). This proposal will include the rules under FQD for calculating GHG emissions of fuels (which is necessary for providing evidence that the 6% reduction requirement is met). The EC proposal does not take a position on the actual need for financial support to biofuels before 2020. However, the Commission expresses in COM/2012/0595 that in the period after 2020 food-crop based biofuels, which do not lead to substantial GHG savings (when emissions from ILUC are included) should not be subsidised. The whole amendment process requires discussion and approval from the European Council (Member States) and the European Parliament.

Developments show a more realistic sense of achievable and sustainable goals and what can and what cannot be realized under current conditions. As also mentioned in the Commission’s progress report, the prognosis indicates that biofuels targets will not be achieved under current conditions. The greater reliance on advanced feedstock clearly asks for additional measures for the target to be reached.

Considerations for the market:
- The EU has a clear intention to move towards more sustainable biofuels;
- This also indicates a move towards advanced, second generation biofuels;
- This may also affect demand in feedstock for 2G biofuels, including increasing (and competing) demands in forest residues and waste;
- Current conditions and the move towards advanced feedstock results that targets will not be reached unless additional measures are taken.

2.2 Global Wood Biomass Markets continue to rise: Debate on the implementation of sustainability certification for solid biomass

Pellet exports from the two primary pellet-producing regions on the North American continent, the US South and British Columbia, continued to increase in the 3Q/12, reaching a new record high of 860,000 tons. Shipments in the 3Q/12 were over 70 per cent higher than the same quarter in 2011. Over three million tons of new pellet-export facility capacity was announced during the second half of 2012. As a result of the increased demand for pellets both domestically in Germany and from the export market, pellet prices in the 4Q/12 moved up to the highest level since 2006. These facts obviously continue the debate for a common approach to sustainability certification for solid biomass. Moves in that direction can be seen from the market and from national governments. The Dutch government has for example closed the Green Deal, an agreement on sustainability reporting for solid biomass for energy, which resulted in a voluntary sustainability reporting of involved companies in March 2013. The sustainability certification (most commonly) applied for industrial wood pellets are Green Gold Label, Laborelec Label and Drax Power Sustainability Principles, as identified by
IEA Bioenergy Task 40. Meanwhile the Initiative Wood Pellet Buyers (IWPB) continues standardizing its sustainability criteria. However, market parties are still awaiting the long expected proposal from the European Commission on the implementation of sustainability criteria for solid biomass in Europe, how these will look like and when these will be implemented.

Considerations for the market:
- Increased wood pellet demand and imports continue the debate for a common approach to sustainability certification for solid biomass;
- Awaiting the proposal from the Commission creates uncertainty in the market. The proposal is delayed and is now expected for Summer 2013.

2.3 Harmonization and extension of certification schemes
The thirteen EC approved voluntary schemes for certifying the sustainability of biofuels are in full implementation, while further improving their guidelines based on practical experiences. Certification schemes are looking for further harmonization between each other. Not only within the scope of biofuels but also in relation to schemes used in competing sectors. RSB has recently recognized FSC while RTRS has recognized GMP+, a Feed Certification scheme. The update of NTA 8080 also includes a harmonization with other sustainability standards as CEN and ISO. Meanwhile, both ISCC and NTA8080 are working on extending the scope of their certification to a broader range of products: the biobased economy.

Considerations for the market:
- While in implementation, schemes are looking for further harmonization and extending their scope;
- This means that the applicability and suitability of schedules for a company can change over time.

2.4 First signs of inclusion of biofuel for aviation within sustainable biofuel targets
On both European and US continents, there is a move towards the recognition of biojet fuels as part of the renewable energy policy. In the US, EPA decided to explicitly include jet fuels as renewable fuels, and accepting Camelina based biodiesel as advanced biodiesel for meeting RFS targets. This provides opportunities for the market, as these fuel pathways are now eligible for crediting and generating Renewable Identification Numbers (RINs) in accordance with the RFS regulations. Meanwhile, the Netherlands has included biokerosine for being part of the obligation and allowing trading them in the form of biotickets. This redrawing of the political framework of biojet fuels goes hand in hand with a market wish to further develop this sector. IATA, the International Air Transport Association, has also made its call for sustainable biojet fuels development, indicating that more than 1,500 commercial biofuel flights have been completed since 2011. Recently, KLM has operated its first transatlantic flight with a blend of kerosene and 25% recycled cooking oil to New York. KLM is in the process of creating a portfolio of partnerships to develop regional supply chains, including within Europe, covering different feedstock and technology pathways. KLM aims for a one percent blending target by 2015, or around 30,000 to 35,000 tonnes of jet biofuel.
Considerations for the market:

- First policy moves to incorporate biojet fuels into the renewable energy policy;
- This, combined with the ambitions of the market, points to a growing biojet fuel sector – despite still existing uncertainties;
- The increase in biojet fuel demand may create competition in feedstock – but also offers opportunities for synergies (in e.g. technology development)
3 Policy discussions and announcements

3.1 European Commission

3.1.1 Proposal revision RED / FQD to mitigate indirect land use change

The proposal, published on 17 October 2012 aims to start the transition to biofuels that deliver substantial greenhouse gas (GHG) savings. The amendment also establishes the first reporting on estimated indirect land-use change emissions. Most relevant aspects of the proposed amendment include:

- Increase the limit for GHG reduction to 60% with effect from 1 July 2014 for biofuels produced in new installations;
- Introduction of a 5% cap to food-crops based biofuels and bioliquids;
- A reporting obligation in the Fuel Quality Directive for the emissions resulting from the change in carbon stock changes caused by indirect land use;
- Introduction of ILUC factors per crop. These factors are used for reporting and not yet for the calculation of the GHG performance and reduction targets established in the FQD;
- Introduction of a list of biofuels feedstock that are subject to multiple counting. Member States need to ensure that raw materials cannot be adjusted to be eligible for multiple counting.

