

BOS

Briefing Session



23rd May 2019

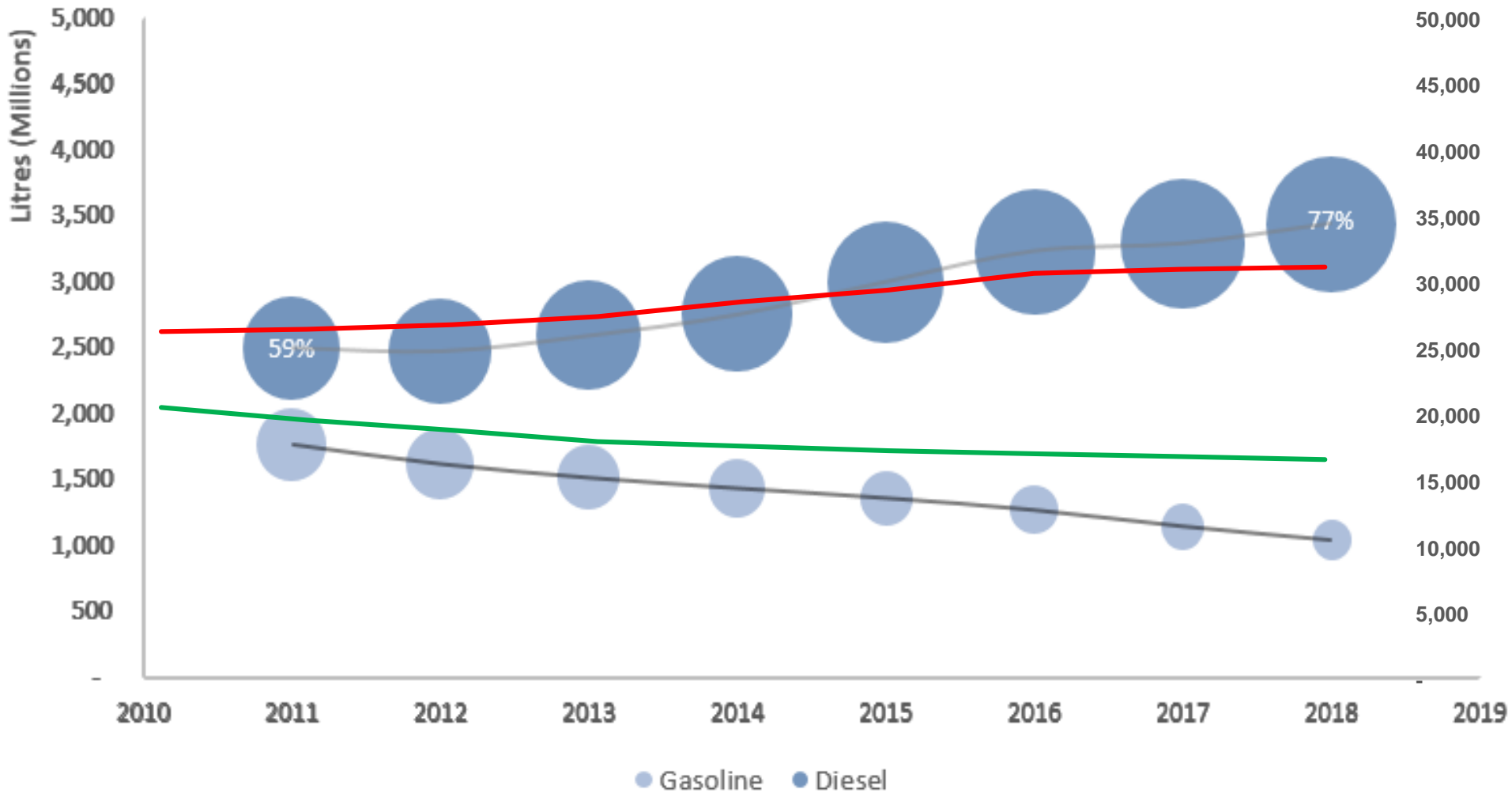
TODAY'S AGENDA

- CFPP biodiesel – GBI & SGS
- Reconciliation of 2018 period
- BOS recap on SI 160
- BOSOS changes in 2019
- Biofuels Policy 2020-2030 – DCCAE

