

A close-up photograph of several sugarcane stalks, showing their characteristic reddish-purple and brownish-grey hues. The stalks are bundled together, and some of the outer husks are peeling away, revealing the lighter-colored inner pith. In the background, there are blurred green sugarcane leaves, suggesting a field or processing area. The image is framed by a white diagonal shape in the top right corner.

# World Biofuels Outlook

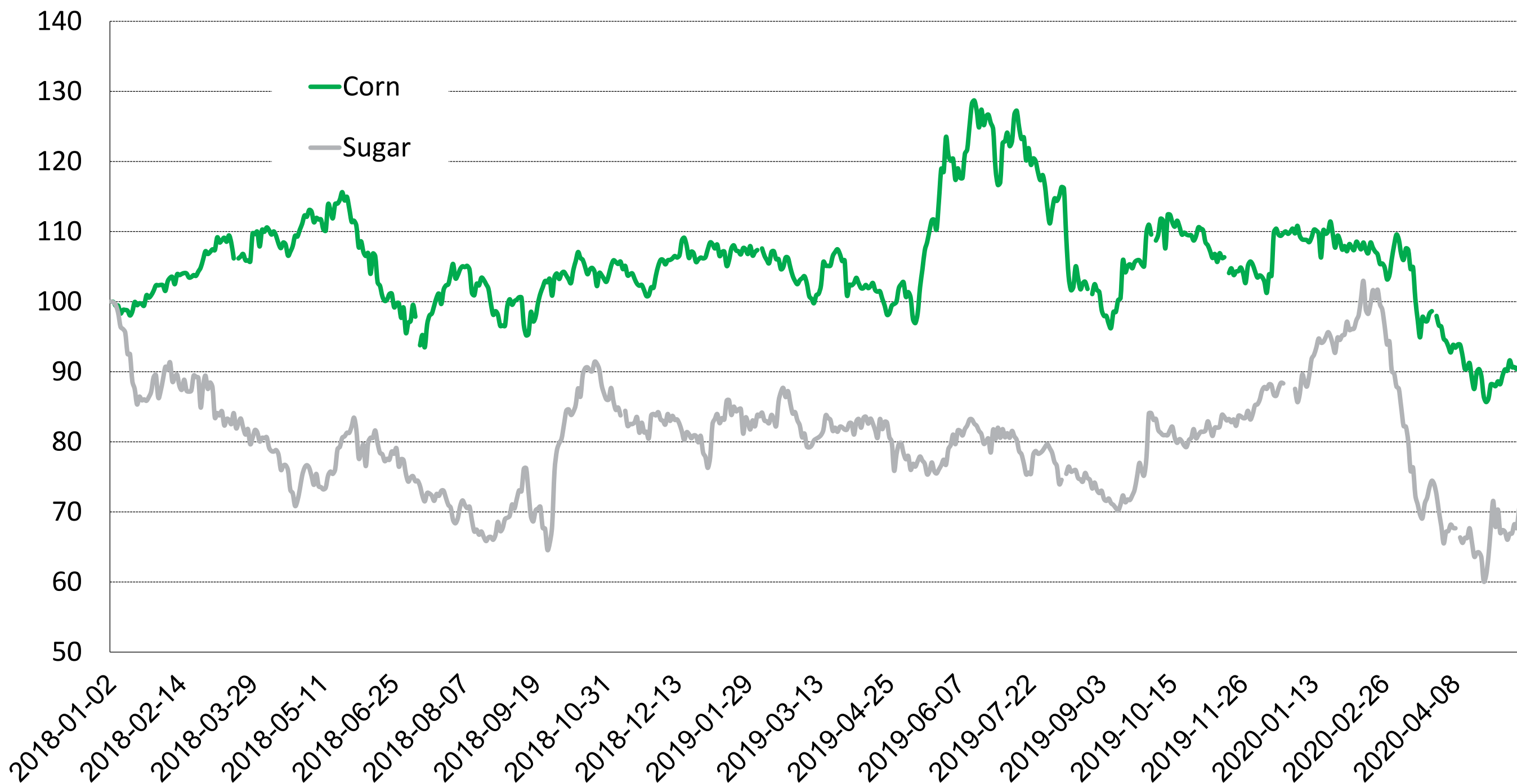


## World Ethanol and Biofuels

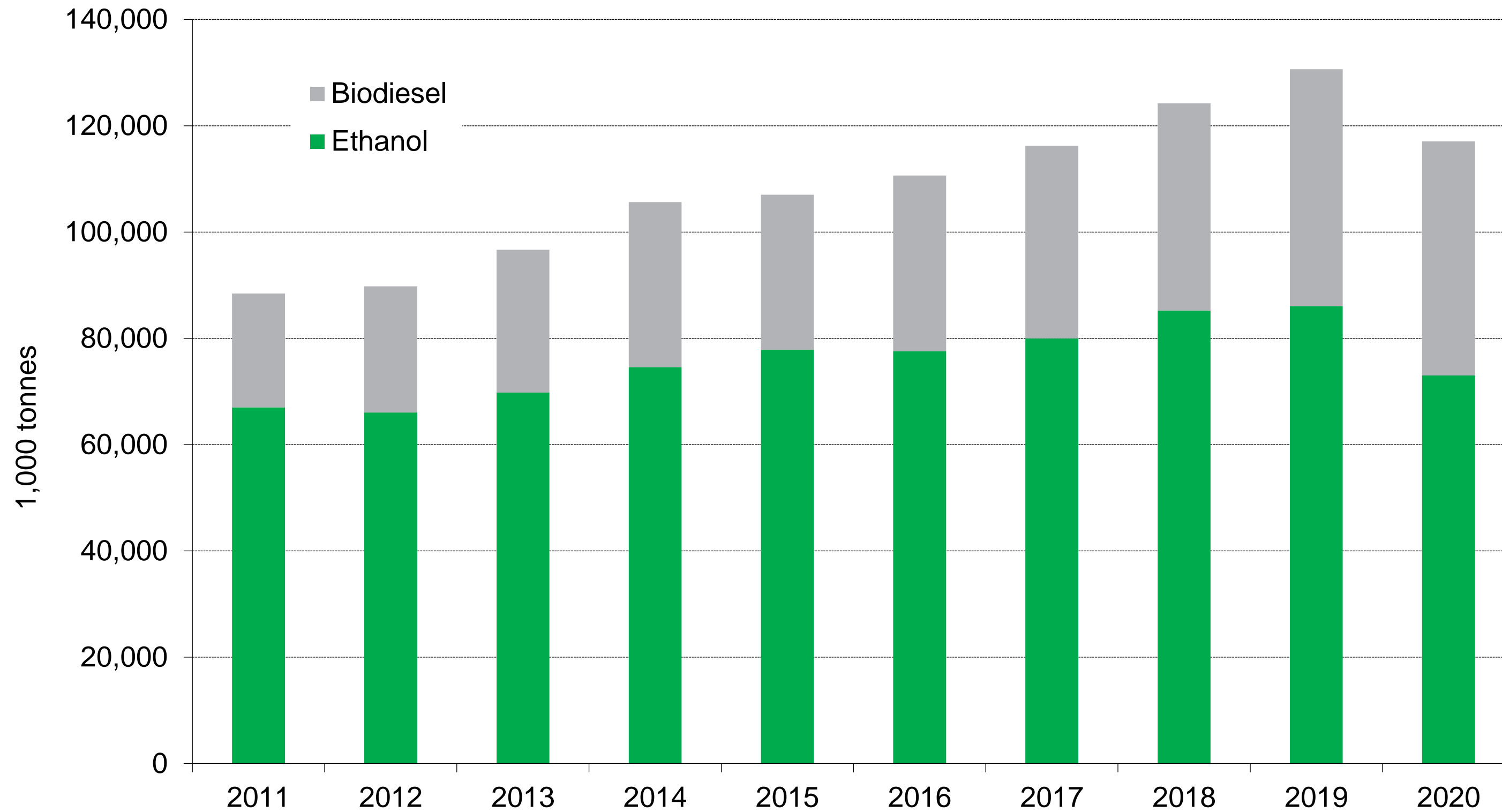
- Wide range of outcomes possible given heightened uncertainty about the course of the Sars-Cov-2 impact and the economy
- Both sugar and corn prices are hit, but differently
- 2020 biofuel consumption will decline but with variations
- Demand destruction bigger problem than low energy prices
- Climate change and Re-building efforts provide tail-wind

