



NATURAL RESOURCES CANADA - INVENTIVE BY NATURE

Potash Outlook

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Natural Resources Canada

TFI Fertilizer Outlook and Technology Conference
Fort Lauderdale, Florida
November 16, 2016



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Outline

- **Historical Consumption and Supply**
- **Outlook for Demand and Supply**
- **Demand Fundamentals**
- **Major Consuming Countries**
- **Major Suppliers**
- **Summary**



Historical Potash Consumption and Supply

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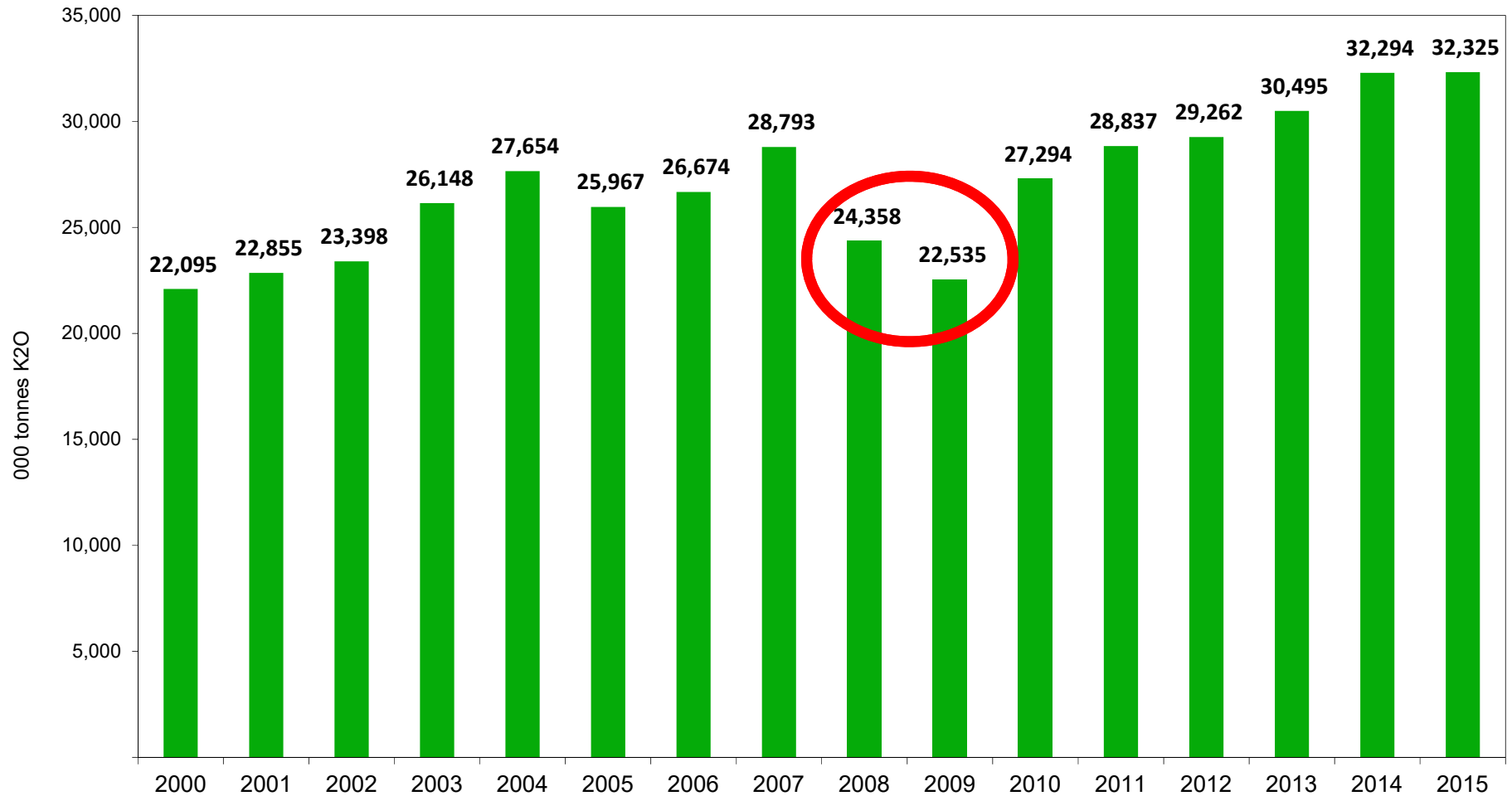
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Historical Consumption

