

CORE THEME 5

RES in Transport



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1 IN A NUTSHELL

The third phase of the Concerted Action on Renewable Energy Sources Directive (CA-RES3) provided national authorities with a platform for a structured and confidential dialogue to support their implementation of renewable energy policies and targets. As part of this dialogue, representatives from participating countries were invited twice a year to attend CA-RES3 plenary sessions, with discussions grouped into five Core Themes.

In Core Theme 5 “RES in Transport”, policy experts from participating countries discussed policies and good practice examples to promote renewable energy in transport. These included measures to achieve the target of 10% renewable energy in transport by 2020 and national sub-targets for “advanced biofuels” from wastes and residues as set by EU Member States in accordance with the Renewable Energy Directive 2009/28/EC and Directive 2015/1513 (“ILUC Directive”).

The initial Core Theme sessions focussed on the transposition of the ILUC Directive that was due by September 2017. The negotiations of the revised Renewable Energy Directive 2018/2001 provided the background to later discussions. Following the latter Directive’s adoption, participants also discussed its implementation and the accompanying delegated and implementing acts. Over the period covered in this report, the share of renewable energy in transport fuels continued to increase across participating countries. However, progress towards renewable energy targets remained uneven with a small number of countries overachieving the 2020 targets that other countries found more challenging to achieve. There were also key differences between participating countries regarding the specific renewable fuel mix and support mechanisms, which in turn impacted policy choices.

Measures to promote biofuels whilst ensuring their sustainability were an integral part of the Core Theme 5 discussions. The rising target levels for 2020 and beyond shifted the focus also towards measures to promote other alternative fuels, including advanced biofuels, biomethane, renewable electricity, renewable fuels of non-biological origin or recycled carbon fuels. The use of these fuels poses new challenges in terms of sustainability and accounting for greenhouse gas savings, for example when taking into account competing uses in other sectors. Another point of discussion was encouraging the use of renewable fuels in non-road transport sectors such as aviation and maritime.

Throughout the six plenary meetings, representatives from participating countries set out their respective measures to achieve domestic and EU targets. This allowed participants to exchange information about different policy mechanisms, developments at national and EU level as well as their experiences regarding specific challenges and potential solutions. Participants also used the sessions to seek clarifications of the interpretation of EU legislation and highlight any concerns in terms of its current application that might require joint actions. The Core Theme meetings also allowed for more technical discussions related to specific fuels and fuel types. Participants discussed, for example, policy challenges for promoting fuels from feedstocks listed in Annex IX Part A of the Renewable Energy Directive (“advanced biofuels”), with presentations on technological development, feedstock availability and progress of specific projects.

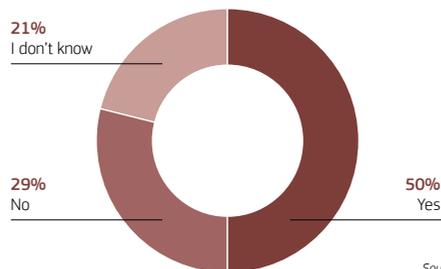
Overall, the Core Theme discussions helped participants gain a deeper understanding of different policy options and approaches as well as good practices in other participating countries. The Core Theme allowed participants to stay up to date with policy developments at national and EU level and to identify common challenges. This also provided the opportunity to review potential solutions and determine whether coordinated or joint actions might be required to address any challenges.

2 TOPIC IN THE SPOTLIGHT: PROMOTION OF “ADVANCED BIOFUELS”

The “ILUC Directive” 2015/1513 requires Member States to set a national target for biofuels produced from feedstocks and other fuels listed in part A of Annex IX of the Directive as a share of total transport fuels. These fuels are often referred to as “advanced biofuels”. While the ILUC Directive does not mandate a certain percentage, it provides a reference value of 0.5% in terms of energy content for 2020. With several participating countries expected to remain below this reference value, the revised Renewable Energy Directive 2018/2001 introduced a mandatory advanced biofuels target of at least 0.2% in 2022, at least 1% in 2025 and at least 3.5% in 2030.

In the discussions of Core Theme 5, many participants pointed out challenges to increasing the share of advanced biofuels in their country. As a consequence, several of them continued to have concerns as to whether their countries would be able to meet the targets for advanced biofuels (see Figure 1).