# World Ethanol and Biofuels

## Feedstock Prices



# World Biofuel Production to Fall



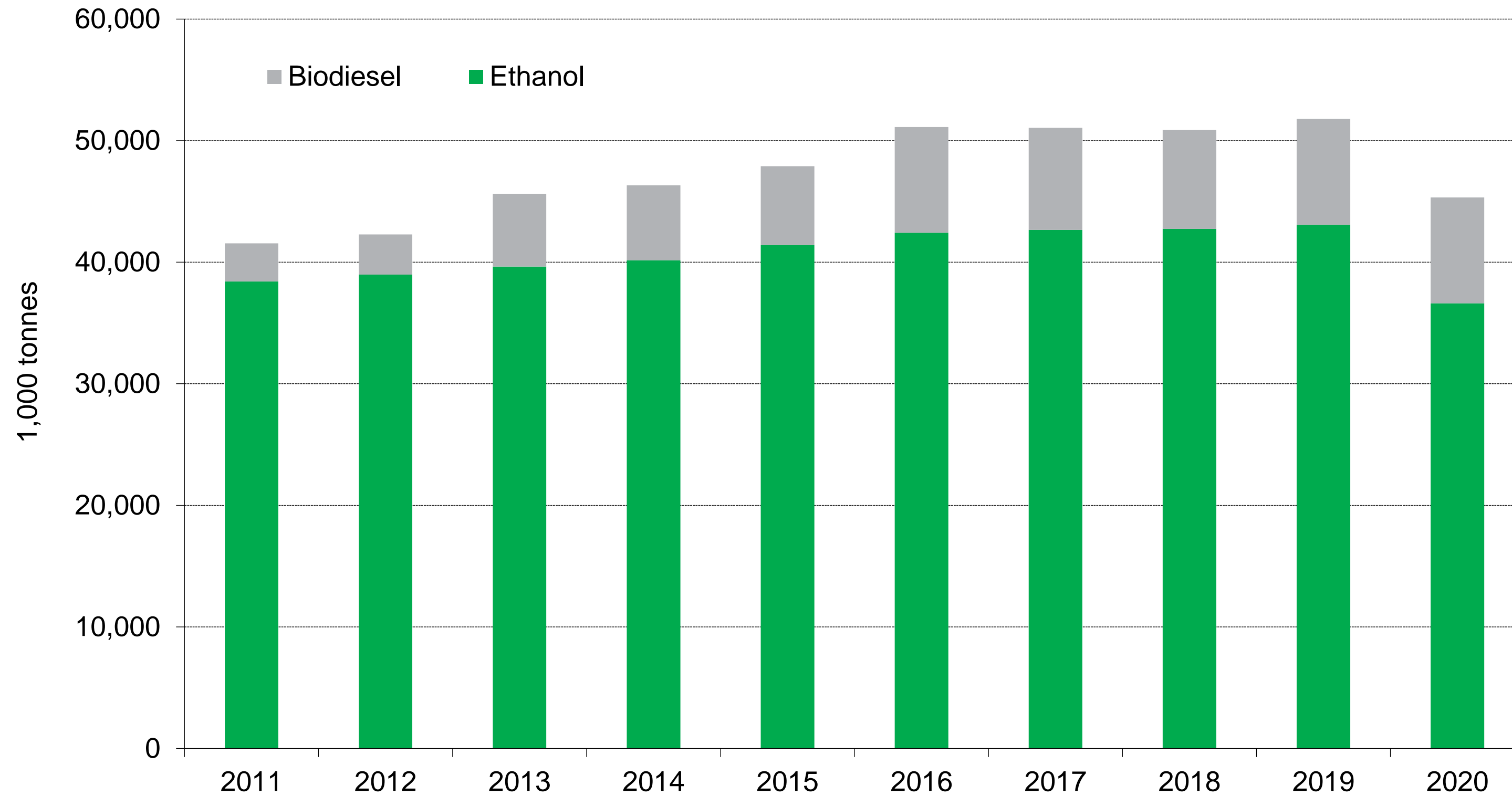
# 2020 Situation - USA

## World Ethanol and Biofuels

### USA – Economic Crisis Prompts new Attacks on RFS

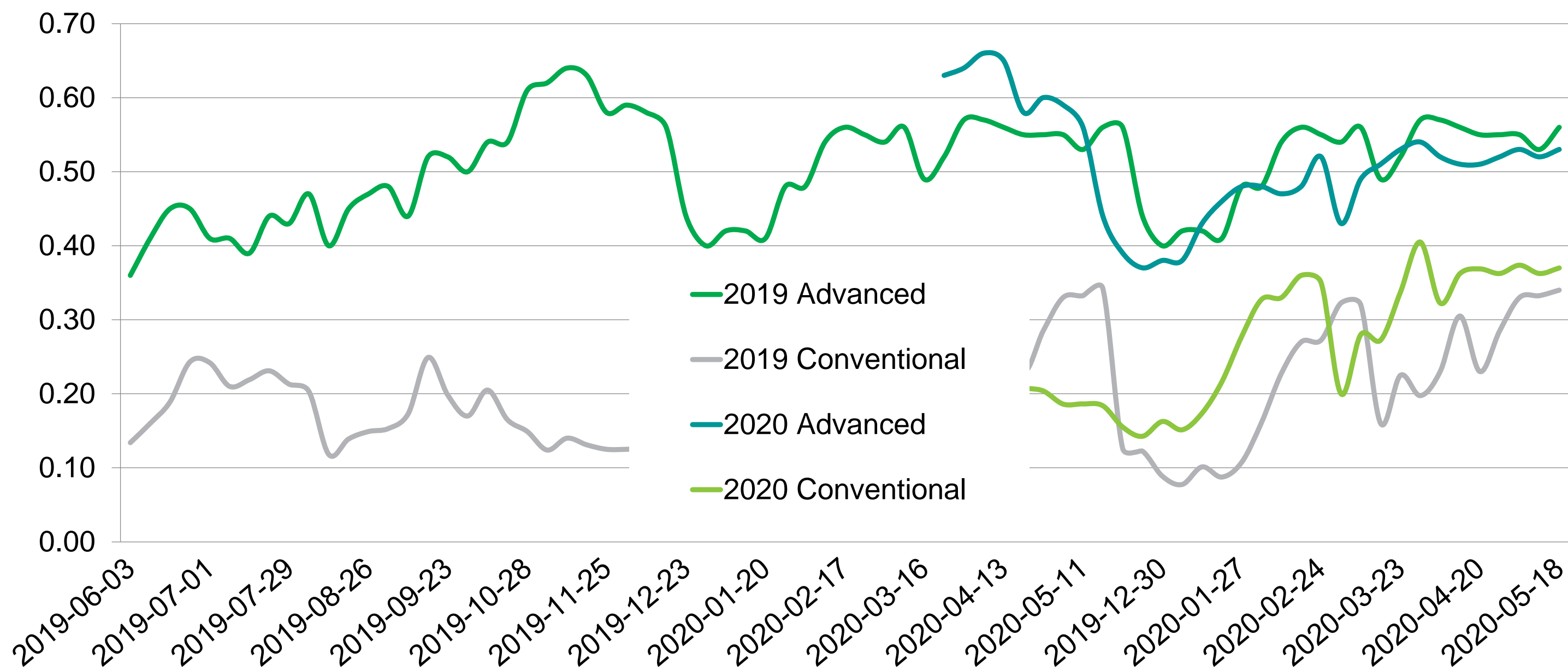
- Oil industry is asking for suspension of RFS
- Recession hits demand
- 50% of production capacity idle at peak of crisis
- Industry hopeful that worst is behind it

# US Biofuel Consumption Contracts



# World Ethanol and Biofuels

## USA – RIN Prices in USD/gallon





## World Ethanol and Biofuels

### USA - Ethanol Balance (1,000 cubic metres)

		2020	2019	2018
Opening stocks		3,544	3,783	3,709
Output		53,500	61,325	62,377
	Fuel ethanol	51,700	59,725	60,802
	Non-fuel ethanol	1,800	1,600	1,575
Imports		1,360	1,335	1,059
Consumption		48,490	56,480	56,015
	Industrial ethanol	1,300	1,070	1,047
	Potable ethanol	790	810	803
	Fuel ethanol	46,400	54,600	54,165
Exports		6,345	6,419	7,347
Ending stocks		3,569	3,544	3,783