The proposal approval will be discussed during 2013 in the European Council and the European Parliament.

3.1.2 Council of the European Union to give early and full attention to the ILUC proposal

On 3 December 2012, the Council of the European Union adopted various conclusions regarding renewable energy. Among them, the Council concluded that further consideration should to be given to the economic, environmental and social aspects of production and use of renewable energy sources (RES). In this context, the Commission’s recent proposal on indirect land use change related to biofuels and bioliquids should be given early and full attention. In particular the expected rise in the use of biomass in the coming years increases the need to consider the sustainability dimensions of the use of sensitive biomass resources.

3.1.3 EU Timber Regulation in force since March 3, 2013

On 3 March, new legislation came into effect to counter the trade in illegal timber. The new EU Timber regulation prohibits the placing of illegally harvested timber on the European market in an effort to tackle the problem of illegal logging across the world. The new law affects both imported and domestically produced timber and timber products, and it covers an extensive range of products, from paper and pulp to solid wood and flooring. The aim is to put in place procedures to minimise the risk of illegal wood being traded. Anyone who first places a timber product on the EU market must apply "due diligence" to ensure that the wood they are trading is legal. Traders who buy or sell timber already on the market are required to keep adequate records so that the wood they deal in can be easily traced.

3.1.4 First Renewable Energy Progress Report published by European Commission

On 27 March 2013, the European Commission published its first Renewable Energy Progress Report under the framework of the 2009 Renewable Energy Directive. Since the adoption of this directive and the introduction of legally binding renewable energy targets, most Member States experienced significant growth in
renewable energy consumption. However, as the trajectory grows steeper towards the end, more efforts will still be needed from the Member States in order to reach the 2020 targets. With regard to the EU biofuels and bioliquids sustainability criteria, Member States' implementation of the biofuels scheme is considered too slow. The accompanied staff-working document goes into more detail about the effectiveness of sustainability schemes discussing, amongst others, the social and economic impacts on land use, land use rights and food prices.

3.1.5 RES LEGAL EUROPE website goes online

On 15 October 2012, the RES LEGAL website from the European Commission went online. The website is a free online database on support schemes, grid issues and policies regarding renewable energy sources in the EU 27 Member States, the EFTA Countries and some EU Accession Countries. The database covers all three energy sectors: electricity, heating & cooling and transport. RES LEGAL Europe provides an overview of different national regulations regarding renewable energy sources. The descriptions are based on relevant legal sources. Links to the original legal sources in their original language are available, along with a link to a translation of the regulations. In addition, this website provides with a list of contacts in national bodies and experts that will answer any further questions.

3.1.6 Definition biofuels in mineral oil products specified

The implementing Regulation No 1113/2012 of the Commission of 23 November 2012 specifies the minimum concentration of biofuels in mineral oil products with GN-code 2710.20. This is 0.5%

3.1.7 Anti-dumping regulation: imports of biodiesel from Argentina and Indonesia subject to registration

The Commission Regulation (EU) No 79/2013 of 28 January 2013 makes imports of biodiesel originating in Argentina and Indonesia subject to registration. Biodiesel from these two countries has to be notified by importers for registration by national customs in order to ensure that, if all conditions are fulfilled, future anti-dumping duties can be levied retroactively.

3.1.8 Anti-dumping duty on US bioethanol

The EU Council adopted on 18 February 2013 regulation imposing definitive anti-dumping duties on imports of bioethanol originating in the United States of America. Article 1.2 mentions that the rate of the duty is € 62.30 per tonne net. The duty is applicable in proportion, by weight, of the total content of pure ethyl alcohol produced from agricultural products. Bioethanol for uses other than fuel are exempted. The antidumping duties stem from a complaint filed to the Commission by the European ethanol producer trade association known as ePure in 2011.

3.1.9 Bioeconomy observatory launched by Commission

The European Commission launched the initiative to establish an observatory to map progress and measure the impact of the development of bioeconomy within the European Union. The observatory is a three-year project and started in March 2013. The observatory aims at supporting regional and national strategies by making the data it will collect publicly available. It plans to have in place a dedicated web portal in 2014. The Joint Research Centre (JRC) will coordinate the Observatory.
3.2 Transposition of EU-RED: Published

3.2.1 Germany: double counting
Stricter certification rules for double counting have been established in Germany under the "Verordnung zur Durchführung der Regelungen der Biokraftstoffquote - 36. BImSchV". From 1st of January 2013 all UCOME chains from UCO collectors, UCO processors and all trading companies have to be certified under one of the national standards approved by Germany, namely ISCC DE or REDcert DE. This restriction may be contradictory to the approach of the EU RED and EU Commission, which state that all standards approved by the EU Commission have to be accepted by all EU member states. German authorities have also restricted the sourcing of waste to a specific number of countries: Germany, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Italy, Lithuania, Luxemburg, Netherlands, Austria, Poland, Sweden, Slovakia, Spain, Czech Republic, Hungary, the UK and Northern Ireland, Norway, Switzerland, Canada, Malaysia, Peru, Cambodia and the US. Not all EU member states are included in this list. These new rules lower the volume of biodiesel useable for double counting in Germany as not all biodiesel cargoes offered meet the stricter certification requirements.