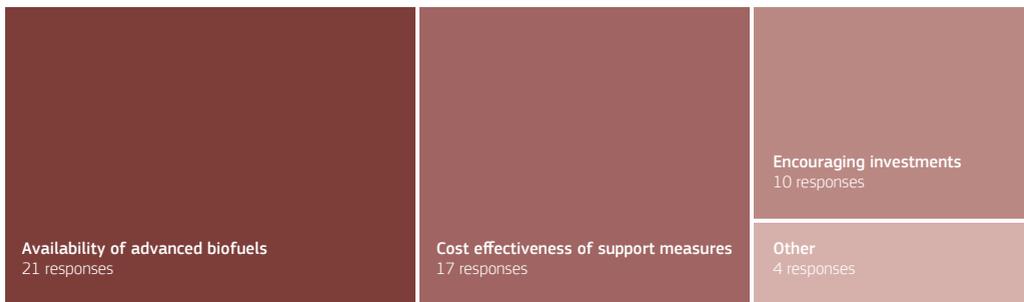
FIGURE 1 Do you expect to meet your advanced biofuels target for 2020?



Source: Participant survey from November 2019

Risks flagged by participants related to the general availability of these fuels, the cost-effectiveness of support measures and potential failure to attract investments (see Figure 2 below). Other challenges related to the interplay with long-term strategies and greenhouse gas savings. Several of the sessions in Core Theme 5 were therefore dedicated to advanced biofuels and provided an overview of different technologies and their respective readiness level as well as the availability of feedstocks.

FIGURE 2 Potential barriers to achieving advanced biofuel targets (by number of listings)



Source: Participant survey from November 2019

The presentations and discussions in the Core Theme 5 sessions made it clear that in principle technologies and feedstocks would be available to meet ambitious targets. There are also a number of advanced biofuel projects in production and development across participating countries (technologies include, for example, ethanol from straw or biomethane). However, challenges remain as to increasing the shares of advanced biofuels in the fuel supply and various projects have failed despite support being provided by participating countries. These challenges relate to the projects' access to finance and the supply chain, including availability of feedstocks, their collection and transport.

Project developers who presented at the meetings stressed that stable policy frameworks, ambitious targets and financial support mechanisms would be key to supporting the development of advanced biofuels. The sessions also highlighted the difficulties for policy makers in balancing support for projects that are close to commercialisation (e.g. advanced ethanol) and more likely to deliver on targets in the short term, and support for less advanced technologies that will be required to meet targets in the long-term (for example drop-in fuels, diesel substitutes and aviation fuels).

The sessions discussed new challenges in ensuring sustainability of advanced biofuels and the wastes and residues they are produced from. Presentations highlighted that safeguards to ensure sustainable extraction of agricultural residues or the application of the waste hierarchy would be essential to ensure the projects have a positive impact. However, many of these assessments would need to be made on a project by project basis and take into account local and regional conditions. The discussions also highlighted differences in the interpretation of the Annex IX Part A list of feedstocks and the potential requirement for further coordination in the future.

3 CHALLENGE MEETS SOLUTION

This chapter provides an overview of the topics covered in the Core Theme sessions and highlights good practice examples from participating countries.

3.1 Highlights from the Discussions

The following topics were discussed in more detail in Core Theme 5 “RES in Transport”.