# 2020 Situation - Brazil

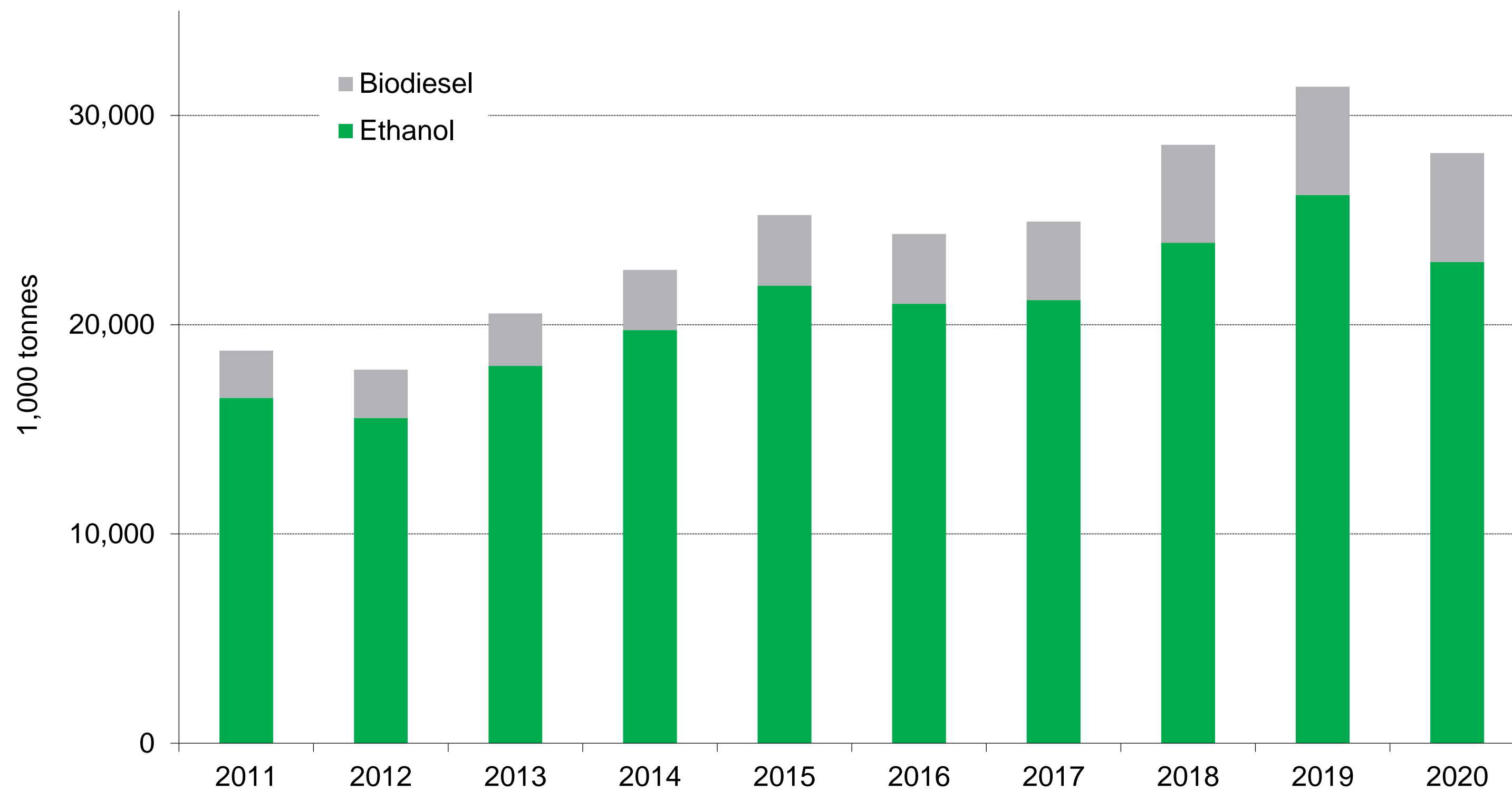
## World Ethanol and Biofuels

### Brazil – Implementing RenovaBio

- 2020 marks first year of RenovaBio
- Solid response from industry
- Recession hits demand
- All stand-alone distilleries (ca. 130 units) are at risk