3.2.2 Poland: Transposition still in disagreement
The EU-RED Directive has not been yet transposed to the Polish national law, although the time frame of implementation set by the EU was December 5 of 2010. The Polish Ministry of Economy prepared a draft amendment to the Law on bio-components and liquid biofuels (The Act of 25 August 2006 on bio-components and liquid biofuels, Journal of Laws of 2006 No. 169, item. 1199, as amended). The amendment is still discussed because of different points of view among political parties.

The European Commission has initiated a formal investigation against Poland, which can result in substantial financial penalties. Poland has also still not managed to make a full transposition of the Fuel Quality Directive (2009/30/EC). This term of implementation ended on December 31, 2010. A proposal of the new Act on monitoring fuel quality, prepared by The Ministry of Economy is waiting for approval of The Council of Ministers, which is planned in the first quarter of 2013.

3.2.3 Spain: Biodiesel quota into effect; self-imposed embargo on imports lifted
The Spanish Industry Ministry issued on 9 February 9 2013 a Resolution establishing a 30 days term for biodiesel producers to submit their applications to quotas. Biodiesel producers can be from anywhere in the world, with which the self-imposed embargo thought for Argentinean biodiesel is finally lifted. The quotas would be valid for the Spanish biofuel targets over two years and can be expanded, the Ministry's resolution said. For this reason, the Argentinean government has suspended its complaint to the World Trade Organization against Spain. Argentina says it is monitoring the situation closely and will re-instate its complaint if Spain moves to again put up trade barriers against its biofuels.

3.2.4 Spain: Biodiesel mandate down from 7 to 4.1 percent
The Spanish government announced on Feb. 22 that it has approved the downward revision of its mandatory consumption targets for biodiesel from 7 percent to 4.1 percent, according to a document from the Ministry of Industry, Energy and Tourism. The biodiesel mandate is reduced in order to minimise the fuel prices and to ensure stability in the sector.
3.3 Netherlands: Published and announcements

3.3.1 Various motions on biofuel policy in Netherlands and Europe
The Second Chamber supports the biofuel policy of the Minister. This was shown by the results of the vote on the motions following the debate on 16 January 2013. The Minister’s policy aims at reaching agreement on European level about the sustainability of biofuels, to stimulate better biofuels and to accept investments already made. There is a plea to the Secretary to call for clear sustainability requirements in a European context.

3.3.2 Decision for amendment Dutch biofuels legislation published
On 4 December 2012, a decision of 26 November 2012 to amend the Decree renewable transport fuels and the Decree air pollution was published. The decision exempts the following parties from the Decree and the Decree on Renewable Energy transport fuels pollution:
• Fuel suppliers that release only a small amount of fuel (as further defined);
• Companies, who only act as an intermediary.
The decision also regulates the possibility of opt-in for biokerosene: suppliers of biokerosene can opt for voluntary registration. The supply of biodiesel to inland shipping now also counts towards the annual targets. Biogas, for which SDE + subsidy is granted, does no longer count towards the Decree.

3.3.3 Green Deal: sustainability reporting solid biomass 31 March 2013
The Green Deal on ‘sustainability reporting of solid biomass for energy’ is an agreement between the Dutch Government and various energy companies. The parties have agreed to:
• A commitment to achieve a minimum GHG reduction of 60% for the solid, woody biomass for energy compared to the reference of fossil energy;
• A public, annual reporting: The reports with data of the previous year are to be prepared by 31 March by the participating companies. The report provides data on e.g. the origin of the biomass, certification and GHG reduction level.

3.3.4 Double counting animal fat category 3 ended per January 2013
As already announced in a letter from 19 March 2012 by State Secretary Atsma, the double counting of animal fat category 3 for biofuels has ended per 1 January 2013.

3.3.5 Opening of SDE+ subsidy 2013 with small changes
With the publication of two regulations, the implementation and conditions of the SDE+ (Stimulation Sustainable Energy) have slightly changed compared to the year 2012. For example, electricity from renewable sources that is not placed on the grid comes eligible for subsidy. A complete overview of the SDE+ and the changes for bioenergy compared to 2012 can be found on the website from NL Agency. The SDE+ subsidy is opened per April 4, 2013.

3.3.6 Commission Corbey advises about biomass use and RED revisions
The advice ‘Duurzame biomassa in de chemiesector’ (Sustainable biomass in the chemical sector) from January 2013 gives recommendations on the efficient and sustainable use of biomass in the chemistry sector. These include a clear sustainability framework, the development of innovation pathways and creating a level playing field between sectors. The advice ‘Land in zicht!’ (Land in sight), published in the same period, gives a reaction on the EU proposal to revise the

3.4 Non-EU policies and announcements

3.4.1 Malaysia increases biodiesel obligation and reduces export levies
The Malaysian government aims to increase in 2013 the obligatory sale of biodiesel to 10%, expectedly leading to additional sales of approximately 300,000 tonnes of crude palm oil per year. The plan goes hand in hand with the measure to reduce significantly export levies. Malaysia has announced in October 2012 that it cuts the export tax from CPO to between 4.5 percent and 8.5 percent from about 23 percent, to help trim record stockpiles and compete with Indonesia, the largest producer. Shipments are taxed at 4.5% in April 2013, the same as March.

3.4.2 Belgium: biofuels sales obligation follows European legislation
The European Court of Justice has confirmed in January 2013 that the Belgium government is allowed to require to oil companies a minimum 4% biofuel blend in their gasoline or diesel. This was a response to a preliminary ruling from the Constitutional Court of Belgium that had received a protest from the Belgian Petroleum Union. Meanwhile, the government approved a bill in December 2012 that the reduction in excise duty for biofuels is extended with six years. For receiving this support, a higher blending percentage of biofuels in fossil fuels is required. This means an increase of minimum blending from 7 to 10 percent for bioethanol and from 5 to 7 percent for biodiesel over the period 2013-2019.