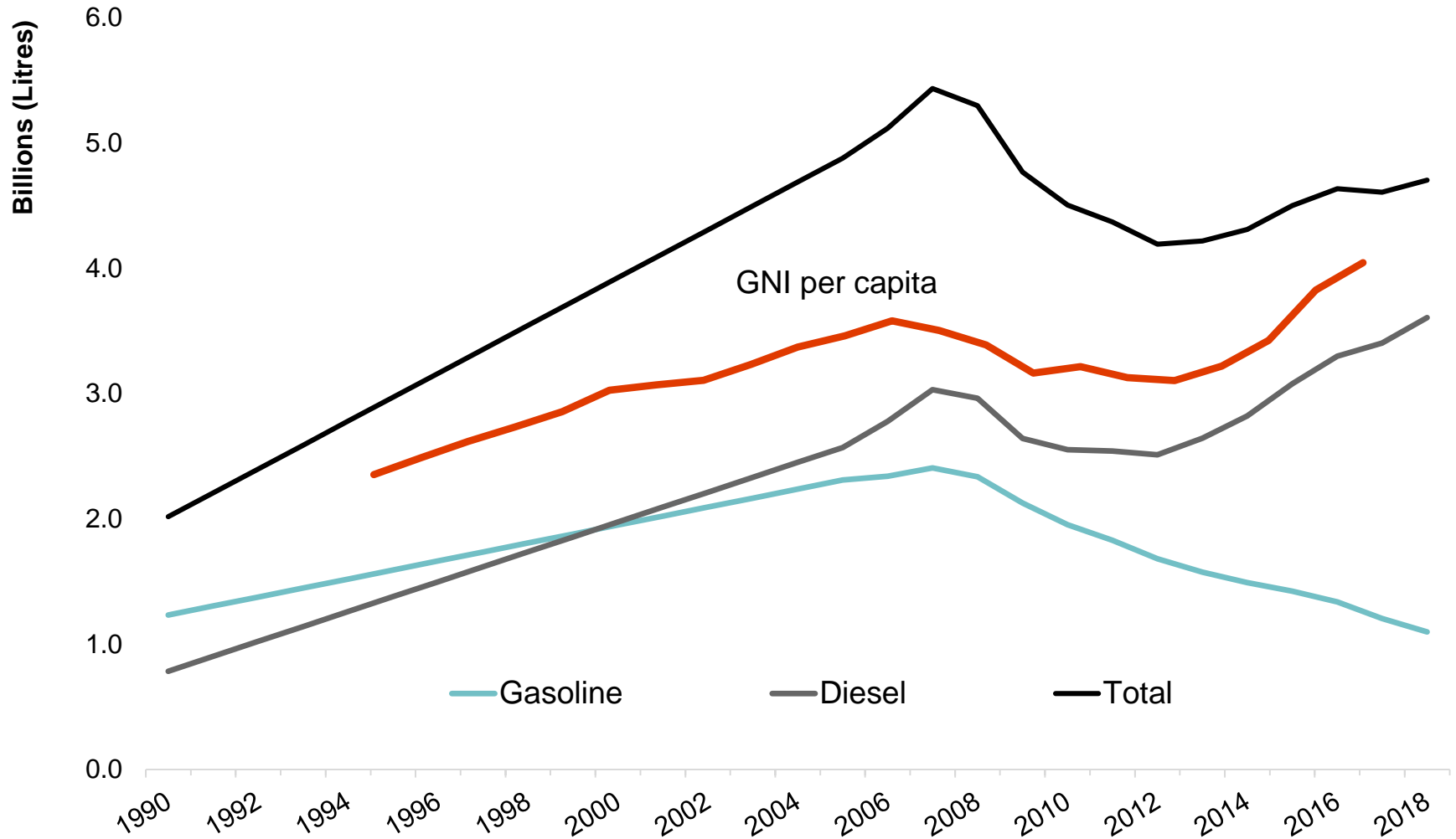
- Open discussion



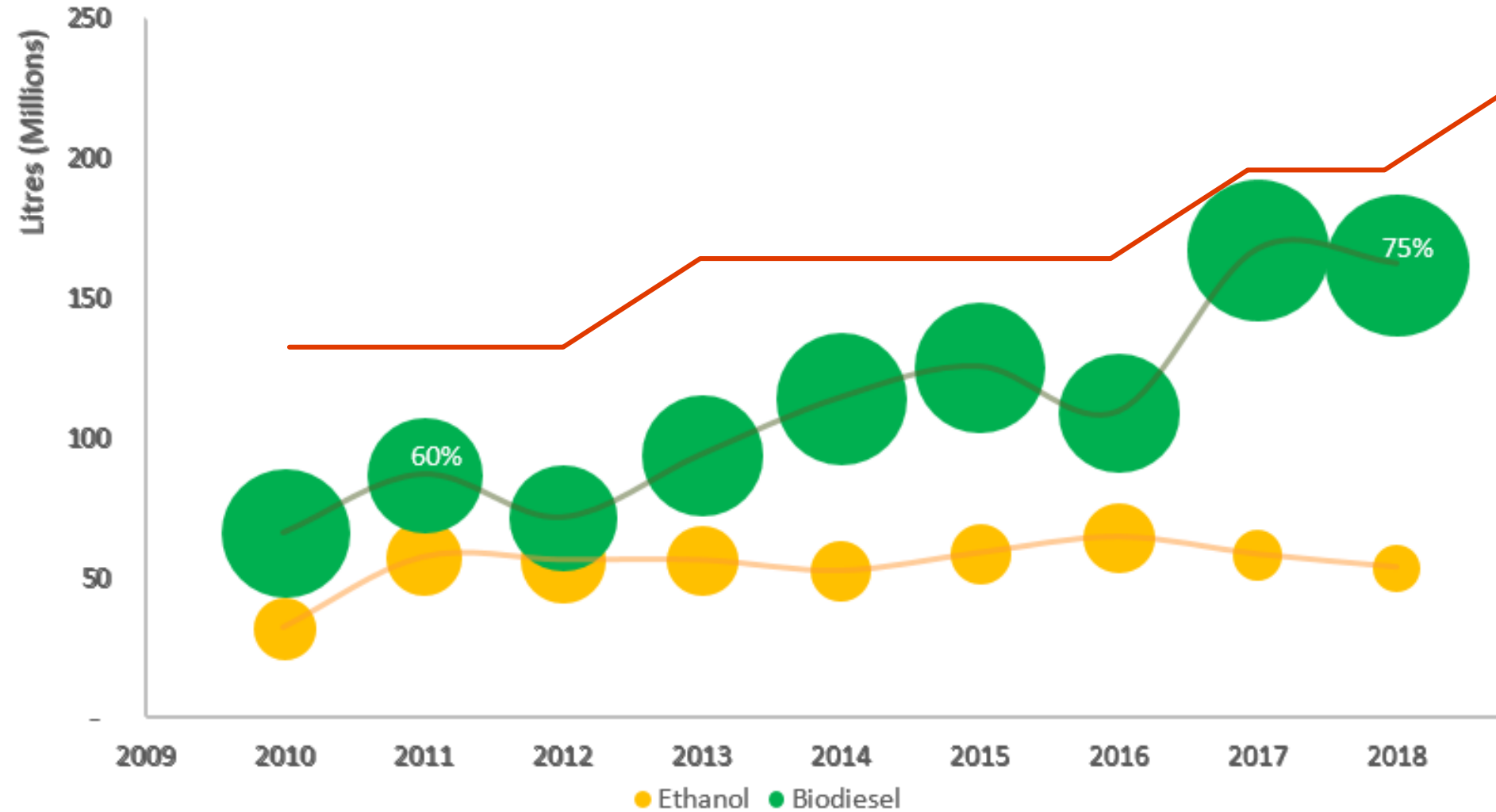