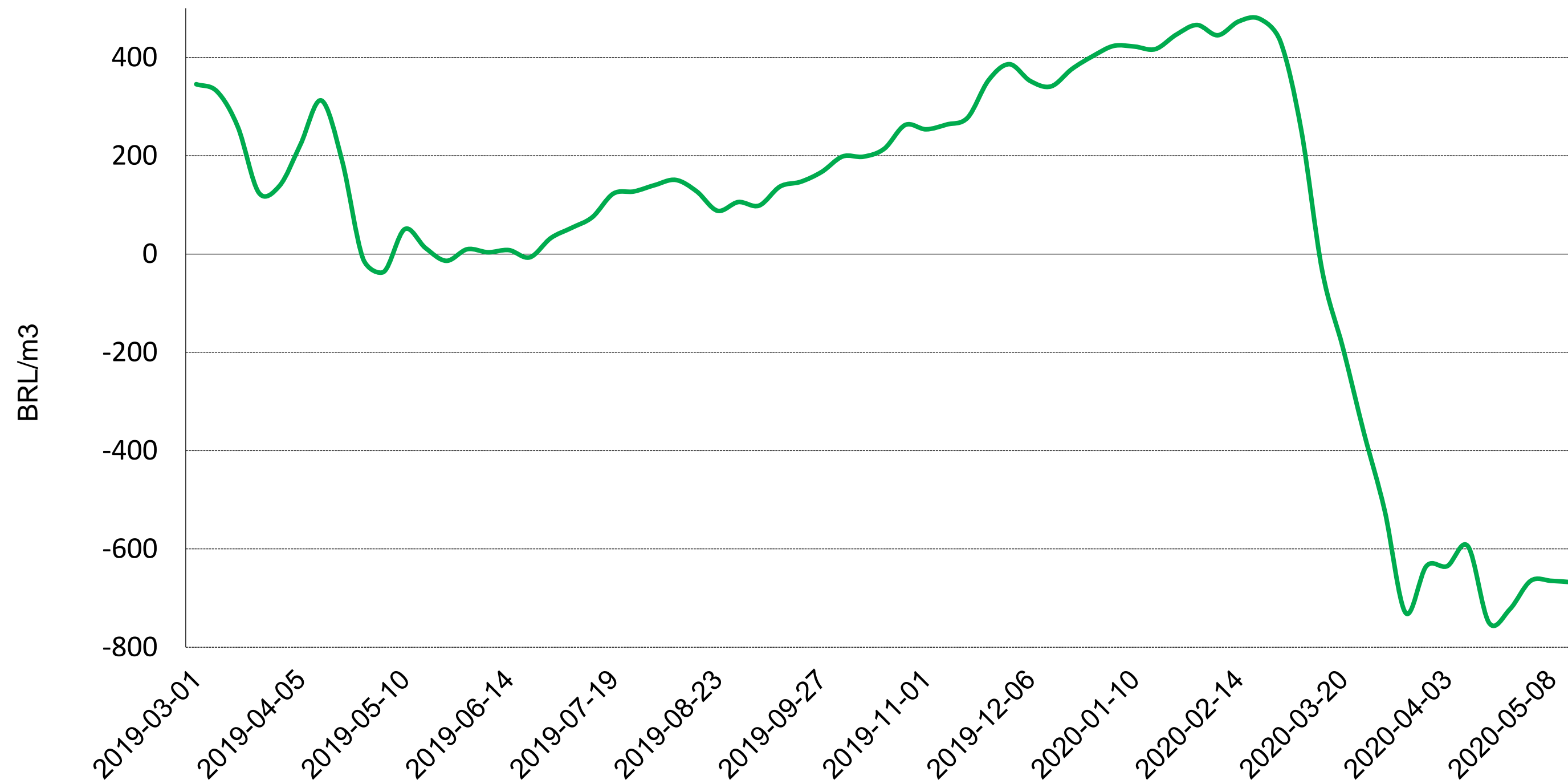


## Brazil's Ethanol Consumption Will Decline



# World Ethanol and Biofuels

## Ethanol Margins



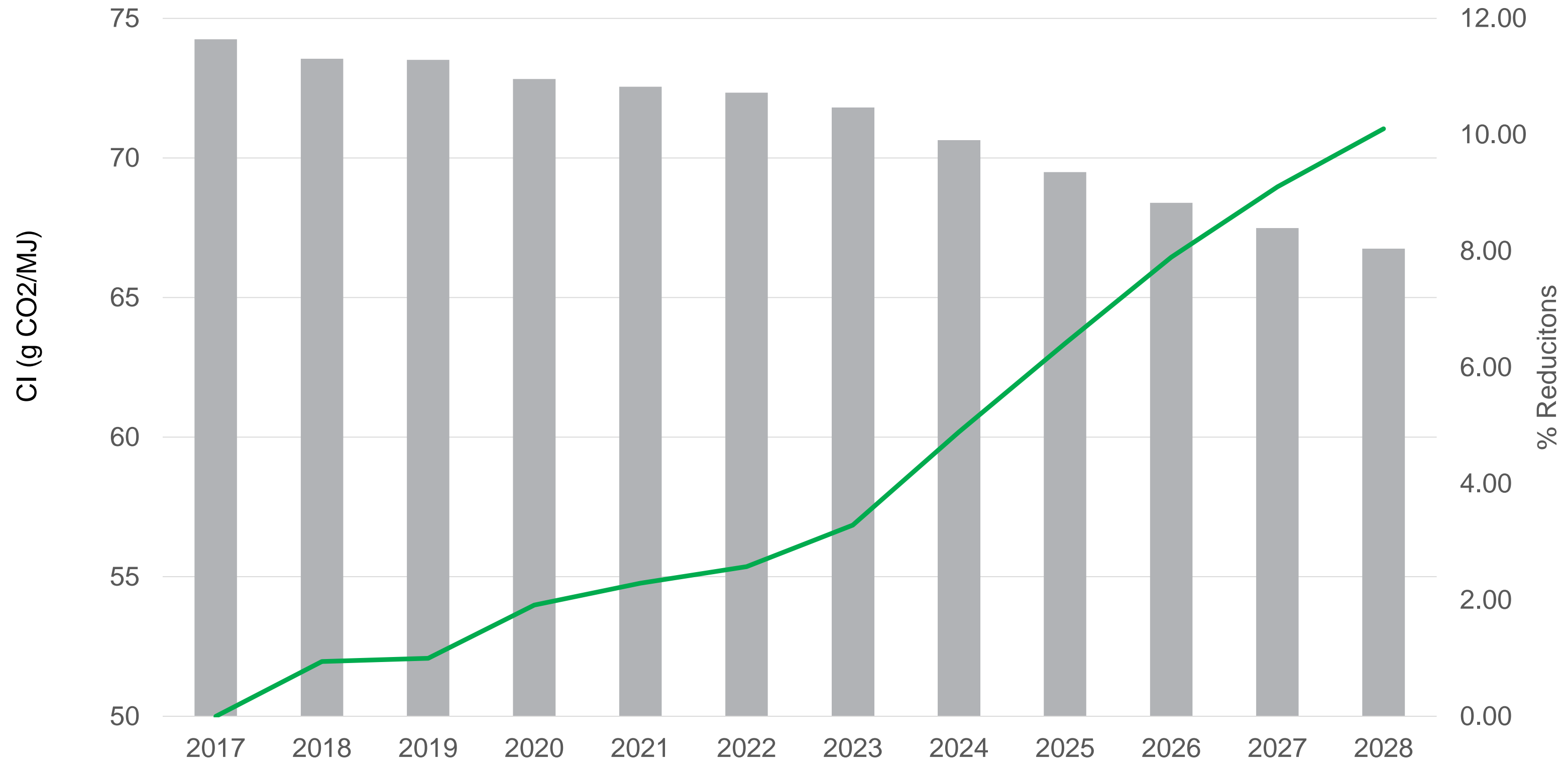
## World Ethanol and Biofuels

### Brazil - Ethanol Balance (1,000 cubic metres)

Apr/Mar		2020/21	2019/20	2018/19
Opening stocks		2,341	1,729	1,510
Output		30,050	35,587	33,116
Fuel ethanol	↓	27,400	33,096	30,798
Non-fuel ethanol	↑	2,650	2,491	2,318
Imports	↓	1,215	1,668	1,518
Consumption	↓	29,870	34,650	32,545
Industrial ethanol	↑	1,500	1,288	1,290
Potable ethanol		370	362	360
Fuel ethanol		28,000	33,000	30,895
Exports	↓	1,460	1,993	1,870
Ending stocks		2,276	2,341	1,729



