

ANNEX A

Table A.5. Main policy assumptions for biofuel markets

		2013est	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ARGENTINA												
Biodiesel												
Export tax	%	20.7	21.6	22.4	23.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0
BRAZIL												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incorporation mandate ¹	%	17.5	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
Biodiesel												
Tax concessions ²	BRL/hl	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Import tariffs	%	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
CANADA												
Ethanol												
Tax concessions ²	CAD/hl	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Import tariffs	CAD/hl	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Incorporation mandate ¹	%	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Direct support												
Federal	CAD/hl	6.0	5.0	4.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Provincial	CAD/hl	4.3	4.3	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Tax concessions ²	CAD/hl	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Incorporation mandate ¹	%	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Direct support												
Federal	CAD/hl	12.0	10.0	8.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Provincial	CAD/hl	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
COLOMBIA												
Ethanol												
Import tariffs	%	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Blending target ^{3,4}	%	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
EUROPEAN UNION												
Biofuel												
Energy share in fuel consumption ⁵	%	4.7	5.4	5.9	6.3	6.8	7.4	7.9	8.5	8.5	8.5	8.5
Ethanol												
Tax concessions ²	EUR/hl	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
Import tariffs	EUR/hl	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
Biodiesel												
Tax concessions ²	EUR/hl	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
Import tariffs	%	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
INDIA												
Ethanol												
Import tariffs	%	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Share of biofuel mandates in total fuel consumption	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Biodiesel												
Import tariffs	%	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Share of biofuel mandates in total fuel consumption	%	2.8	3.7	4.6	5.5	6.4	7.3	8.2	8.2	8.2	8.2	8.2
INDONESIA												
Ethanol												
Import tariffs	%	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3
Blending target ⁴	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Blending target ⁴	%	3.0	3.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
MALAYSIA												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
PERU												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Biodiesel												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Table A.5. Main policy assumptions for biofuel markets (cont.)

		2013est	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
THAILAND												
Ethanol												
Import tariffs	%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blending target ⁴	%	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Biodiesel												
Blending target ⁴	%	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
UNITED STATES												
Renewable Fuel Standard⁶												
Total	Mn l	62 648	63 492	68 069	70 007	72 399	75 479	78 654	80 013	81 715	83 008	83 008
advanced mandate	Mn l	10 410	8 982	11 288	13 226	15 618	18 698	21 873	23 232	24 934	26 227	26 227
cellulosic ethanol	Mn l	23	108	400	800	1 600	2 600	3 700	4 800	6 100	7 300	7 300
biodiesel	Mn l	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845	4 845
Ethanol												
Import surcharge	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Import tariffs (undenatured)	%	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Import tariffs (denatured)	%	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
Blenders tax credit	USD/hl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Biodiesel												
Import tariffs	%	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60
Blenders tax credit	USD/hl	26.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: 2013/14est: Data for 2013/14 are estimated.

For many countries, shares for ethanol and biodiesel are not individually specified in the legislation.

Figures are based on a combination of the EU mandate in the context of the Renewable Energy Directive and the National Renewable Energy Action Plans (NREAP) in the EU member states.

1. Share in respective fuel type, energy equivalent.
2. Difference between tax rates applying to fossil and biogen fuels.
3. Applies to cities with more than 500 000 inhabitants.
4. Expressed in volume share.
5. According to the current Renewable energy Directive 2009/28/EC, the energy content of biofuel other than first-generation biofuels counts twice towards meeting the target. It is assumed that a certain share of the 10% transport energy target is filled by other sources than biofuel.
6. The total, advanced and cellulosic mandates are not at the levels defined in EISA. As those mandates are subject to uncertainties regarding EPA implementation, the following assumptions were taken to construct the baseline: The total and advanced mandates have been reduced by a portion of the shortfall in cellulosic production. That portion starts at 80% in 2014 and reaches 100% in 2023.

Source: OECD and FAO Secretariats.