RECONCILIATION OF 2018 PERIOD – FOSSIL FUEL



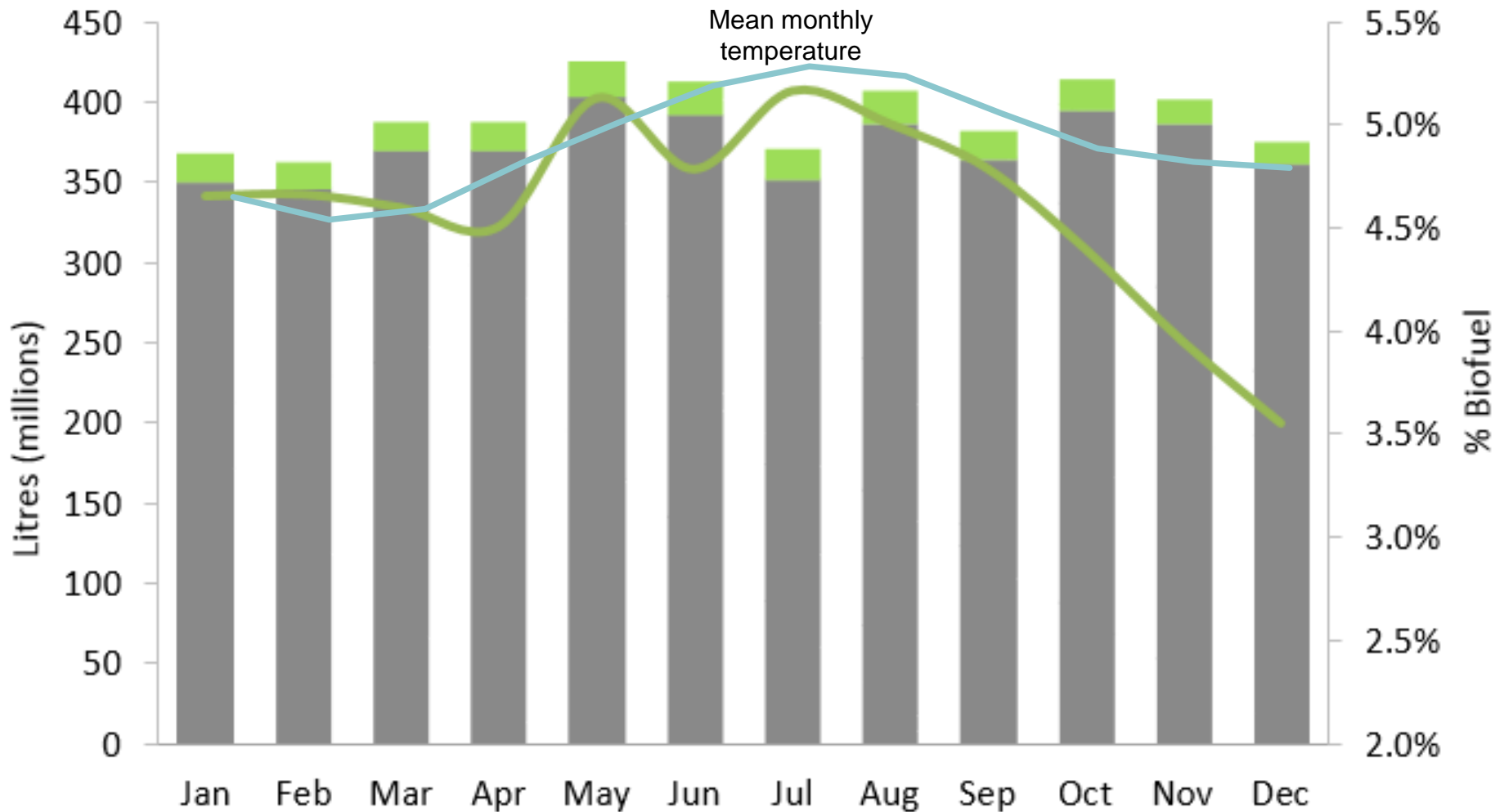
RECONCILIATION OF 2018 PERIOD – FOSSIL FUEL