# RenovaBio – CI Efficiency Path



# 2020 Situation – Europe

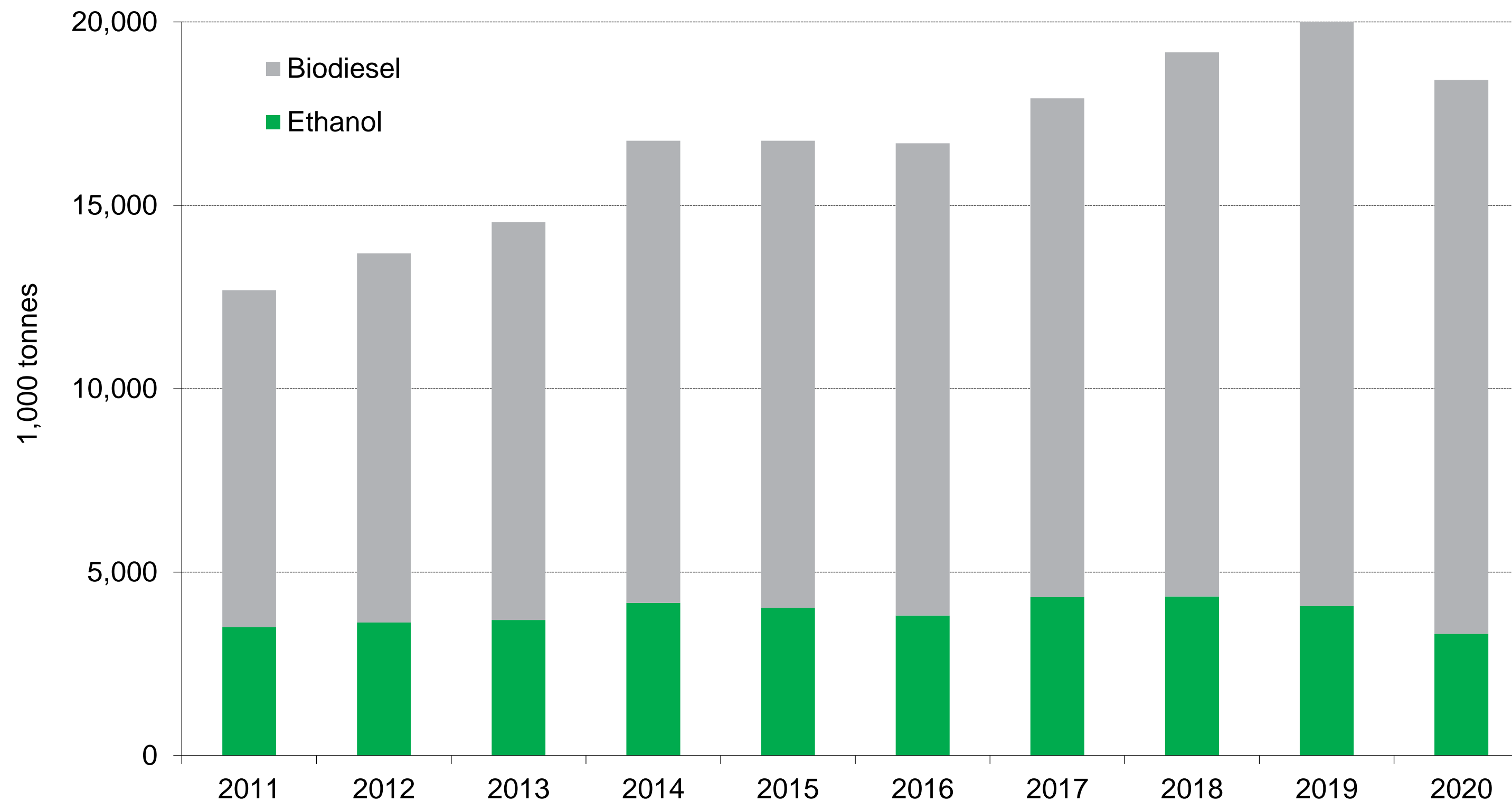
## World Ethanol and Biofuels

### EU – Biofuels Market Rules changed in 2020

- 2020 defines maximum consumption of crop-based biofuels under Renewable Energy Directive
- Some MS implemented higher blending targets
- COVID-19 may cut fuel ethanol demand by 15%, biodiesel by 5%