World Potash Consumption (000 t K₂O)



Sources: IFA, NRCan

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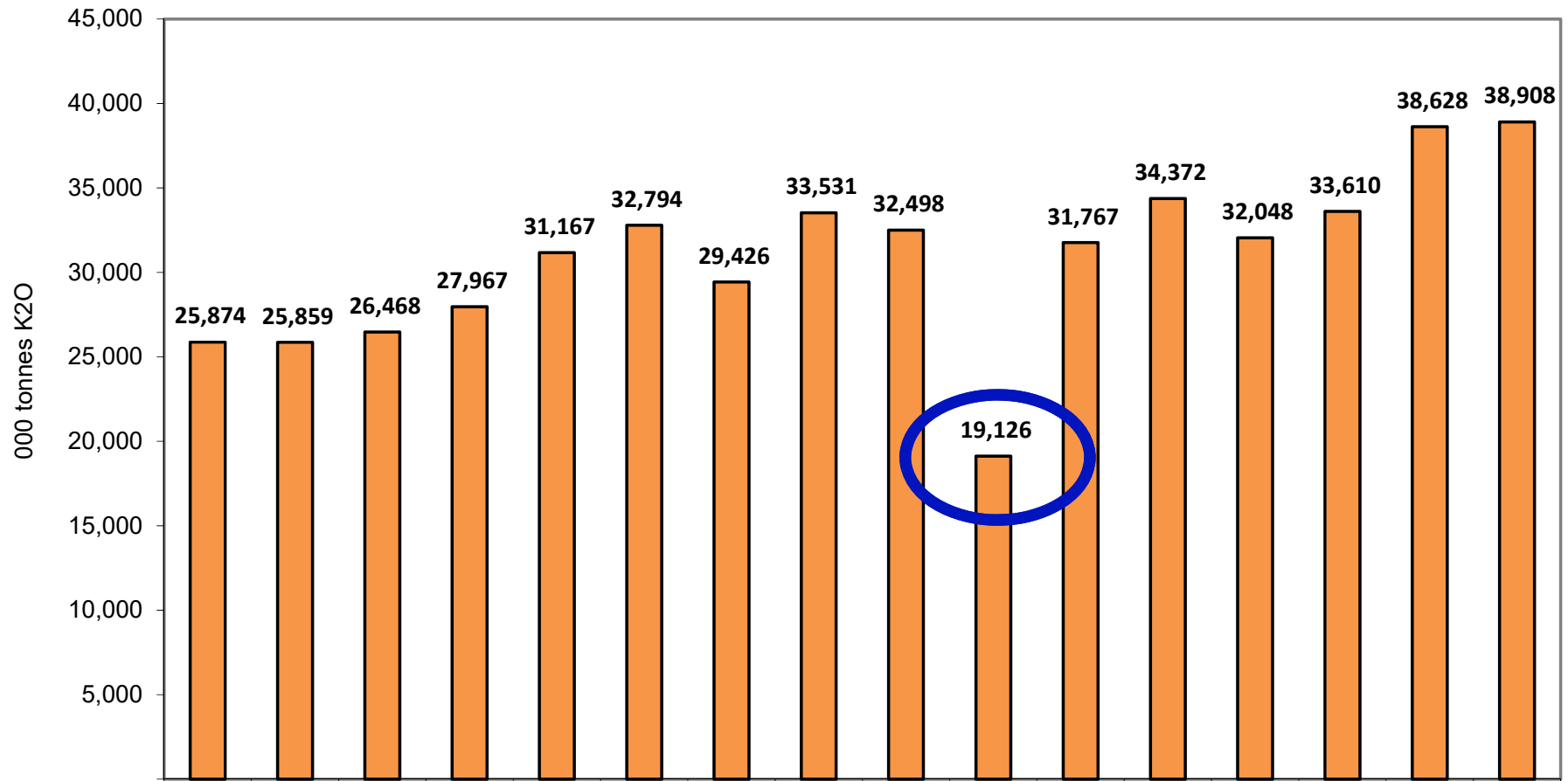
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Historical Production