RECONCILIATION OF 2018 PERIOD – BIOFUEL



RECONCILIATION OF 2018 PERIOD – FOSSIL & BIO



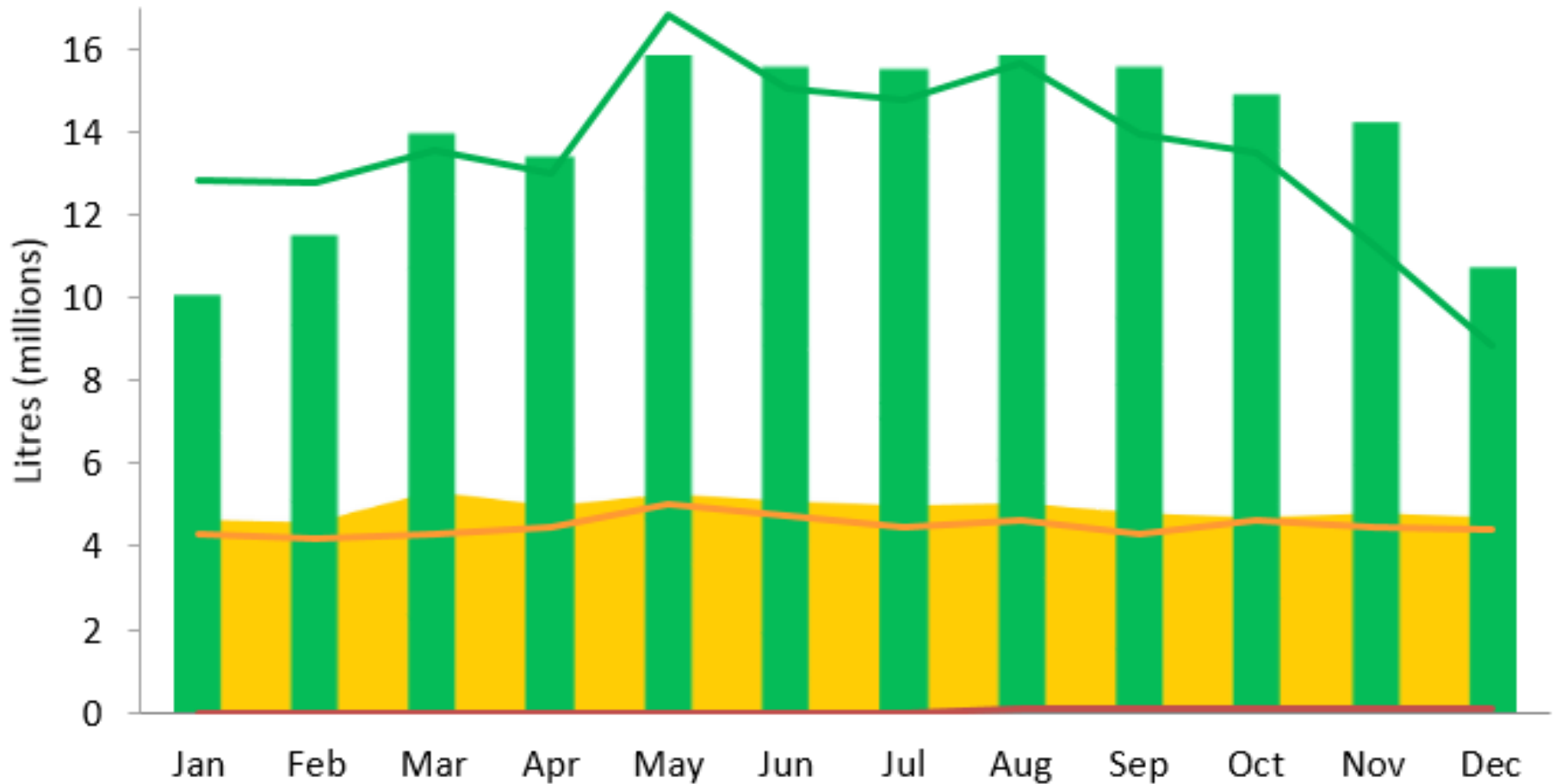
■ Fossil Fuel

■ Biofuels

— % Biofuel



RECONCILIATION OF 2018 PERIOD – BIOFUEL

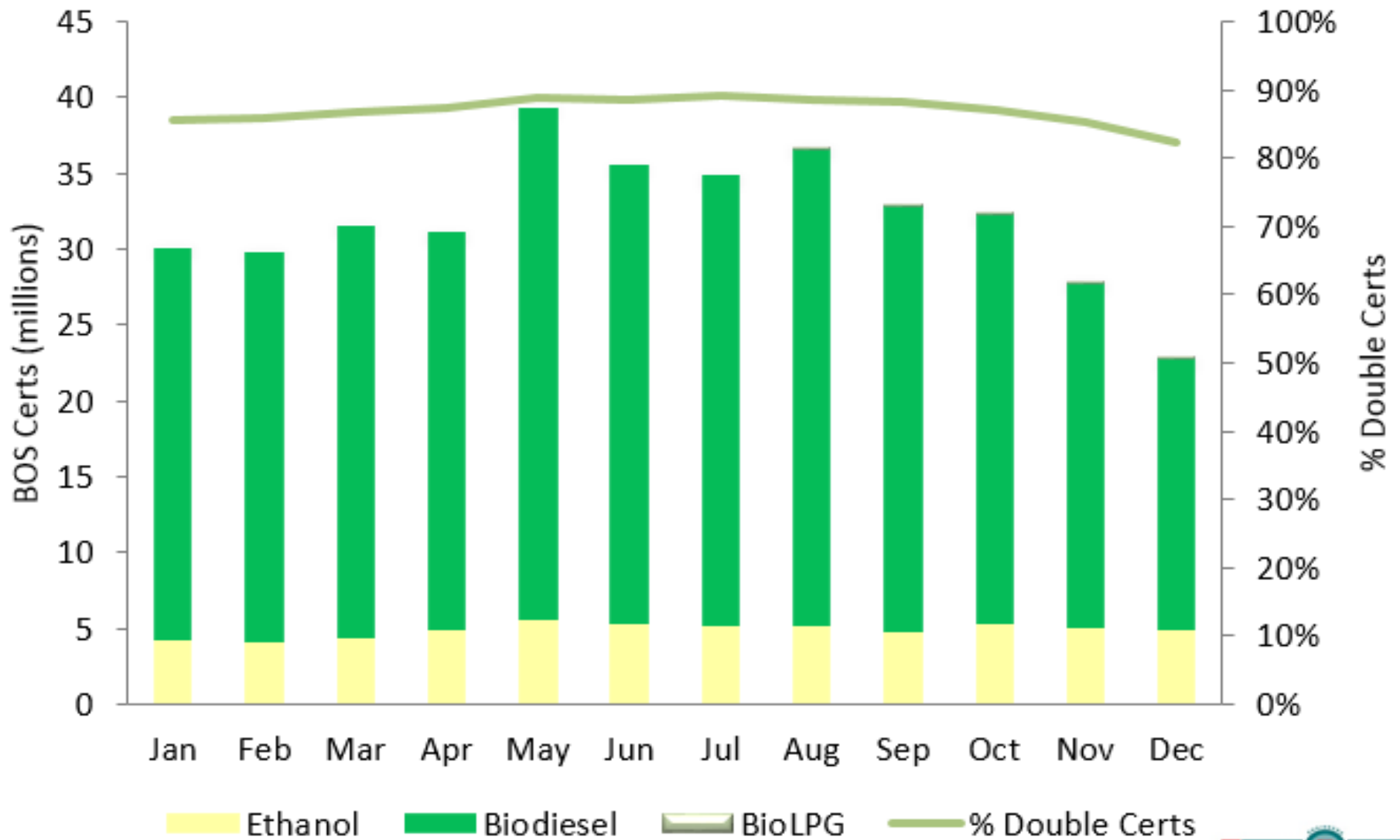


Ethanol (2017)
 Biodiesel (2018)

Biodiesel (2017)
 BioLPG (2018)

Ethanol (2018)