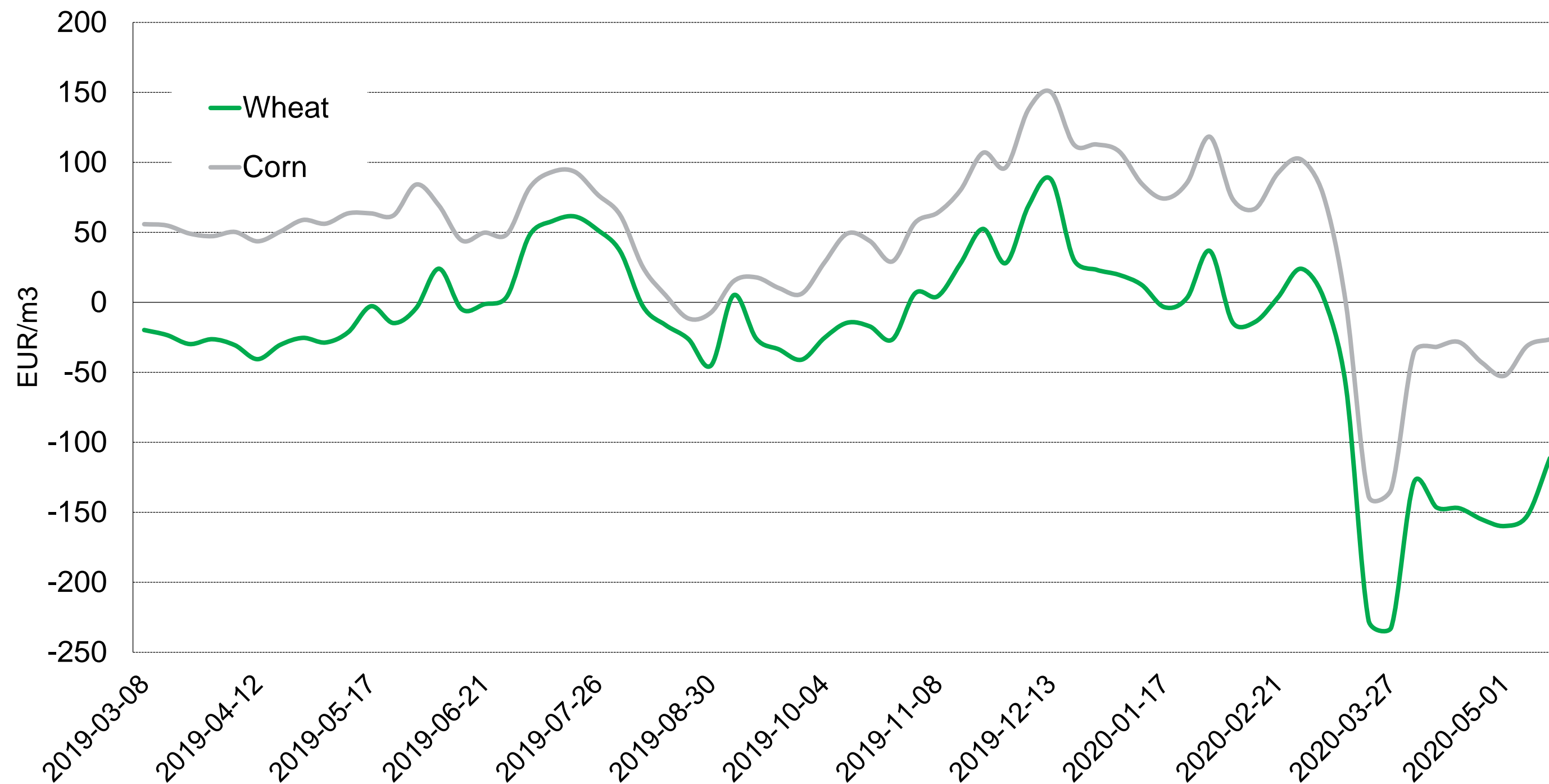


## Current Crisis will primarily hit Ethanol Consumption



# World Ethanol and Biofuels

## Ethanol Margins



## World Ethanol and Biofuels

### EU 27 - Ethanol Balance (1,000 cubic metres)

		2020	2019	2018
Opening stocks		832	543	770
Output	↓	6,550	7,246	6,907
Fuel ethanol		4,200	5,133	4,830
Non-fuel ethanol	↑	2,350	2,113	2,077
Imports	↓	1,030	1,204	919