3.4.3 Brazil: Extension of Soy Moratorium until 2014
The Soy Moratorium in Brazil was renewed in October 2012 for another year, until January 31, 2014. This decision is based on two reasons: 1) the new Forest Code still needs more time to be complemented and additional regulations for farmers to adapt to new rules and 2) information about recent increase in deforestation in Mato Grosso and Pará.

3.4.4 USA: EPA decided not to waive Renewable Fuel Standard (RFS) for 2012
On 16 November 2012, the US Environmental Protection Agency (EPA) announced that the year’s drought has created significant hardships in many sectors of the economy, particularly for livestock producers. However, the agency’s extensive analysis makes clear that Congressional requirements for a waiver requested by governors from several states have not been met and that waiving the RFS would have little, if any, impact on ethanol demand or energy prices over the time period analysed.

3.4.5 USA: EPA Proposes 2013 US Renewable Fuel Standards
The US Environmental Protection Agency (EPA) has proposed in February its 2013 percentage standards for four fuel categories within the Renewable Fuel Standard program (RFS2). The proposed 2013 overall volumes and standards are:
- Biomass-based diesel (1.28 billion gallons; 1.12 per cent)
- Advanced biofuels (2.75 billion gallons; 1.60 per cent)
- Cellulosic biofuels (14 million gallons; 0.008 per cent)
- Total renewable fuels (16.55 billion gallons; 9.63 per cent)

The proposal will be open for a 45-day public comment period and EPA will consider feedback from a range of stakeholders before the proposal is finalised.
3.4.6 **USA: EPA approves advanced biofuel pathway for Camelina, and includes jet fuel as renewable diesel**  
On 22 February 2013, EPA issued a final rule identifying biodiesel produced from Camelina as pathway meeting the lifecycle greenhouse gas (GHG) reduction requirements for advanced biofuels as specified in the Renewable Fuel Standard (RFS) Program. This rule also clarifies the definition of renewable diesel to explicitly include jet fuel. This clarification offers additional market certainty and opportunities to renewable fuel producers.

3.4.7 **Canada: Canada to stop biofuel subsidies in 2017**  
The Canadian government plans to end its subsidy for production of biofuels when its current program ends in 2017, partly because of the need to cut government spending. Minister Oliver explained that the ethanol industry now produces the necessary volume of renewable fuel for Canada to meet its target of 5% ethanol in the country's gasoline supply, the newspaper reported. The minister also noted that the Canadian biodiesel industry had been unable to produce enough of that fuel, forcing some refiners to import to meet a 2% biodiesel target.

3.4.8 **Canada: Amendment to renewable fuels regulations proposed**  
On 31 December 2012, Peter Kent, Minister of the Environment of Canada, announced his intention to propose an amendment to the Renewable Fuels Regulations that would see a permanent national exemption from the 2% renewable content requirement in home heating oil, as well as a six-month extension to the exemption from the two per cent renewable content requirement for diesel fuel for Canada's Maritime Provinces.

3.4.9 **Panama: Mandatory use of ethanol**  
Mandatory use of ethanol will be implemented in September of this year in Panama according to an amendment to Law 42. The Panamanian Secretariat of Energy will regulate the law. Tax exemptions and other benefits have been established for biofuel investment projects, such as an incentive equal to 20 per cent of value of the acquired material for a period of five years from the commencement of production. Additionally, the purchase of bioethanol and biodiesel as alternative fuels will generate a tax credit of 60 cents per gallon for companies investing in the technology and will offset the payment of the excise tax on fuel and other petroleum products. This credit will not be transferable.

3.4.10 **Pakistan: Biogas and Biofuel Advances**  
The Pakistani government announced in November 2012 that it aims to implement several new plants with the aim of creating a total of 304 MW of electricity from city waste. Many projects are already underway, with an aggregated capacity of 57MW, and the subsequent facilities will create a further 247MW via agricultural, industrial and biogas waste products.

3.4.11 **East Africa: Standardizing bioenergy**  
An international standard for bioenergy is set to take effect in 2014, and the East African Community (EAC) will follow its guidelines. This standard together with national policies and regulatory frameworks will facilitate sustainable biofuel production in the region. The project, coordinated by the Tanzania Bureau of Standards (TBS), also looks at using the development of the International Organization Standards (ISO) 13065 on sustainability criteria for bioenergy as a case study.
The EAC has announced in November 2012 its plans to conduct awareness programs before the new standard become operational. The Swedish government through its agency SIDA has agreed to support the project, which would cost some $3.6 million. The EAC is the regional intergovernmental organisation of the Republics of Burundi, Kenya, Rwanda, the United Republic of Tanzania, and the Republic of Uganda, with its headquarters in Arusha, Tanzania.
4 Sustainability certification of biomass

This chapter will first discuss the developments in certification schemes, followed by an update on the development of standardization for sustainability of bioenergy.

Certification schemes:

4.1 ISCC
The 3rd ISCC Global Sustainability Conference and General Assembly of the ISCC Association took place in February 2013 in Brussels. Presentations can be downloaded from the website. An overview on the ISCC+ system was also given at this meeting. In addition to existing ISCC PLUS modules further ones are in preparation (e.g. Book and Claim or remote sensing). The Trace Your Claim database was presented, which can be combined with ISCC PLUS and will transfer the entire product information in a closed system.