RECONCILIATION OF 2018 PERIOD – CERTS

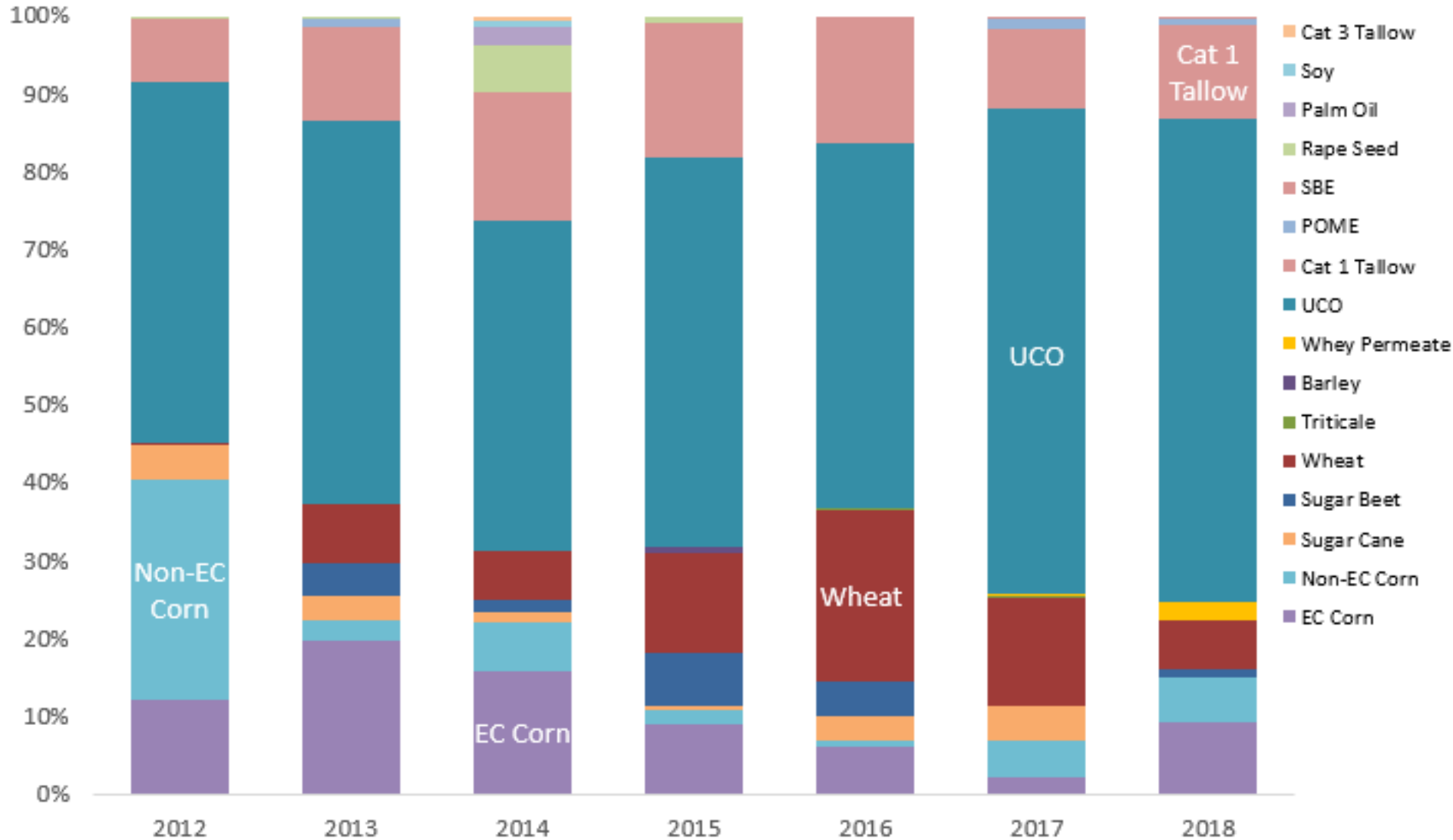


RECONCILIATION 2018

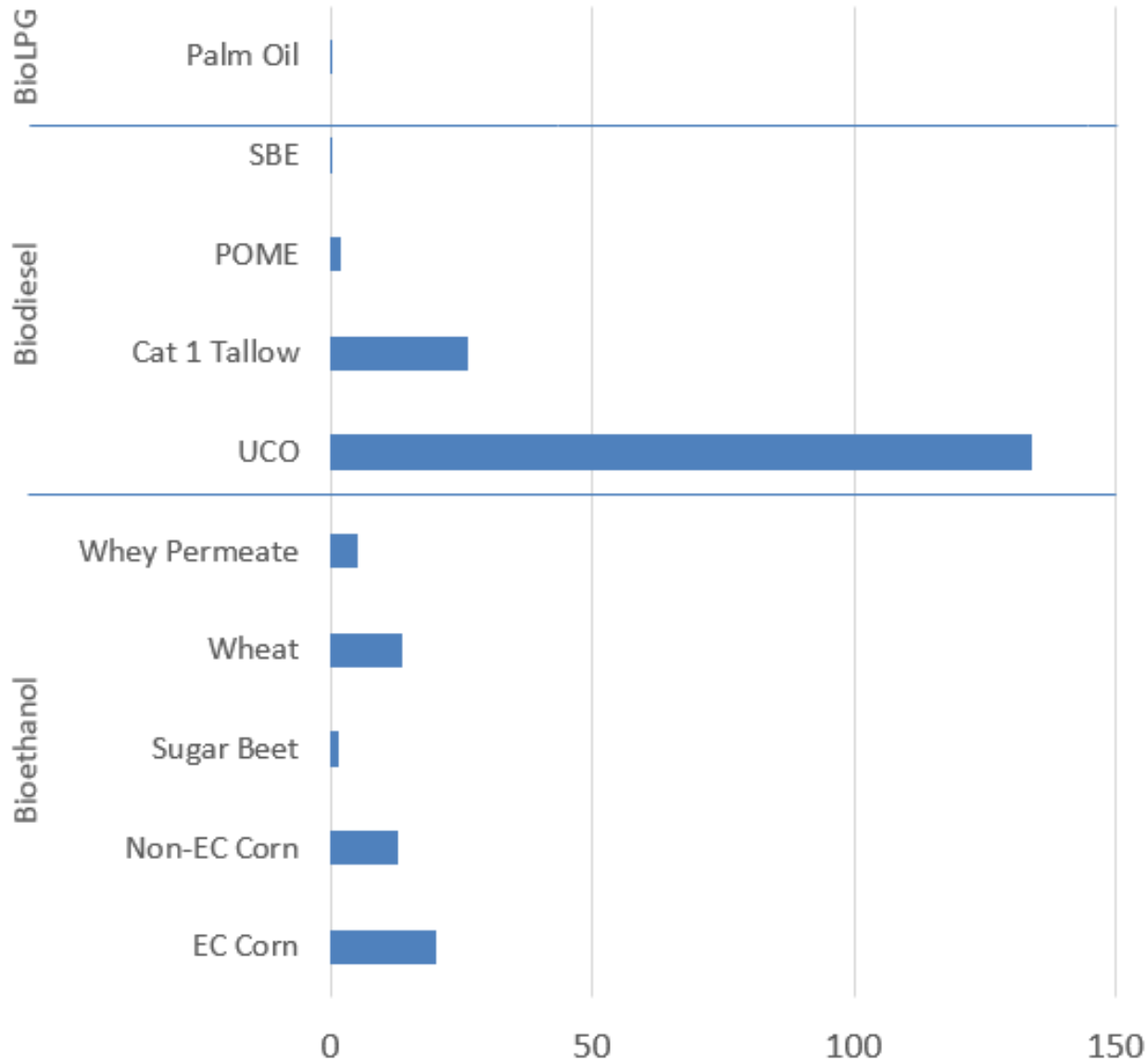
- The numbers:
 - 4.5 billion litres fossil (+ 1%)
 - 216 million litres bio (- 4%)
 - 4.7 billion litres in total (+ 0.8%)
 - Obligation 8.895% vs 8.56% achieved
 - Surplus of 49 million Certs
 - Approx. 69 million Certs carried forward to 2019