Consumption	↓	6,800	7,240	7,118
Industrial ethanol	↑	1,800	1,417	1,420
Potable ethanol		800	870	860
Fuel ethanol		4,200	4,953	4,838
Exports	↓	655	921	935
Ending stocks		957	832	543



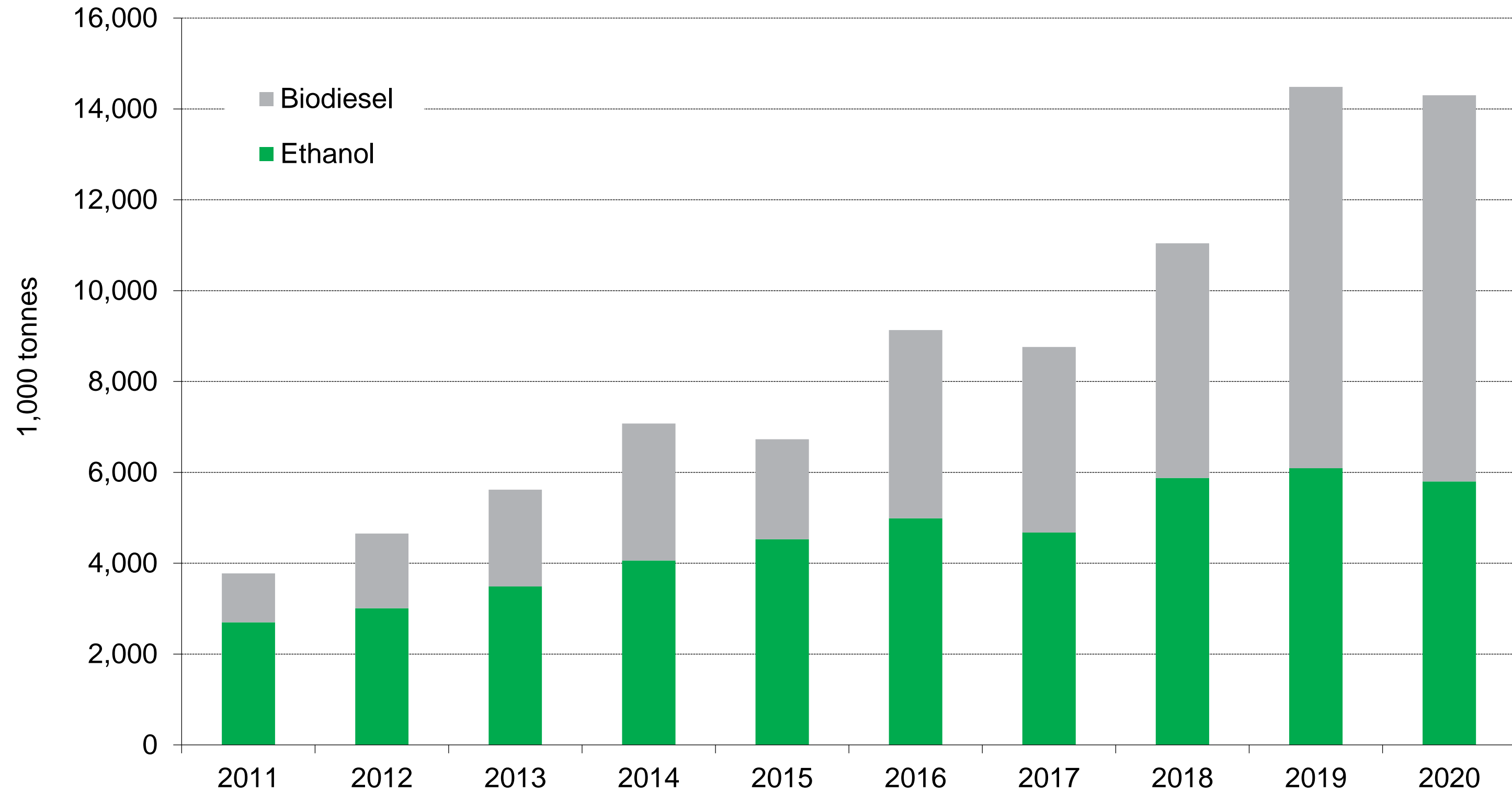
# 2020 Situation – Asia

## World Ethanol and Biofuels

### Asia – Biofuels Market



- China puts E-10 target on hold
- India's E-10 program stutters
- Thailand delays E-20 as standard fuel