4.2 Initiative Wood Pellet Buyers (IWPB)
The Initiative Wood Pellet Buyers was launched by GDF SUEZ. Other partners include energy utilities that fire large quantities of wood pellets such as Dong, Vattenfall, E.On and RWE. The goal is to enable the trading of industrial wood pellets among the partnering companies. IWPB continues to work on the development of the scheme and its governance structure. Governance will be independent, meaning that the Secretariat must be independent from all participants of IWPB. This includes the set up of a Sounding Board. The IWPB scheme will be a new scheme, as opposed to building the scheme on the basis of GGL. Technical documents are developed. Coherence is sought with ongoing policy developments on European level – through Eurelectric.

4.3 NTA8080
On March 19, 2013, NTA8080 has organized the kick-off meeting for the revision of NTA 8080 "Sustainability criteria for biomass for energy purposes". The principles for the review have been presented. One of the topics that were discussed is the proposal to extend the scope of NTA 8080 to biobased products. The Dutch Normalisation Institute (NEN) also wants to further harmonize the NTA 8080 on certain points with other sustainability standard as ISO and CEN. Also preserving biodiversity and ILUC are included as an agenda item, as well as cascading.

4.4 RBO: Launch of new initiative
The Register of Biofuels Origination (RBO), an industry initiative of the European Biodiesel Board, held its opening meeting on 16 January 2013. The RBO is a platform where companies work together to develop a certification system to guarantee the sustainability of double counting biofuels.

4.5 REDcert
REDcert’s suitability as a certification system pursuant to 36th BImSchV (double counting of biofuels) was confirmed by BLE in December 2012. This enables companies with a REDcert registration to credit the fuel twice to the fulfilment of the biofuel quota following a successful audit.
4.6 **RSB: new policy on by-products and residues**

On 1 January 2013, the new RSB has made the formal shift from being an initiative of the Energy Center of the EPFL, to being an autonomous non-profit based in Switzerland. Meanwhile, the RSB Steering Board has approved the new **RSB policy** for certification of biofuels based on by-products and residues. The policy, still excluding forest harvesting residues, offers a flexible approach to operators using residues and by-products for biofuel production.

In most cases, no upstream certification will be needed. Only operators processing the residue for the specific purpose of producing biofuel will be audited.

On 4 March 2013, RSB has announced its decision to recognize the standard of the Forest Stewardship Council (FSC), which certifies responsibly managed forests.

Meanwhile, RSB has awarded certificates to various companies. This includes the certification of US-based Piedmont Biofuels in February 2013. This company collects used cooking oil from restaurants to produce biodiesel that is sold locally. Also, SkyNRG became the first renewable jet fuel supply chain to be fully certified by the RSB. The first **RSB certified flight** from KLM to New York took off on 8 March 2013. The route will now exclusively be fuelled on sustainable biofuels from used cooking oil.

4.7 **RSPO RED: approved by Commission**

On 23 November 2012, The European Commission has officially recognized the ‘Roundtable on Sustainable Palm Oil RED’ scheme for demonstrating compliance with the EU RED sustainability criteria. In addition, RSPO has been approved as member of ISEAL end of 2012. The RSPO-RED is a voluntary extension of the RSPO system.

4.8 **RTRS**

RTRS signed a cooperation agreement with GMP+ International in January 2013. The GMP+ Feed Certification scheme was initiated and developed by the Dutch feed industry from a food safety perspective. The main goal of the cooperation is to provide GMP+ participants the possibility for certification for both Feed Safety Assurance and Feed Responsibility Assurance within a single certification scheme.

**Developments in standardization:**

4.9 **BIOGRACE II**

The **BioGrace-II project** is a follow up of the earlier closed BioGrace-I project. BioGrace-II aims to harmonise GHG calculations for electricity, heating and cooling from biomass on the European market. The first public events have been organized in October 2012 in Germany and in February 2013 in the Netherlands. The feedback will be used to further improve the tool. The project runs until 2015.

4.10 **CEN TC 383: chain description will be published as Technical Specification**

After processing the received comments, CEN TC 383 has decided that conformity assessment and the evidence for the sustainability of a bioenergy chain in Europe is still too much under development for a final norm. Therefore, it is decided to choose for a so-called CEN Technical Specification (CEN/TS). This interim step gives industry the opportunity to use the standard; Remaining comments and adjustments can be entered in a final version at a later time. CEN Members are not obligated to take over a ‘TS’ in their national text. CEN / TC 383 has further
decided to remain its broad scope to allow for normalization of other ecological
criteria and solid and gaseous biofuels.

4.11 GBEP: Lessons learned from testing implementation of indicators
The 14th Steering Committee meeting of the Global Bioenergy Partnership (GBEP) was organized in November 2012. Lessons learned and (preliminary) results from the GBEP indicators’ implementation in Colombia, Ghana, Indonesia, the Netherlands and Germany were presented. They are available on the GBEP website. The pilot projects in Ghana and in the Netherlands, both funded by NL Agency, started in 2011. Both projects are concerned with the proliferation of 24 indicators for sustainability. The project in Ghana also includes a capacity building element.

The GBEP indicators’ implementation in Colombia, Ghana and Indonesia is reaching its conclusion. Apart from the inevitable differences arising from different national contexts, the four testing highlighted how the indicators are useful tools to catalyze flow of data from the bioenergy sector to research and government, who will then use it to develop policies to guide the national practices. All four countries considered the GBEP indicators an extremely useful tool to facilitate the sustainable development of bioenergy.