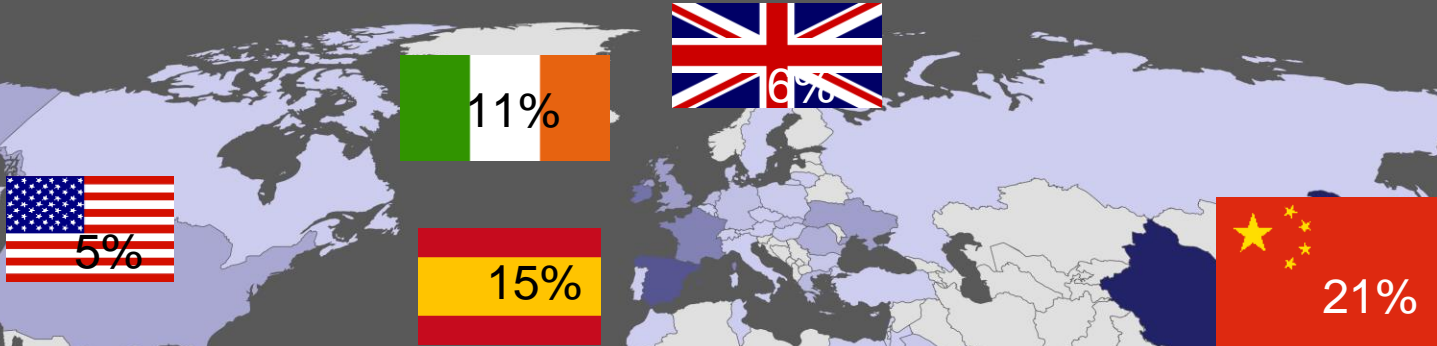
RECONCILIATION 2018 – FEEDSTOCKS



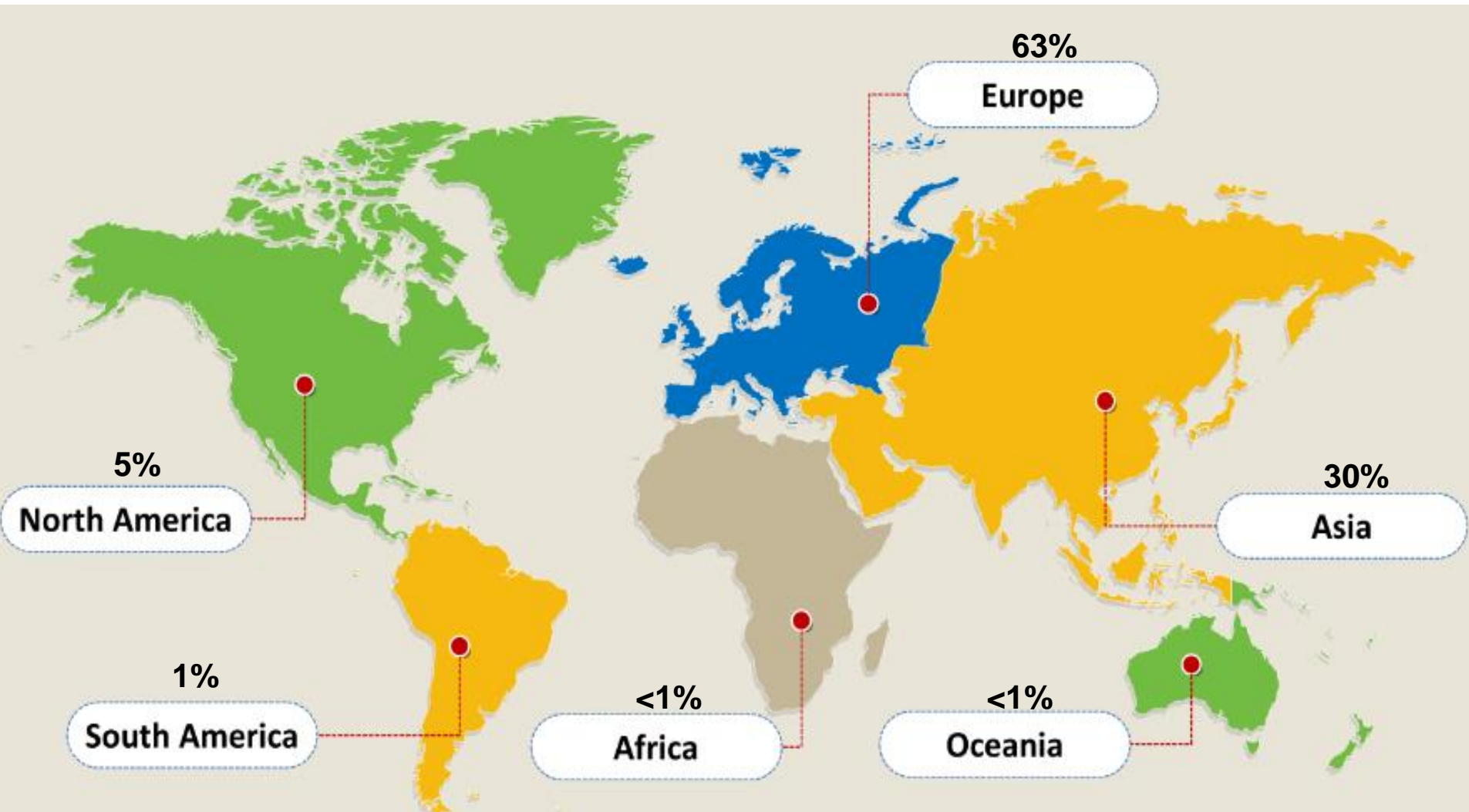
RECONCILIATION 2018 – FEEDSTOCKS



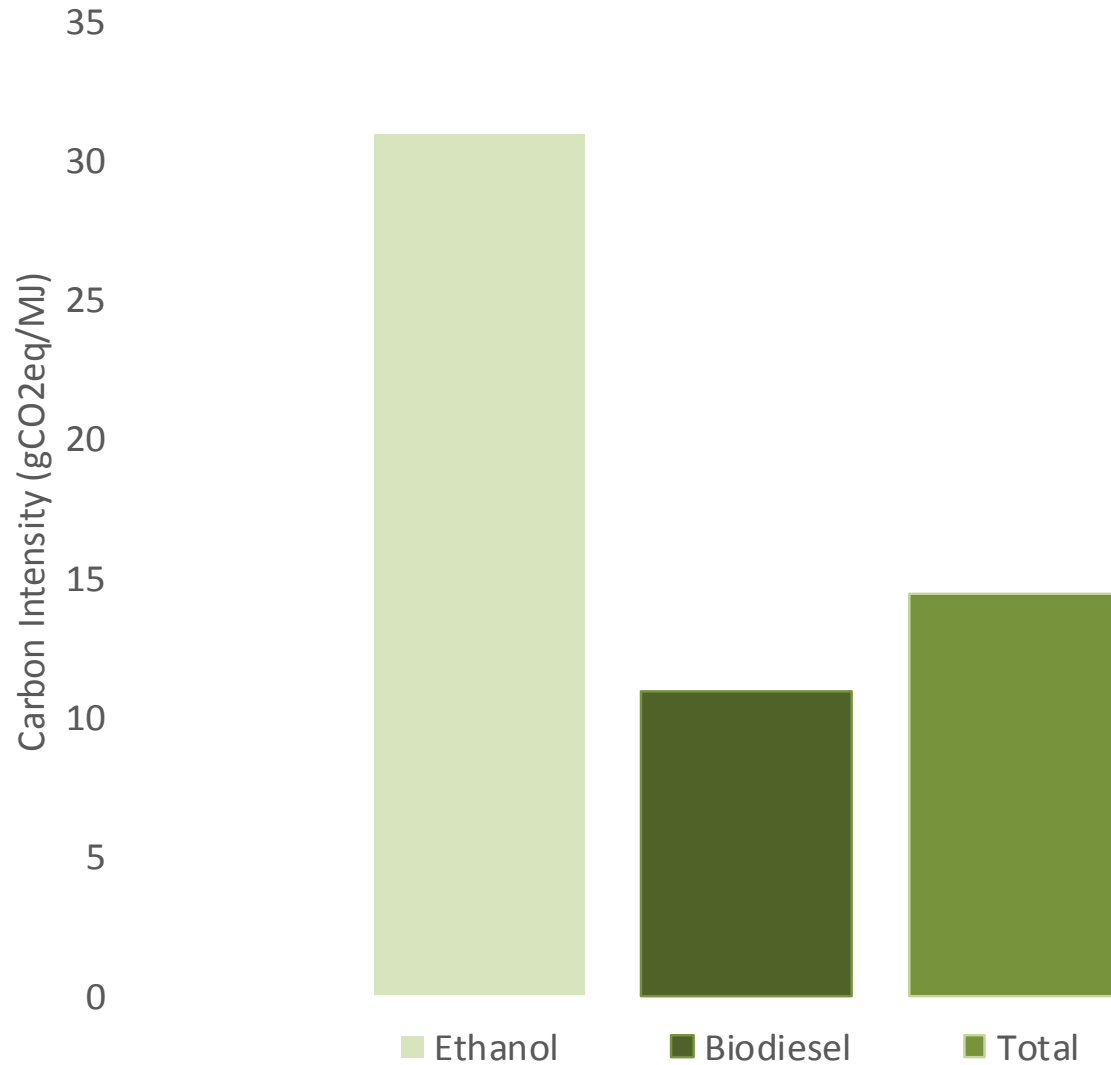
RECONCILIATION 2018 – FEEDSTOCKS



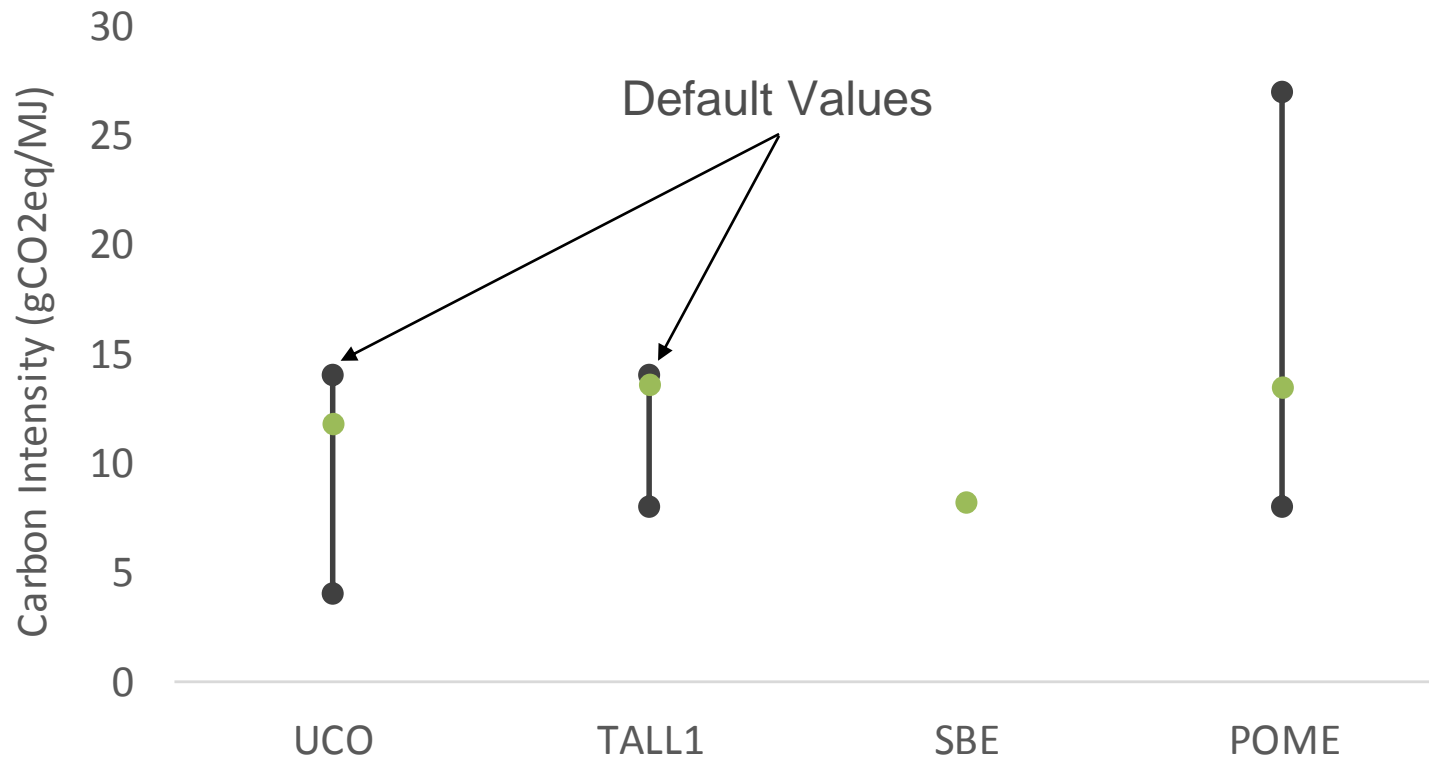
RECONCILIATION 2018 – FEEDSTOCKS



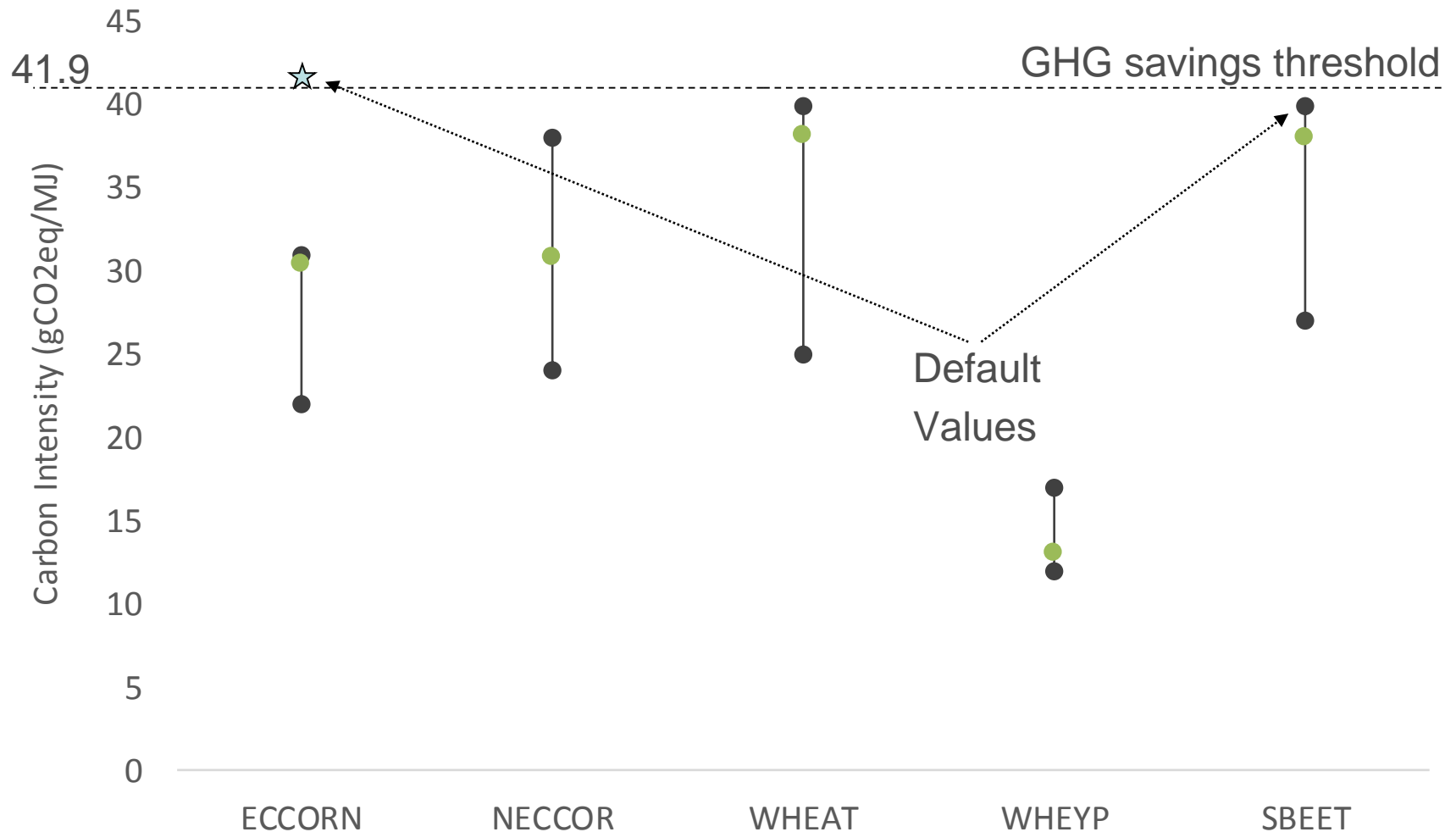
RECONCILIATION 2018 – CARBON SAVINGS



RECONCILIATION 2018 – CARBON INTENSITY BIODIESEL



RECONCILIATION 2018 – CARBON INTENSITY BIOETHANOL



AUDITING

- On-site audits
 - Over eight years, 32 audits
 - 3.2 audits per company over 8 years
 - Selection criteria:
 - Performance during period (BOS & OLA)
 - Audit history
 - Market share (bio & fossil)
- Desk-based audits
 - Over seven years, 22 audits



AUDITING

- On-site audits
 - Review mass balance (OLA)
 - Examine PoS
 - Evidence of inter-company purchases & sales
 - OLA and BOS revisions
- Desk-based audits
 - Specific discrepancies, typically include statistical differences, and purchases and sales discrepancies



AUDITING

Summary of findings:

- Certs revoked: 238 k
- Additional levy payments: €200 k
- Certs awarded: 1.2 M
- Levy refunds: €1.3 M (€1 k to €770 k)



On average per on-site audit:
38 k Certs awarded and €40 k refunded

RED and FQD implementation

BOSOS

OLA data

Sustainability st.