World Potash Production (000 t K₂O)



Sources: IFA, NRCan

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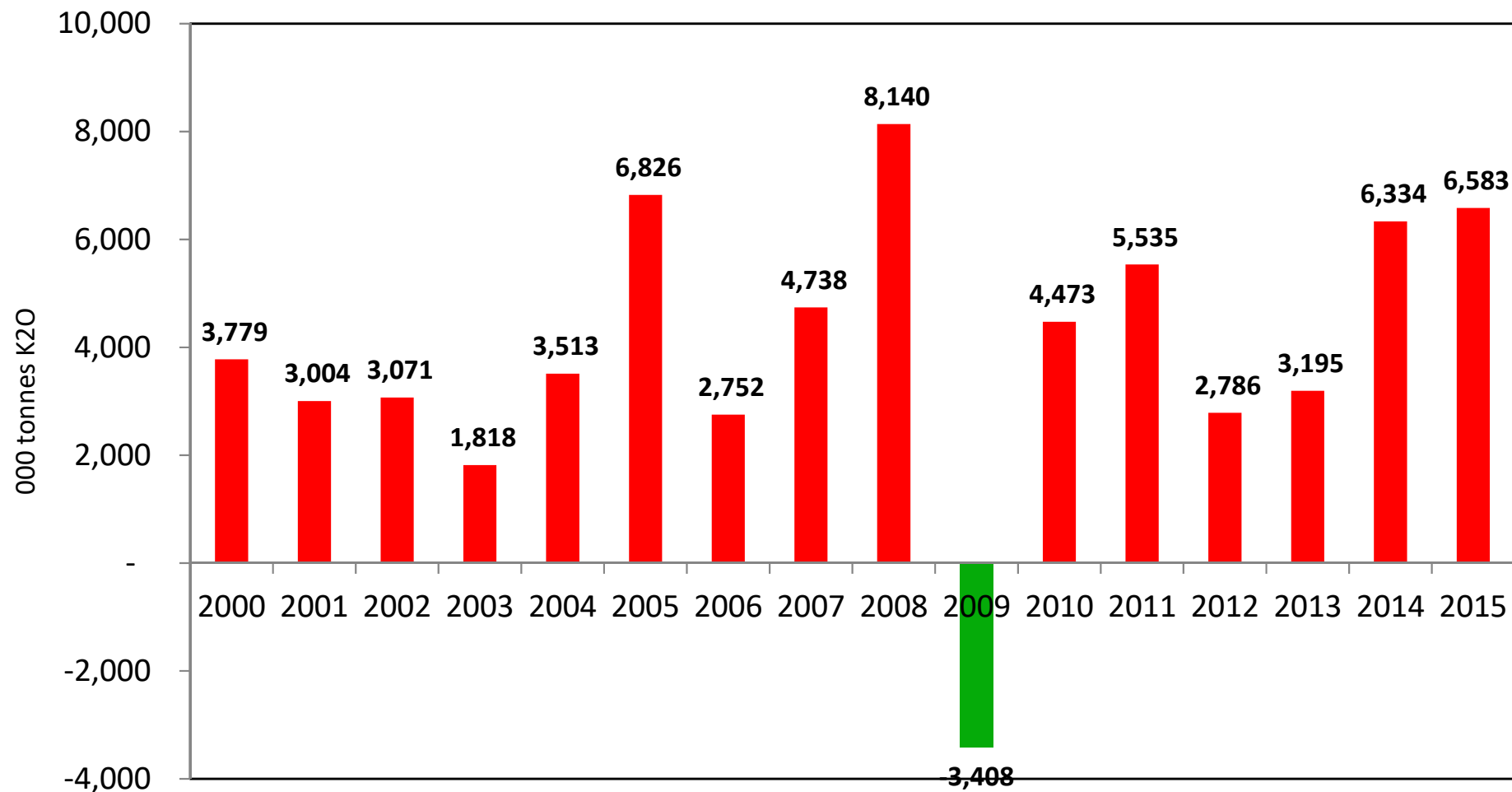
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Supply Exceeded Consumption