In light of further advancement in the knowledge and information sharing of the experiences derived from the application of the indicators in the field, the Activity Group has created a data platform on the GBEP website.

4.12 ISO 13065: Second draft in preparation
Comments on the draft version of ISO 13065 on ‘Sustainability criteria for bioenergy’ have been discussed in an ISO/PC 248 meeting in January 2013. It was decided that principles could propagate aspiration, but that criteria and indicators may not be guiding. It was also decided that indicators could yield quantitative, qualitative and binary results. This, combined with solutions for other comments, has resulted in significant changes of the draft text. A second draft text will therefore be circulated for comments before a draft standard will be published for public comments.
5 International co-operation / projects

5.1 Leaders of Sustainable Biofuels Initiative
This Initiative, launched on 4 February 2013 with a Manifesto, aims to support the development of second-generation biofuels. Founding Members are the CEOs of Chemtex, British Airways, BTG, Chemrec, Clariant, Dong Energy and UPM. Their strategy is to accelerate research and innovation into emerging biofuel technologies. R&D is to be supported by public and private R&D programmes. Further, they will cooperate with the supply chain to develop worldwide sustainability certification and work towards a set-up of financing structures to facilitate the implementation of sustainable biofuel projects.

5.2 KBBPPS project: pre-standardization research biobased products
The KBBPPS project, started end of September 2012, aims at increasing the uptake speed of standards and certification systems for bio-based products. The project executes pre-standardization research for bio-based products. Results are automatically feed into the European standardization process CEN/TC 411 on "Bio-based products". The goal is to provide the European and global market with horizontal standards on biomass content and biodegradability that have been assessed on a first set of different products, such as solvents, plastics and lubricants. The research consortium is managed by NEN in the Netherlands and has a timeline of three years.

5.3 ITAKA: Initiative Towards sustainable Kerosene for Aviation
The Initiative Towards sustainable Kerosene for Aviation (ITAKA), funded by the 7th European Framework Programme, started its project activities in November 2012. ITAKA consists of a consortium of leading aerospace and fuel companies. The project aims to produce sustainable renewable aviation fuel and to test its use in existing logistic systems and in normal flight operations in Europe. Possible sustainable feedstocks that are assessed are Camelina and Used Cooking Oil. The biofuel sustainability will be assessed against the RSB EU RED Standard.

5.4 Sustainable Land-use Concept for South America
On 8 November 2012, The Technische Universität München (TUM) announced a new land development concept for South America. The model is tailored to medium-sized farms in South America and sees farmers transitioning from large-scale monoculture to more diverse crop mixtures spread over smaller plots interspersed with wooded areas – a switch that can bring significant financial benefits. The new concept encourages farmers to move away from large-scale mono-cropping and to plant a mix of field crops on smaller plots, while at the same time setting aside part of their land for forests and hedges. Any unused land will be reforested. Adopting this sustainable method of intensive farming initially means higher costs for farmers due to reforestation and the division of land into individual plots. However, the combination of woodland management and smaller plots of land pays off in the long term.
5.5 GBEP and ECOWAS: Regional bioenergy Forum for West Africa on biomass resource assessment and mapping

On 13 and 14 November 2012, the second workshop from GBEP and the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) was held in Rome. This workshop included discussions of the following technical topics:

- Methodological framework for resource assessment and mapping of environmental, social and economic resources, and calculations of total available biomass;
- Cataloguing and sharing experiences to date related to biomass use, existing resource maps, and socio-economic conditions, including methods for the allocation and tenure of land.

Presentations are available online.

5.6 NL Agency: Workshop Sustainable Biomass Production in Southeast Africa

Participants in this workshop, organized in Mozambique from 19 to 21 March 2013, discussed the sustainability policies and pilot projects on bioenergy in the region. The results of recent and on-going projects funded through the Global Sustainable Biomass Programme and the Sustainable Biomass Import Programme (the Netherlands Programmes for Sustainable Biomass – NPSB) as well as through the Daey Ouwens Fund (DOF) were presented as well.

5.7 IEA Bioenergy Task 40– Canadian Bioenergy Association (CanBio): Conference on bioenergy economy in Canada and Asia Pacific region

On 27 and 28 November 2012, CanBio together with IEA Bioenergy Task 40, organised an event to showcase growth in bioenergy in Canada, Asian markets, and partnership opportunities with Australia, New Zealand, China, Korea, Singapore, and others. Presentations of the event are available on the website.

5.8 IEA Bioenergy Task 40 – Workshop on sustainability certification

A workshop was organized by IEA Bioenergy Task 40 on “How can sustainability certification support bioenergy markets” during the 8th annual WBM Conference in Rotterdam on 12 March 2013. The participants indicated that certification systems are not easy, but they have a clear purpose and the markets can work with them. Nevertheless it was agreed that there is still a lot to do to improve their functioning and various issues are still to be resolved. It was considered important to use the lessons beyond the energy sector, and then also translate these to land use, agriculture, forestry and other biomass applications. Presentations are available on the website.

5.9 The project Methodology for Low Indirect Impacts Biofuels (LIIB)

The project Methodology for Low Indirect Impacts Biofuels (LIIB) is a collaboration between WWF International, Ecole Polytechnique Fédérale de Lausanne, and Ecofys. The Low Indirect Impact Biofuels (LIIB) methodology seeks to promote biofuel production without displacing other provisioning services and hence avoiding indirect environmental and social impacts. This means identifying areas and/or production models that can be used for environmentally and socially
responsible energy crop cultivation, without causing displacement effects that could affect the market prices for commodities and land, thus potentially affecting global land use change and food security. LIIB is pilot tested in Mozambique, Indonesia, South Africa and Brazil. First results about the pilot tests have been published in January 2013 and are available from the project website.