Progress towards 2020 Targets and Implementing Measures

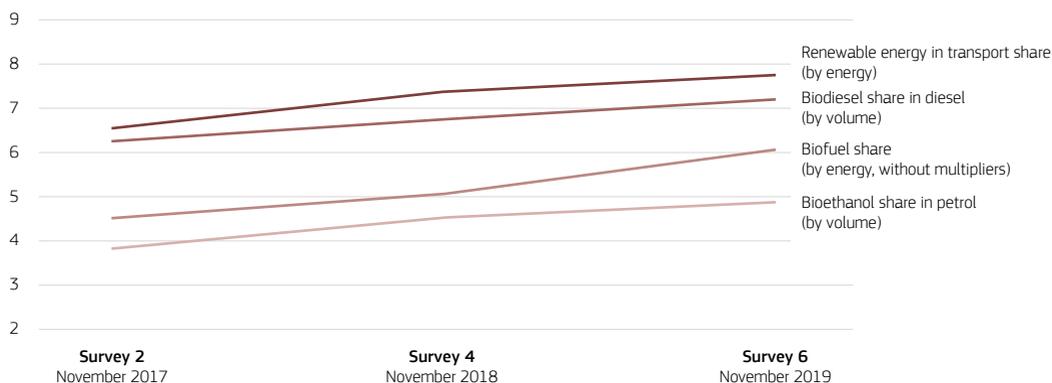
As part of the six plenary sessions, participants held regular discussions on progress towards the 2020 targets as well as the measures taken to implement the targets under the Renewable Energy Directive 2008/28/EC and the ILUC Directive 2015/1513.

The presentations given during each session highlighted the different support mechanisms for renewable energy in transport in participating countries. Most participating countries have an obligation on fuel suppliers to provide a certain share of renewable fuels or blending mandates in place. However, these schemes may differ in terms of scope, targets, accounting rules and flexibilities (for example, in how far they allow trading of certificates used to prove compliance within the scheme). Very few participating countries provide support based predominantly on the greenhouse gas savings achieved (rather than the share of renewable fuel). However, most participating countries have introduced elements linking incentives to greenhouse gas savings as part of their implementation of the ILUC Directive. Fiscal incentives (for example, carbon taxation, tax rebates, duty incentives) are used in most countries to promote renewable energy in transport, as are support mechanisms for research and development projects, grants, public procurement, engagement campaigns and other incentives (e.g. toll incentives, free parking for less polluting vehicles). There are also further measures in place to encourage renewable electricity in transport (see chapter below)

The overall share of renewable energy in transport increased throughout the period covered by this report. Information provided by participants suggested that this applied to the overall renewable energy share and the share of biofuels, including both bioethanol blended with petrol and biodiesel blended with fossil diesel (with an increase e.g. also of hydrotreated vegetable oil (HVO) in many countries) (see Figure 3 below). The information also indicated that the shares of other alternative fuels (e.g. renewable electricity or biomethane) increased.¹

¹ As the information provided was less consistent with fewer submitted responses, it has not been included in Figure 3.

FIGURE 3 Self-reported renewable energy shares in transport (in %)



Please note that the graph provided here is only included for illustrative purposes. It is based on participant surveys from three sessions with differing response rates. The graph does not represent official statistics or EU averages as provided for example by EUROSTAT.

Source: participant surveys from November 2017–2019

Generally, most participating countries further improved their access to data alongside the implementation of the ILUC Directive, including information on feedstocks used to produce the fuel, their countries of origin as well as greenhouse gas savings achieved by different fuels. However, the publicly available information and reporting might still vary across participating countries.

Despite the overall rising renewable energy share, progress towards the 2020 targets differed widely in participating countries, with only a minority of countries already overachieving these targets. In contrast, other countries highlighted throughout the sessions the need to take additional measures to be able to reach these targets. Additional measures included raising existing domestic targets for biofuels and the promotion of electric vehicles and infrastructure as well as promoting the use of higher biofuel blends, biomethane and further support measures for advanced biofuels from wastes and residues that are not yet commercially available. Support for the use of renewable fuels in non-road sectors (i.e. aviation and maritime) were also included in the response.

The sessions highlighted similarities and differences in the mix of fuels and fuel types used to achieve targets. Due to the rising targets, an increasing number of participating countries started to investigate measures to expand the types of feedstocks and fuels used (see also section on “new” fuels further below). Differences arose in terms of the starting position of each country (e.g. overall renewable shares in transport and other sectors, fuel and feedstock mix). These differences relate for example to the respective shares of crop- and waste-derived biofuels in each country, which in turn have informed policy decisions on caps or views on the need for additional measures to address indirect land use change (ILUC) impacts.

Overall, the Core Theme discussions provided an overview of the complex policy landscape in this area, allowing participants to gain a deeper understanding of common challenges, potential solutions and the background to existing differences in approach.