World Potash Supply/Use Balance (000 t K₂O)



Sources: IFA, NRCan

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Outlook for Demand and Supply

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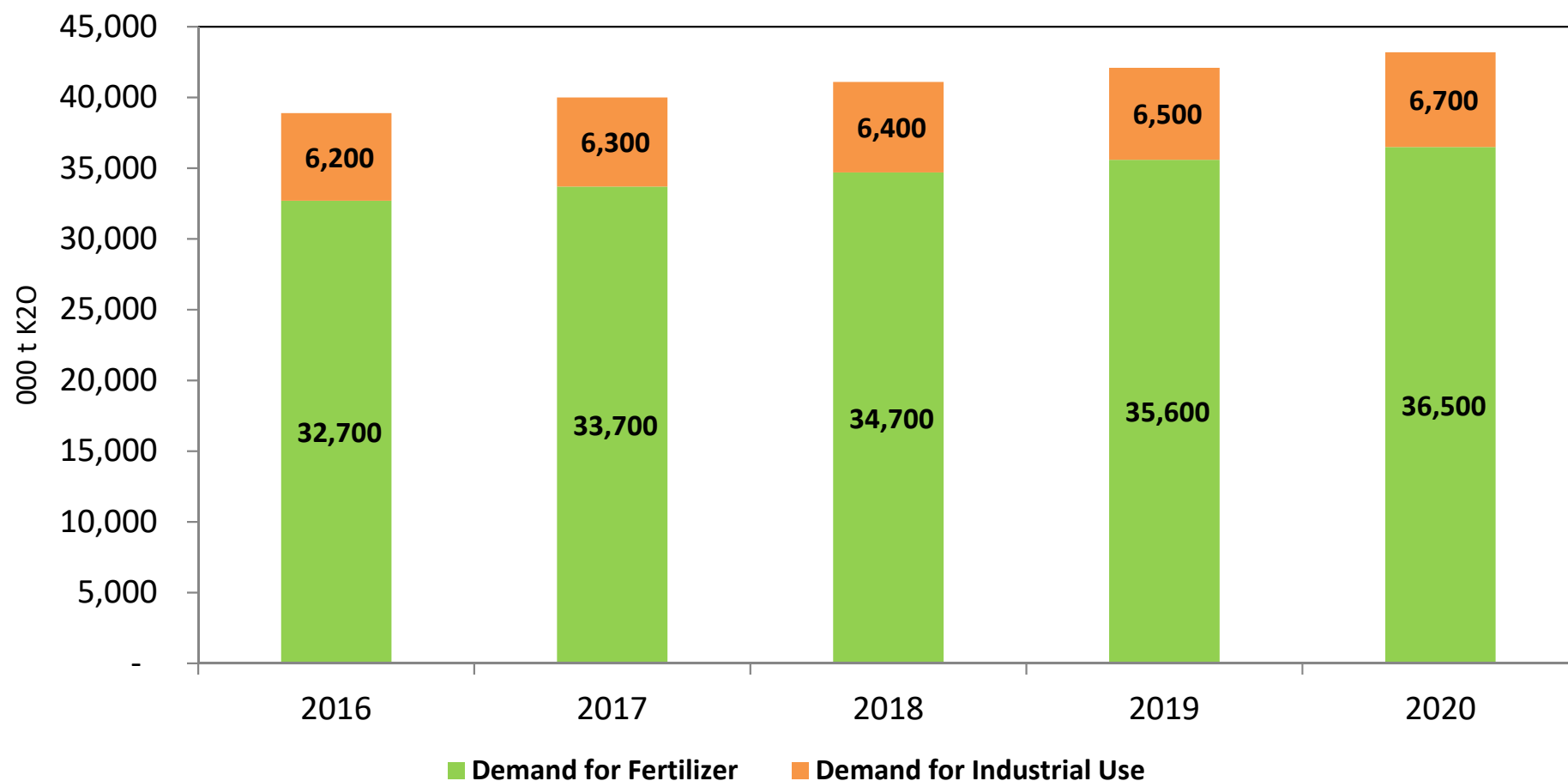
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Demand Outlook