5.10 FAO: Tools fostering sustainable bioenergy development
On 15 November 2012, and during the GBEP seminar in Rome, experts from FAO showed different tools, instruments and policies developed by them to foster the deployment of sustainable bioenergy development taking into account environmental, social and economic issues. This includes work done in the IFES Programme, supported by NL Agency, which assesses different systems for integrating food and energy and identifies factors that hinder the uptake of these systems. Programme findings are intended to inform policy-makers and supporting partners about the importance of IFES for climate-smart agricultural development. FAO also presented the recently agreed Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. These guidelines were developed through a global multi-stakeholder consultation process. They represent a global consensus on internationally accepted principles and standards for responsible practices. The framework can be used by national governments developing their own policies, legislation and programmes. Moreover, FAO presented the findings of two studies carried out in Tanzania under the BEFS programme: one on the evaluation and planning of bioenergy in using the Water Evaluation and Planning (WEAP) tool; and a second one on the economic feasibility assessment of sunflower based biofuels in Tanzania.
6 Reports

6.1 NGOs: Biofuels on the Dutch Market, ranking oil companies in the Netherlands
BirdLife Europe, Transport & Environment, the European Environmental Bureau and the Dutch NGO Natuur & Milieu commissioned this study to assess the environmental performance of the biofuels sold by the various fuel suppliers in the Netherlands and rank them based on the average GHG emissions of their biofuel blends in 2011. The report, published in February 2013, concludes that biofuels in the Netherlands have a limited ILUC effect: Most of the feedstock used within the Netherlands comes from waste or residues. The report also advises to harmonize reporting obligations of biofuels between Member States.

This report, available in final draft in April 2013, provides a quantitative and qualitative overview of past and current solid and liquid biomass flows in the Netherlands (by constructing mass balances), and assesses (as far as possible) to what extent these biomass were certified with sustainability schemes, and by which ones. Most important certification schemes for woody biomass are FSC and PEFC, followed by GGL and Laborelec. The most important certification scheme for biofuels is ISCC.

6.3 NL Agency: Marktimpactanalyse flexibiliteit carry-over biobrandstoffen (Market impact analysis flexibility carry-over biofuels)
This report, published in November 2012, evaluates the impact of more or less flexible regulations around the carry-over of biofuels, with the help of scenarios. The scenarios are assessed for their effectiveness, efficiency and support. The report concludes that the supply of biotickets will only marginally increase when carry-over is not permitted.

6.4 NL Agency: Ensuring the sustainability of biobased chemicals & polymers
The NRK (Dutch Rubber and Plastics Association), SABIC and Plastics Europe Netherlands division have signed a Green Deal with the Dutch government with the title “Green certificates of (polymer) chemical products (partly) consisting of green materials. As a start, this report from November 2012 takes a first step towards the development of such a Green certificate by getting an understanding of the applicability of existing sustainability frameworks and assessing an approach to develop certification of biobased chains.

6.5 NL Agency: How to build a bankable undertaking in biomass?
This report explores a wide range of commercial options for the many start-up projects in NL Agency’s biomass portfolio. The project created a support structure for these projects, allowing contractors to assess commercial opportunities and risks by using project development tools. This, with the aim to provide maximum support for growth after the subsidy period.
6.6 NL Agency: Draft standard aquatic biomass value chain indicators
At the request of NL Agency, Proforest developed this draft standard with indicators under 8 sustainability principles and tested it on the DBM-funded pilot project for shrimp co-culture algae cultivation in Vietnam, the ‘Vietnam Aquatic Biofuel Project’, a partnership of the Saigon-based Institute for Tropical Biology (ITB) and US firm Algen Sustainables. This draft standard, published in March 2013 is developed as discussion document for use in future developments of a voluntary standard for algal biomass.

6.7 Alterra: 30 vragen over bodemvruchtbaarheid (30 questions about soil fertility)
Alterra has released a report (in Dutch) about soil fertility. The report pays attention to the relation between agriculture, soil fertility and biomass by answering 30 questions; one of them is the influence of energy production from biomass on the soil fertility.

6.8 FAO: Biofuels and the sustainability challenge
This report from March 2013 addresses the core issue of sustainability of biofuels and related feedstock. It is based on a wide range of sustainability related studies, reports, policy initiatives. The report examines the economic, environmental and social sustainability dimensions of biofuels and reviews the major certification initiatives, schemes and regulations. Country case studies are included as well.

6.9 GHG database now available on FAOSTAT3
Greenhouse gases database are available on FAOSTAT3 (still in pilot version) since December 2012. The newly added GHG database offers a time-series of emission statistics for all countries over the period 1990-2010. It provides countries with information to identify and assess GHG emissions from their agriculture, forestry and other land use sectors. Data are based on Intergovernmental Panel on Climate Change reporting methodologies. The service wants to provide countries with regular updates of global and regional GHG emissions land-use trends.

6.10 IEEP: The role of bioenergy in Europe’s energy future
This report, published by the Institute for European Environmental Policy (IEEP) in October 2012, focuses on the growing use of bioenergy in for biofuels, heating and electricity in Europe. The report discusses the great uncertainty about claims of emissions reductions and carbon neutrality and is based on wide literature on bioenergy’s GHG emissions.