Electricity

UERs

Sustainability criteria

RED

- Biofuel certificates
- Double counting
- Indicator for crop-based biofuel
- 0.25% indicator for advanced

FQD

- CO_{2eq} saving (tonnes)
- GHG intensity of fuels

FQD
6%
reduction in
GHGi

Trading certs & CO₂ savings

Acc. holder

Acc. holder

Acc. holder

SI 160 (FQD) COMPLIANCE

- Reduce carbon intensity by 6%
- Reaching biofuel obligation in 2020 achieves around 4% ↓

Somewhat positive

- Applicable in 2020
- Potential fines, low
- Electricity in EVs
- UERs
- Low carbon fossil fuels

- No carry forward
- No buy-out option
- No double counting

Somewhat negative

SI 160 COMPLIANCE

- For an ‘average’ supplier:
 - Average CI biofuel (11 & 31 gCO_{2eq}/MJ)
 - Average diesel:gasoline mix (77:23)
 - 100% double count biodiesel
 - 10% double count bioethanol
- Achieve 11% BOS obligation with:
 - 6.4% biodiesel (25m litres) & 4.8% ethanol (6m litres)
- Achieve almost 4% carbon intensity reduction
- Shortfall of 34 kt CO_{2eq} (equates to c.15m litres of biodiesel)

CARBON SAVINGS FROM ELECTRICITY

- Elec consumed (actual or estimated)
- GHG emission factor
- Verification report to demonstrate adequate measurement and monitoring



Electricity carbon savings application

1. Please select the month and year for which you wish to apply for carbon savings arising from electricity used in vehicles and motorcycles.

Month * Year

2. Please enter the quantity of electricity consumed by vehicles and motorcycles during the application period and whether it is actual or estimated.

Electricity consumed (MJ) * Estimated or Actual

3. Please enter the GHG emission factor you wish to use. This may be a calculated value or default value (as published by the Commission for Regulation of Utilities)

Default or Calculated * Emission factor (gCO_{2eq}/MJ)

Carbon Savings - Based on the above data, your company is eligible to apply for the following quantity of carbon savings

Carbon savings (tCO_{2eq})
0.00

Name of Verifier

4. Please upload the independent verification report (in PDF format).

Upload the verification assurance report. This file must be in PDF format.

No file chosen

5. Please complete the mandatory declaration.

We hereby declare that

SOIL CARBON ACCUMULATION

- Emission savings (Esca) from 'soil carbon accumulation' via improved agricultural practices.

3. Greenhouse Gas (GHG) information

Total default value according to RED applied Yes No

E =	Eec +	Ei +	Ep +	Etd +	E	-	Esca -	Eccs -	Eccr -	Eee	=	
	9.53 +		3.38 +	4.27 +	0	-					=	17.18

GHG emission saving ³⁾:

79.5% (for biofuels 83,8 gCO ₂ eq/MJ)	77.7% (for heat production 77 gCO ₂ eq/MJ)
81.1% (for electricity production 91 gCO ₂ eq/MJ)	79.8% (for cogeneration 85 gCO ₂ eq/MJ)

The installation where the final biofuel or bioliquid was produced started physical production of biofuels or bioliquids after 5 October 2015 ⁴⁾ Yes No

- Soil carbon accumulation: increase the carbon content of the soil
- Improved agricultural practices:
 - Reduced or zero tillage; improved crop rotations and/or cover crops, including crop residue management; improved fertiliser or manure management; use of soil improver
- For crops, report 'yes' or 'no' – 'n/a' only for wastes & residues

BOSOS Modifications

- New fuels to be added:
 - Methanol & biomethanol
 - Gasoil for use in NRMM & biogasoil
 - CNG & bioCNG
 - LNG & bioLNG
 - LPG (already have bioLPG)





Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

Biofuels Obligation Scheme

*An overview of current thinking for
the 2019 Consultation*

- Heat and Transport Energy Policy Division
- 23rd May 2019



Purpose of Consultation

- Inform policy for biofuels for period 2021 to 2030
- Implementation of biofuel elements of Renewable Energy Directive [REDII] (2018/2001)
- Updated policy statement and/or input into National Energy and Climate Plan



Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

Objectives for 2021-2030

- Meeting transport targets in REDII
- Contributing to overall level of renewable energy
- Contributing to overall emission reduction



Scope – Obligated Parties

- Inclusion of all road and rail transport?
- Should electricity suppliers be exempt?
- Should hydrogen suppliers be exempt?
- Should CNG/biomethane suppliers be exempt?
- Expansion to heat sector (asked previously but further submissions received)?



Scope – Awarding Certs

- How should EVs be included?
- Should everything in Article 25 (1) be covered for certs?
- Treatment of aviation



Structure – Energy Basis

- Should the scheme operate on an energy rather than volume basis?
- If so, when/how would this conversion take place?
- How would carryover certs be converted?



Targets / Limits

- Overall target (including use of multipliers)
- Sub target for Advance Biofuels (Annex IX Part A)
- Limit on biofuels where produced from food and feed crops – likely maximum allowed of 2% based on current levels of use
- (Soft) Limit on Annex IX Part B – capped at 1.7% (3.4% with multiplier) in 2030 – are we requesting flexibility?
- High ILUC risk biofuels to be reduced to 0% by 2030



Trajectories

- Each target/limit to have a trajectory from 2021 to 2030
- Maintain waste/residue until end 2020 with change to Annex IX A/B from 2021
- Advanced biofuels (Annex IX Part A): 0.2% (2022), 1% (2025), 3.5% (2030)
- UCO/Tallow (Annex IX B Part B): 1.7% (or higher) limit from outset or trajectory
- Should there be carryover for each type of fuel, what should be the level, and should it reduce over time?



Blend Walls

- Potential 2030 levels:
 - *Petrol to reach at least E10*
 - *Diesel to reach at least B12*
 - *Are these suitably ambitious and realistic?*
- Moving from E5 to E10
 - *How will the blend wall be overcome?*
 - *What are the key issues to address and what is the role of suppliers/Government?*
 - *What is the timeline for this?*
 - *Should bio-methanol be included?*
- Moving beyond B7
 - *Is HVO the likely fuel and how could it be introduced?*



Cost

- Seeking to understand:
 - *The cost of E5 -> E10?*
 - *The cost of B7 -> B12?*
 - *The cost of alternatives (including higher ambitions)*
- Noting that:
 - *this is competitive market and there are limits in relation to information that can be provided*
 - *costs will be passed on to consumer*



Penalties

- Should the penalty/buy-out be increased?
- If so, should it be a step change or trajectory?
- Should there be a separate penalty/buy-out for advanced biofuels?



Oil shortage

- Currently there is no provision in the legislation for changing the operation of the scheme during a supply shortage
- If a change was to be made, how should the obligation operate in a supply shortage (e.g. Minister to have powers)?



Other Questions

- The consultation will provide scope for other aspects to be raised
- Welcome input from industry in relation to additional questions that should be asked



Timeframe

- Q3: Targeting publication of consultation
- Q4: Clarity on policy (e.g. NECP)
- 2020: Enacting legislation (deadline for transposition of REDII is June 2021)



Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

Biofuels Obligation Scheme

*An overview of current thinking for
the 2019 Consultation*

- Heat and Transport Energy Policy Division
- 23rd May 2019

NEXT UP



-- Thank you for your attention --