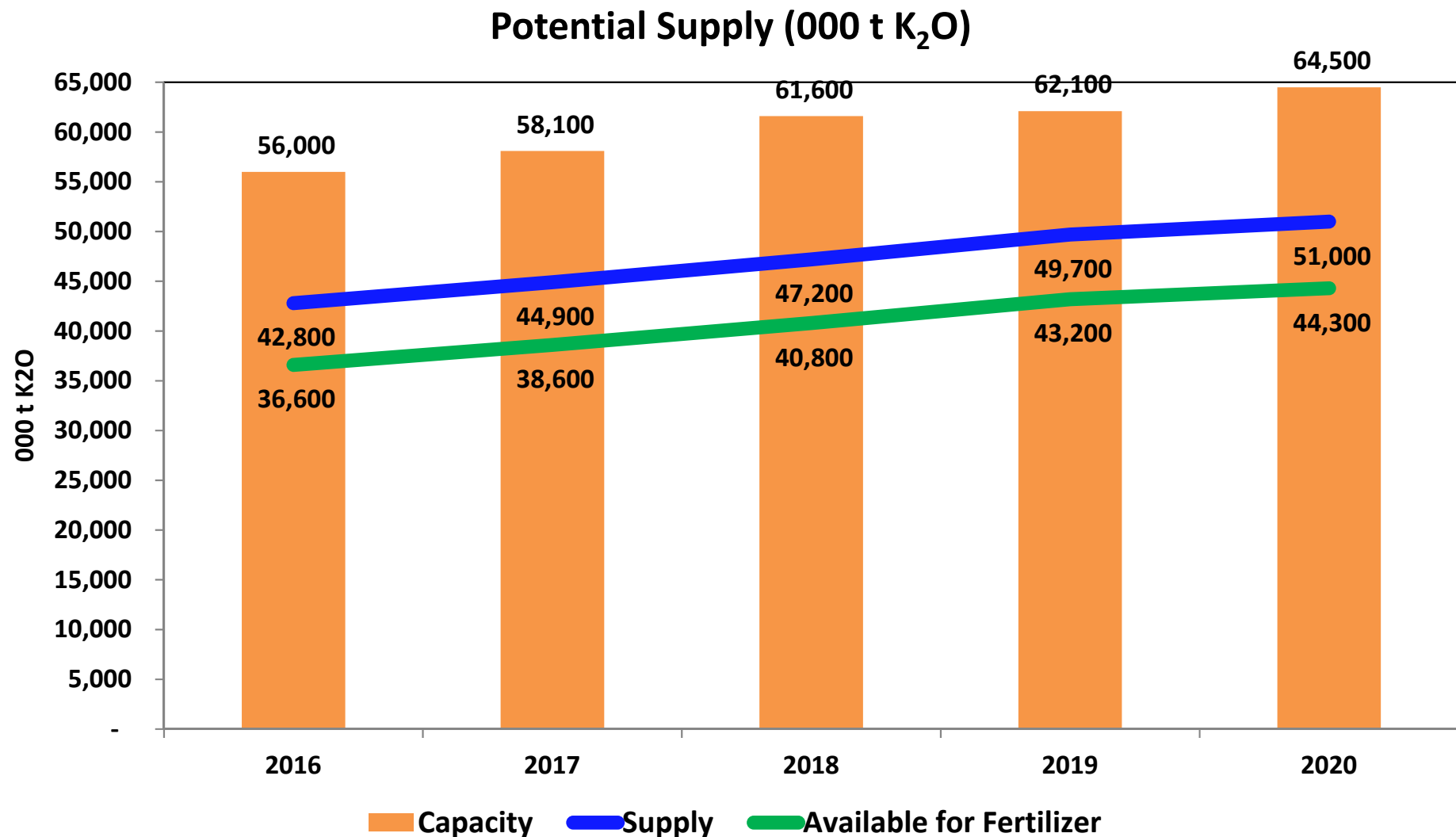
Demand Forecast (000 t K₂O)