6.11 Eurostat: Statistics and figures for Energy, Transport, Agriculture and Forestry
Between December 2012 and January 2013, Eurostat published three databases, comprising a broad set of data collected by Eurostat and the European Environment Agency:
- Energy, transport and environment indicators — 2012 edition;
- Agriculture, fishery and forestry statistics — Main results – 2010-11 — 2012 edition;
- Farming, fishing and forestry in figures.
6.12  **IEA Bioenergy: Monitoring sustainability certification of bioenergy. Draft reports available**  
The study initiated on January 2012 among Tasks 40, 43 and 38 to monitor the actual implementation process of sustainability certification of bioenergy, has made available its draft reports for the subtasks of the study:

- **Task 1**: Examining Sustainability Certification of Bioenergy
- **Task 2**: Survey on governance and certification of sustainable biomass and bioenergy
- **Task 3**: Impacts of sustainability certification on bioenergy markets

The study addresses a wide range of schemes, developed largely without coordination among the organisations involved; this is a situation that potentially creates confusion among actors, depression of markets, and unnecessary cost burdens and restrictions on sustainable trade. A report on “Recommendations for improvement of sustainability certified markets” is in preparation. The main outcomes of the study were presented on 12 March 2013 in a workshop during the World Biofuels Markets in Rotterdam.

6.13  **IEA Bioenergy Task 40: Possible effect of torrefaction on biomass trade**  
The focus of this study, published in November 2012, is to examine briefly the status of the development of torrefaction technology. The report also looked at the likely biomass sources and what impact the development of torrefied wood will have on global trade, in particular between now and 2020. This study assessed the extent torrefaction might open up new biomass feedstock sources, and explored how torrefied biomass will perform along the logistical chain of long-haul international transport and at the end-use conversion plants. The torrefaction process was compared with two other important preconditioning technologies: simple pelletization and flash pyrolysis.

6.14  **IEA Bioenergy Task 32: Status overview of torrefaction technologies**  
This report published by Task 32 in January 2013 presents an overview of the current status of torrefaction technologies and their market perspectives. It is largely based on a technology status overview prepared by Task 32 for the Dutch government in 2010. Additional information collected in 2011 and 2012 was incorporated to update the document.

6.15  **USDA GAIN: Renewable Energy and Biofuel Situation in Poland 2012**  
This report published on 28 December 2012 describes the renewable energy and biofuels situation in Poland up to the end of 2012. Poland has not yet transposed the Renewable Energy Directive (2009/28/EC) (RED), as the government has not come to agreement on a Renewable Energy Act. Further, Poland has not fully transposed Directive 2009/30/EC on fuel specifications and quality monitoring into national law, also because of lack of agreement within the government.

6.16  **USDA GAIN: Spain’s Bioethanol Standing Report 2012**  
This report from end September 2012 provides an overview of Spain’s bioethanol sector including Member State specific policy, production supply and demand data. Spain is amongst the four top EU-27 Member States in terms of bioethanol production capacity and consumption. While self-sufficient in bioethanol, Spain has
to import annually between 9 and 13 million MT of grains to meet the livestock sector and bioethanol industry needs. This accounts for over one million MT of grains use. In 2013 the bioethanol sector will face new challenges such as the end of the hydrocarbon tax exemption for biofuels and sustainability requirements for the bioethanol to be eligible to meet national targets.

6.17 USDA GAIN: Ethanol use in Panama
This report from 9 January 2013 describes the mandatory use of ethanol to be implemented in 2013 in Panama. In 2011, Panama passed a law mandating the addition of ethanol to gasoline, up to 10 percent by 2016. This law will go into effect later this year as this USDA Foreign Agricultural Services report outlines.

6.18 USDA GAIN: Two additional biofuels country reports 2012
The USDA GAIN published between October 2012 and January 2013 few more biofuel country reports with all highlights of the biofuel industries during 2012 on those countries. Available reports are Malta and Serbia.

6.19 USDA GAIN: The market for wood pellets in the Benelux
This report published on 4 January 2013, explains that in 2012, the United States is expected to be the main supplier of wood pellets to the Benelux market with an export volume of about 1.25 MMT (US$ 225 million). The Foreign Agricultural Service of the US at The Hague estimates that the Benelux wood pellet consumption will more than double during 2012 – 2020 to a volume of 5.7 MMT (US$ 1 billion). For the supply, the Benelux will depend for over 95% on imports. If trade flows remain consistent with current patterns, the United States has the potential to supply at least half of this import demand. However, wood pellets will need to comply with sustainability requirements.

6.20 Nature – Climate Change: Impacts of biofuel cultivation on mortality and crop yields
The Nature Climate Change Journal, published on 6 January 2013 an article authored by scientists from Lancaster University about the impacts of biofuel production on human mortality and crop yields. The article quantifies the increases in isoprene emission rates caused by cultivation of 72 Mha of biofuel crops in Europe. It estimates the resultant changes in ground-level ozone concentrations and the impacts on human mortality and crop yields that these could cause. The study highlights the need to consider more than simple carbon budgets when considering the cultivation of biofuel feedstock crops for GHG mitigation.
## List of important abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>EU</td>
<td>European Union</td>
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<td>EUTR</td>
<td>European Union Timber Regulation</td>
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<td>FAO</td>
<td>Food and Agricultural Organization of the United Nations</td>
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<td>FQD</td>
<td>Fuel Quality Directive</td>
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<td>GHG</td>
<td>Green House Gas</td>
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<td>IEA</td>
<td>International Energy Agency</td>
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<td>ILUC</td>
<td>Indirect Land Use Change</td>
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<td>RED</td>
<td>Renewable Energy Directive</td>
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<td>RES</td>
<td>Renewable Energy Sources</td>
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<td>UCO</td>
<td>Used Cooking Oil</td>
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Disclaimer

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