Clarification of the Interpretation of the EU Legislative Framework

Participants used the sessions to highlight differences in the interpretation of the existing legislation (e.g. in terms of reporting greenhouse gas emission savings or feedstocks considered to be part of Annex IX Part A). Where possible, the Commission or other participants provided further clarifications or identified next steps to achieve more clarity.

Following the adoption of the revised Renewable Energy Directive 2018/2001, participants also asked for dedicated sessions on the new legislation. These sessions provided an opportunity for participants to confirm their understanding of the new provisions and amendments, and to discuss challenges to the implementation and how these might be overcome.

The discussions covered a wide range of topics and questions as raised by participants, including on the fuel supplier obligation that Member States are required to introduce, exemptions, caps, multipliers and other aspects of target accounting. Many questions also related to the specific rules for biomethane, renewable electricity, renewable fuels of non-biological origin and recycled carbon fuels or biofuels from feedstocks with a high risk of indirect land use change. This also encompassed questions as to the delegated and implementing acts that will need to be adopted. The timetable for implementation, an EU database for renewable fuels, review clauses (e.g. of Annex IX feedstocks), standards for voluntary schemes and sustainability governance were also discussed.

“New” Fuels: Expanding the Feedstock and Fuel Base

Some of the sessions covered specific challenges participants face when expanding existing support mechanisms to other alternative fuels, such as biomethane or low carbon fuels that are not made from biomass (renewable electricity, renewable fuels of non-biological origin or recycled carbon fuels).

The information provided by participants suggested that in most participating countries renewable electricity contributed to transport targets and many countries have set ambitious targets for transport electrification. However, promoting renewable electricity often requires a different support mechanism than that used to promote renewable liquid and gaseous fuels, and in most countries different policies apply. This is because vehicle and infrastructure costs rather than fuel costs are the main barriers to electrification. In contrast to renewable fuels, renewable electricity can often compete with its fossil alternatives and is also supported by measures for the electricity sector. According to the information provided by participants, renewable fuels are mainly promoted through fuel supplier obligations and blending mandates, whereas e-mobility is generally supported through purchase grants, funding for charging infrastructure, tax incentives, public procurement and communications campaigns. This leads to challenges in terms of policy cohesion. However, participants also highlighted overarching policy frameworks and incentives that combine support both for renewable fuels and renewable electricity in transport (including targets under the Fuel Quality Directive). Participants were also presented with examples of schemes (in the EU and outside the EU) that reward greenhouse gas and as such combine support for renewable fuels and renewable electricity.

Other challenges for promoting renewable electricity that were discussed related to calculating the exact share of renewable electricity in transport and ensuring that promoting renewable electricity in transport leads to additional production capacity rather than diverting from existing uses in the electricity sector. While some participating countries started applying rules to ensure such additionality, a majority awaited the Commission delegated act first before setting further measures.

Challenges for renewable electricity equally applied to renewable fuels of non-biological origin produced with renewable electricity. For both renewable fuels of non-biological origin and recycled carbon fuels (the latter a new category of fuels introduced by the revised Renewable Energy Directive), participants also discussed challenges for determining a harmonised methodology to calculate greenhouse gas savings.

Tracing energy products that can be transported via electricity and gas grids can be difficult, particularly across borders and if these products can be used in different sectors (i.e. electricity, heat, transport). Together with Core Theme 4 (Biomass Mobilisation and Sustainability), participants therefore discussed such challenges in relation to biomethane. The sessions highlighted that while there would be substantial potential for biomethane production in the EU, careful consideration would need to be given to the best use of biomethane across different sectors now and in the future when encouraging its use in transport. Existing measures to promote biomethane in transport included e.g. grants, feed-in tariffs, tax incentives, obligations or purchase support for vehicles. The session also highlighted challenges as to cross-border trade and some potential solutions to account for biomethane and its renewability. However, further work is still required to achieve a harmonisation of rules.

Introduction of Higher Blends of Biofuels

Several participants shared their respective experiences of introducing new fuel blends with a higher biofuel content, specifically petrol with up to 10% ethanol (E10) and between 65 to 85% ethanol (E85). They described both the regulatory measures taken to ensure a smooth roll-out and lessons learned. For E10, these lessons related to the communications campaigns that accompanied the introduction of the new fuel (including how to make information available on the compatibility of vehicles). For E85, the importance of the regulatory approval of conversion kits and tax incentives were pointed out as were potential risks (should e.g. demand outstrip sustainable supply).