Sources: IFA, NRCan

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Supply Outlook



Sources: IFA, NRCan

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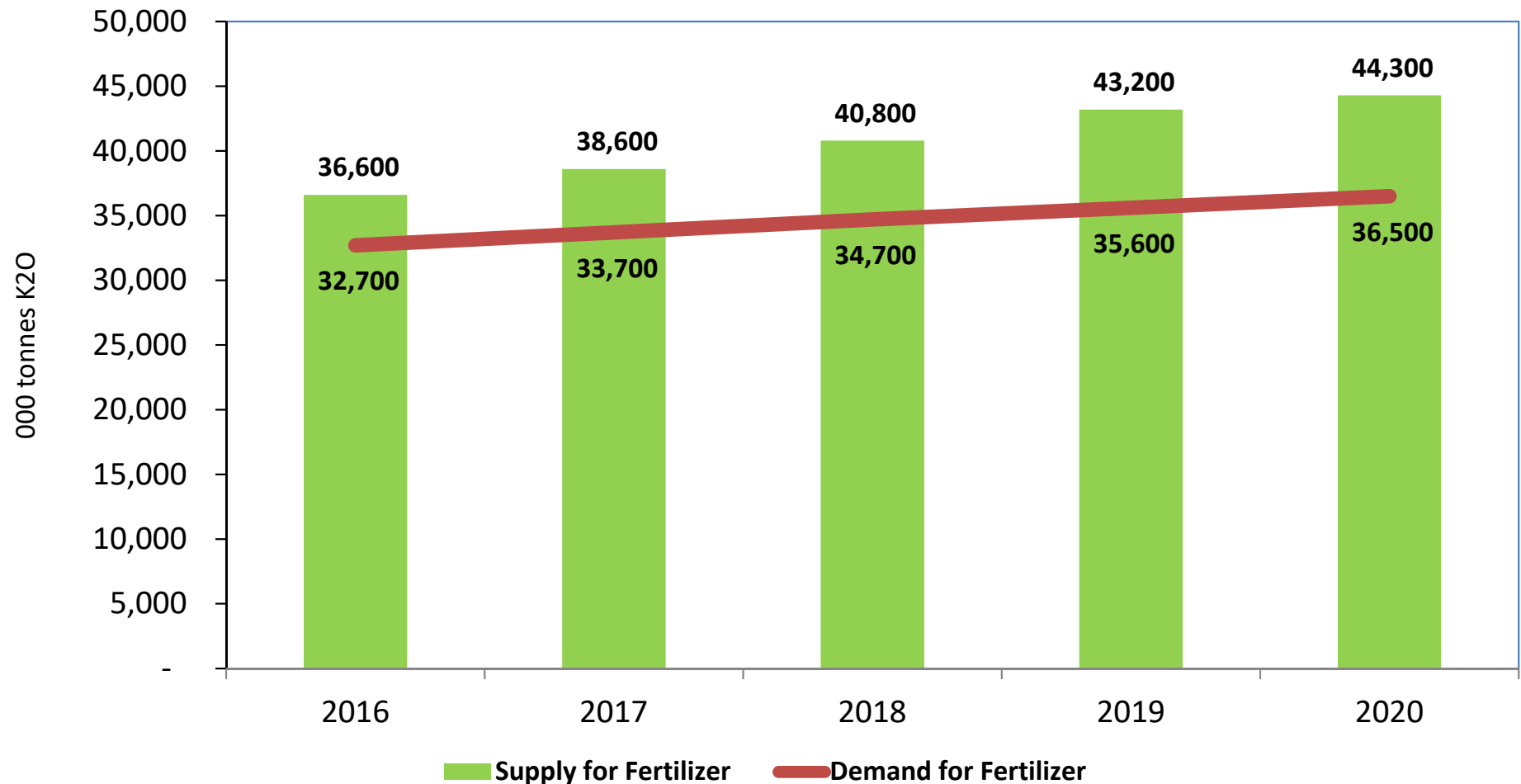
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Forecast Oversupply

Demand/Supply Balance for Fertilizer Use (000 t K₂O)