# Asia's Biofuel Consumption May Stagnate



## World Ethanol and Biofuels

### China - Ethanol Balance (1,000 cubic metres)




	2020	2019	2018
Opening stocks	550	767	492
Output	9,400	9,800	9,520
Fuel ethanol 	3,000	3,200	3,000
Non-fuel ethanol	6,400	6,600	6,520
Imports	300	104	1,034
Consumption	9,700	10,100	10,200
Industrial ethanol 	5,100	5,025	4,814
Potable ethanol	1,600	1,675	1,686
Fuel ethanol 	3,000	3,400	3,700
Exports	55	21	79
Ending stocks	495	550	767



# 2021 and the Longer Term

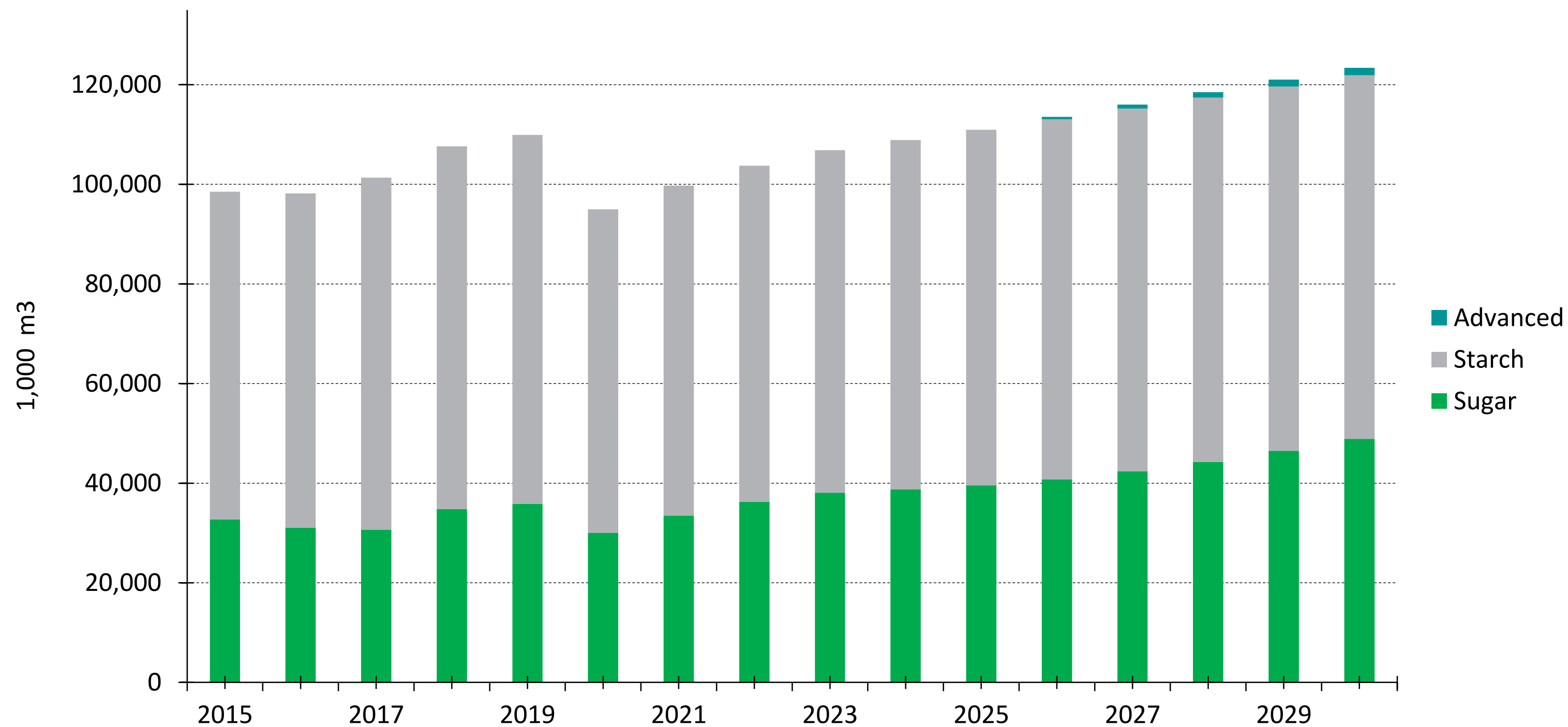
## World Ethanol and Biofuels

### World - Ethanol Balance (1,000 cubic metres)

	2021	2020	2019
Opening stocks	15,121	15,361	15,031
Output	120,920	111,671	125,914
Fuel ethanol 	103,248	93,740	108,949
Non-fuel ethanol	17,672	17,931	16,965
Imports	9,317	9,267	9,059
Consumption 	119,288	111,029	123,603
Industrial ethanol	11,896	12,501	11,027
Potable ethanol	6,387	6,247	6,425
Fuel ethanol 	101,005	92,281	106,151
Exports	10,606	10,149	11,040
Ending stocks	15,464	15,121	15,361

# World Ethanol and Biofuels

Growth in Starch Ethanol may outpace that of Sugar



## World Ethanol and Biofuels

- Ethanol prices have been hit badly
- Low sugar/corn prices dampen margin decline
- Recession fears depress energy prices and could affect biofuels policies

### Post Corona

- Re-building efforts will boost clean fuels
- Climate change debate will help via CO<sub>2</sub> pricing

# Thank you!



**Dr. Christoph Berg**

Managing Director | F.O. Licht,  
Agribusiness Intelligence, Energy &  
Natural Resources

**P:** [+49 454188920](tel:+49454188920)

[Christoph.Berg@ihsmarkit.com](mailto:Christoph.Berg@ihsmarkit.com)