Sector-specific Measures and Long-term Biomass Use

As part of the sessions, participants also discussed long-term projections and different scenarios for the use of biomass at EU level across different sectors. They also highlighted domestic long-term ambitions as set out in national strategies (including for example the National Energy and Climate Plans or national bioeconomy/ biorefinery strategies). A majority of participants also saw the long-term need for biofuels to transition from road to harder to decarbonise sectors such as aviation in order to meet climate commitments by 2050.

Participants consequently discussed measures to promote biofuels in these sectors. At the time of the discussions, only a few participating countries had begun to develop specific decarbonisation policies for

the maritime and aviation sector. Some of these early policies and targets were presented at the meetings, also highlighting some of the challenges. These related for example to the international character of these sectors, that could see operators refuelling elsewhere should introduced measures add significantly to costs. Presentations given also pointed out the complexities in adding new sectors to existing schemes and the need to understand the impacts on existing markets for fuels and feedstocks.

Sustainability Governance

As part of the sessions, participants discussed challenges to ensure that renewable fuels supported by different policy mechanisms are sustainable and deliver actual greenhouse gas savings. Participants discussed, for example, concerns surrounding the application of rules calculating greenhouse gas savings in relation to fossil methanol, differences in the definition of wastes and residues, or measures to prevent the intentional modification of wastes and residues. The discussions also covered a recent fraud case that affected several countries and what additional measures could be taken to prevent similar cases in the future. This included ensuring that existing checks and good practice guidance are applied and potentially improved as well as the introduction of databases that would allow the tracing of feedstocks and fuels. However, more work is still required to determine associated benefits, costs and feasibility of some of these additional measures.

The Core Theme 5 sessions also included discussions with voluntary schemes that are used by fuel suppliers to demonstrate compliance with sustainability criteria.

In relation to the revised Renewable Energy Directive, participants furthermore discussed how the new requirement for Member States to supervise certification bodies could be implemented and highlighted challenges in relation to the implementation of the new rules and timings, in particular should transposition in some countries be delayed.

3.2 Good Practices

During the session, participants presented a wide range of policies and practices, in line with the general diversity of approaches. This included good practice and initial policy ideas for further discussion. Some participating countries also shared more detail of the general challenges they face in promoting renewable energy in transport (including e.g. resources available and securing support for further regulatory developments).

Some good practice examples included:

Topic	Good Practice Example
Overachieving transport targets	Participating countries that already overachieve their 2020 targets pointed out the simplicity and flexibility of their respective systems, setting ambitious targets but leaving detailed decisions to the market. They also highlighted the embeddedness of their policy in an overarching bioeconomy strategies and climate policy, with taxation (including e.g. CO ₂ -based taxation and tax reductions) and supporting measures for infrastructure and research and development projects also playing an essential role.

Topic	Good Practice Example
Combining support for renewable fuels and renewable electricity in transport	Most participating countries apply separate or hybrid support schemes to promote renewable fuels and renewable electricity in transport to account for differences in the support that is required. Schemes that reward greenhouse gas savings rather than the renewable energy supplied (as applied in a limited number of countries in the EU and beyond) provide potentially more flexibility to combine the support for renewable electricity and renewable liquid and gaseous fuels. However, switching to such a system also comes with significant challenges for policy makers, in particular as to maintaining policy incentives and limiting any unintended impacts on the existing industry in the switch-over.
Additionality requirements for renewable electricity and renewable fuels of non-biological origin	So-called additionality requirements seek to ensure that new support measures do not divert resources from existing uses but indeed lead to additional supply. Such requirements already exist for example in the Clean Development Mechanism (CDM). Experience in this area has shown that approaches that require a demonstration that specific activities would not happen without the additional policy incentive often result in significant administrative burden. Approaches using standardised assessments, including e.g. positive or negative lists for eligible technologies or locations, may therefore be preferable. It might also be appropriate for additionality requirements to distinguish between existing and new plants and determine a baseline.
Reporting of greenhouse gas savings	Most participating countries have a wide range of information available in terms of the fuels and feedstocks used, as well as the average greenhouse gas savings achieved. Some participating countries also publish this data regularly (e.g. on a quarterly or an annual basis), with some even providing additional information on greenhouse gas savings by feedstock, fuel type or origin and values both with and without indirect land use change impacts being accounted for.
Renewable fuels in non-road transport sectors	In most participating countries, measures to promote renewable fuels in aviation and maritime are still in an early stage of development. Those that have set targets and presented initial ideas highlighted that measures need to consider the international character of these sectors (i.e. operators may re-fill elsewhere should they consider costs too high), the availability of sustainable feedstocks for these fuels, impact on existing markets, the necessary adaptations to infrastructure and risks of technology lock-in in case of assets with a long life-time.
Introducing higher blends of ethanol	Participating countries that recently introduced petrol with up to 10% ethanol (E10) highlighted the benefits of cooperating with stakeholders on the delivery of an accompanying communication campaign to inform the public about the new fuel and car compatibility. In terms of higher blends (i.e. petrol with up to 85% ethanol), regulatory approval of conversion kits and tax incentives have shown to prove successful in participating countries.
Cross-border trade of biomethane used in transport	The discussions highlighted efforts by some national authorities to support cross-border trade of biomethane by linking their national registries for biomethane, whilst also ensuring that the systems can trace compliance with sustainability requirements. More work on this will still be required to also ensure that biomethane can be accounted for in the country it is consumed.
Interpretation of Annex IX Part A	Some participating countries use positive lists for feedstocks that they consider to be wastes and residues in line with Annex IX Part A of the Renewable Energy Directive. These lists are regularly reviewed, and some countries regularly exchange information with other interested countries (based on previous joint work).
Supervision of certification bodies and accompanying audits	Currently, only one national authority is set up to witness audits undertaken by certification bodies/ voluntary schemes both within and outside the EU on a regular basis. While it may not be possible for other countries to replicate this model as they may not have a similar national authority in place, other participating countries also highlighted the possibility to apply risk-based approaches and strengthen cooperation by attending audits as observers.

4 MAIN FINDINGS AND ACHIEVEMENTS

The policy landscape for measures to promote renewable energy in transport remains diverse and complex. This reflects the different starting positions of participating countries with regard to their renewable energy shares, fuel and feedstock mix, and policy mechanisms in place. The complexity is also a result of the need to combine ambitious decarbonisation targets with the challenge of ensuring that the supported fuels provide genuine greenhouse gas savings whilst taking into account limited availability of sustainable feedstock supply, competing uses and indirect land use change risks. As a consequence of this complexity, policy discussions in this area often include highly technical information.

Against this backdrop, the discussion in the Core Theme 5 meetings helped participants gain a deeper understanding of different approaches and policy options as well as the good practices that have been applied throughout the different participating countries. The Core Theme allowed participants to stay up to date with policy developments at national and EU level and identify both common challenges and potential solutions. The sessions also provided participants with opportunities to clarify and confirm their understanding of existing EU legislation and its application.

Given the diversity of approaches, not all examples of good practice can be easily transferred among participating countries. However, the sessions highlighted many of the common challenges all participating countries face. These relate to rising targets and the need to expand the existing base of feedstocks and fuels, ensuring their sustainability, and increasingly encourage the use of fuels in non-road transport sectors that are harder to decarbonise. Discussing common challenges also provided the opportunity to determine whether challenges require further joint or coordinated action or could be addressed at national level.

The Core Theme also provided insights into and technical discussions of particular fuels, fuel types and methodologies to account for their greenhouse gas savings. Participants discussed, for example, policy challenges for measures to promote fuels from feedstocks listed in Annex IX Part A of the Renewable Energy Directive (“advanced biofuels”), with presentations on technological development, feedstock availability and progress of specific projects. They also shared experiences on the promotion of higher biofuel blends (e.g. petrol with up to 10% or up to 85% bioethanol, E10 and E85) and measures to promote electrification of transport. Other topics of discussion included the challenges arising from cross-border trade and cross-sectoral use of biomethane, and methodologies to account for the greenhouse gas savings from renewable fuels of non-biological origin and recycled carbon fuels. Furthermore, the discussions focussed on longer-term strategic considerations regarding biomass use, the promotion of the use of renewable fuels in non-road sectors, common questions and concerns in relation to sustainability governance and fraud prevention as well as potential solutions.

The table below provides an overview of the findings as mentioned in this report:

Topic	Findings
Progress towards transport targets	Over the period covered by this report, participating countries have increased their share of renewable energy in transport. Progress towards targets is however uneven among participating countries. Some countries already overachieve their 2020 targets, while others plan a range of additional measures to be able to meet theirs (e.g. raising blending levels of biofuels, electrification of transport, promoting advanced biofuels and biomethane or renewable energy in non-road transport sectors). Despite some of the differences, participating countries all face similar challenges in view of rising targets, including how to extend the base of feedstocks and fuels and to ensure their sustainability. The Core Theme sessions allowed participants to exchange experiences and discuss potential solutions and early policy ideas.
Legal interpretations and clarifications	As part of the discussions, participants flagged differences in the interpretation and application of certain provisions in EU legislation (for example in relation to calculation rules for greenhouse gas savings). The sessions also provided participants with the opportunity to discuss their questions regarding the revised Renewable Energy Directive. In response, the Commission provided further guidance, where possible, and participants also highlighted other useful sources of information.
Advanced biofuels (Biofuels produced from feedstocks listed in Annex IX Part A of the Renewable Energy Directive)	In principle, technologies and feedstocks for advanced biofuels are available and several projects are in production or development. However, concerns remain among some participating countries as to whether current targets can be met given the overall availability of these fuels. Lack of access to finance and the failure to build up the required supply chain have been among the main barriers to successful commercialisation of projects even when government support is provided. Further work is still required to ensure sustainability of the feedstocks and promote fuels that will be required in the long-term (including e.g. aviation fuels).
“New” fuels: Expanding the base for feedstocks and fuels	Due to rising targets for renewable energy in transport, fuels not made from biomass (renewable electricity, renewable fuels of non-biological origin or recycled carbon fuels) have come into the focus of policy-makers. Some of these fuels (e.g. renewable electricity) may need other forms of support than renewable liquid fuels and different methodologies and rules will need to be put in place to ensure these fuels are sustainable and do not divert resources from other uses. The sessions dedicated to these fuels provided background to the principles and challenges involved and discussed the initial steps to ensure these fuels are promoted in a sustainable manner and can be traded across borders.
Biomass use and sector-specific measures	As the supply of sustainable biomass is limited, and feedstocks and fuels may be required in different sectors, it will be important to carefully consider the best uses of biomass to help meet ambitious climate targets. In the long-term, biofuels may therefore be required to transition to transport sectors that are hardest to decarbonise and have limited alternatives to liquid fuels (e.g. aviation). Policies to promote renewable fuels in these sectors are in their early stages of development and the international character of these sectors, complexities to include new sectors into existing support mechanisms and impacts on existing markets will need to be considered further in future policy development.
Sustainability governance	The sessions provided participants with the option to discuss existing practices to ensure the sustainability of renewable fuels, highlight where further action may be required and exchange potential solutions, including in regards to new provisions under the revised Renewable Energy Directive.

5 ABBREVIATIONS

Participating countries are referred to according to their two-letter country codes as defined by ISO 3166-1 alpha-2 standard (AT – Austria, BE – Belgium, etc.).

Abbreviation	Full Name
CA-RES3	Third phase of the Concerted Action on the Renewable Energy Sources Directive
CDM	Clean Development Mechanism
EU	European Union
EUROSTAT	European Statistical Office, European Commission Directorate-General
GHG	Greenhouse Gas
HVO	Hydrotreated Vegetable Oil
ILUC	Indirect Land Use Change

This is a public CA-RES3 report

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The first phase of the Concerted Action to support the implementation of the RES Directive 2009/28/EC (CA-RES) was launched with the participation of the responsible authorities from 30 EU countries and supported by Intelligent Energy Europe (IEE) in July 2010 to provide a structured and confidential dialogue on how to address the cost-effective implementation of the RES Directive 2009/28/EC.

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For further information please visit **www.ca-res.eu**

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