Sources: IFA, NRCan

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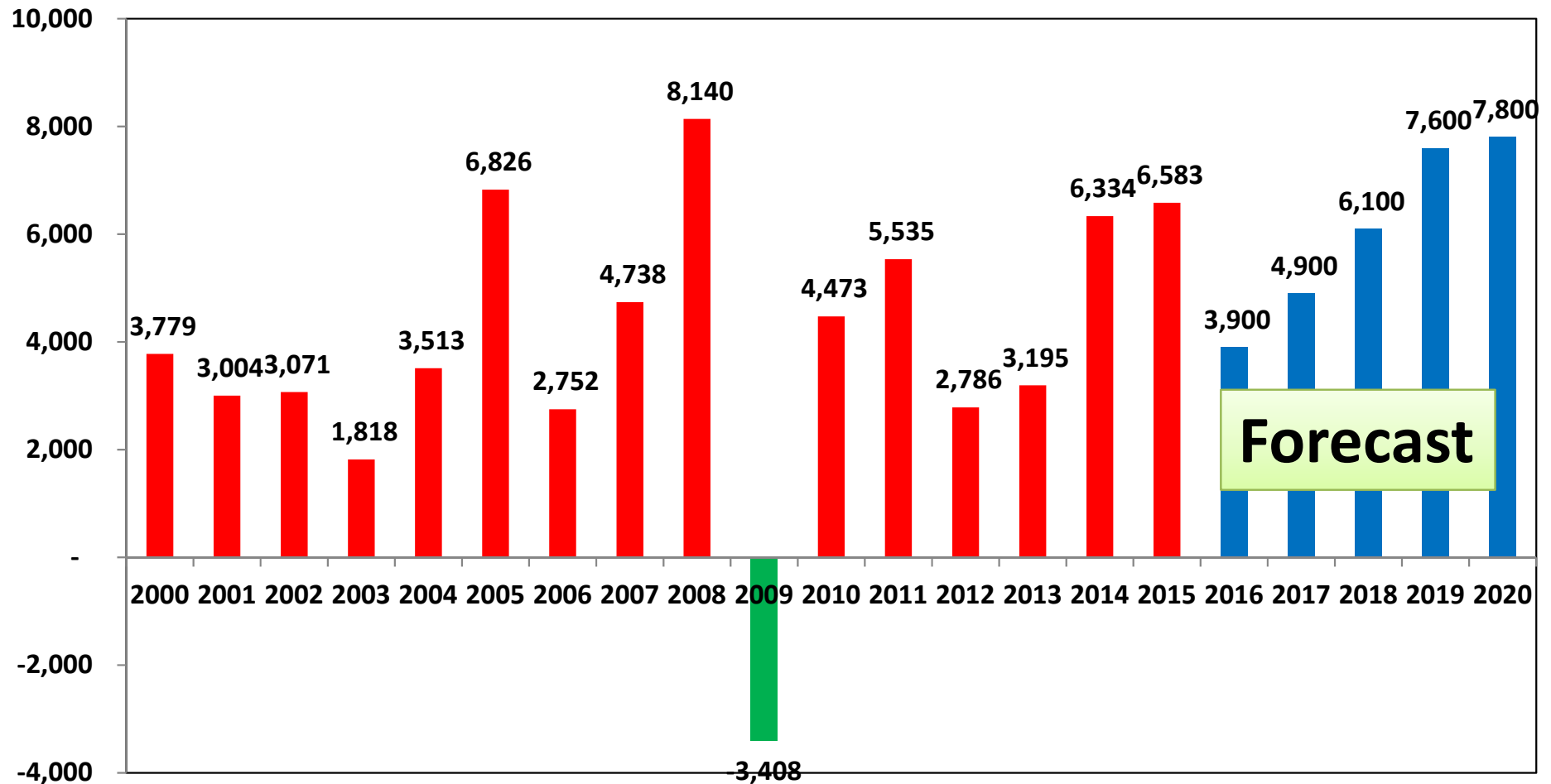
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Actual Oversupply and Forecast

Oversupply Forecast (000 t K₂O)



Sources: IFA, NRCan

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Demand Fundamentals

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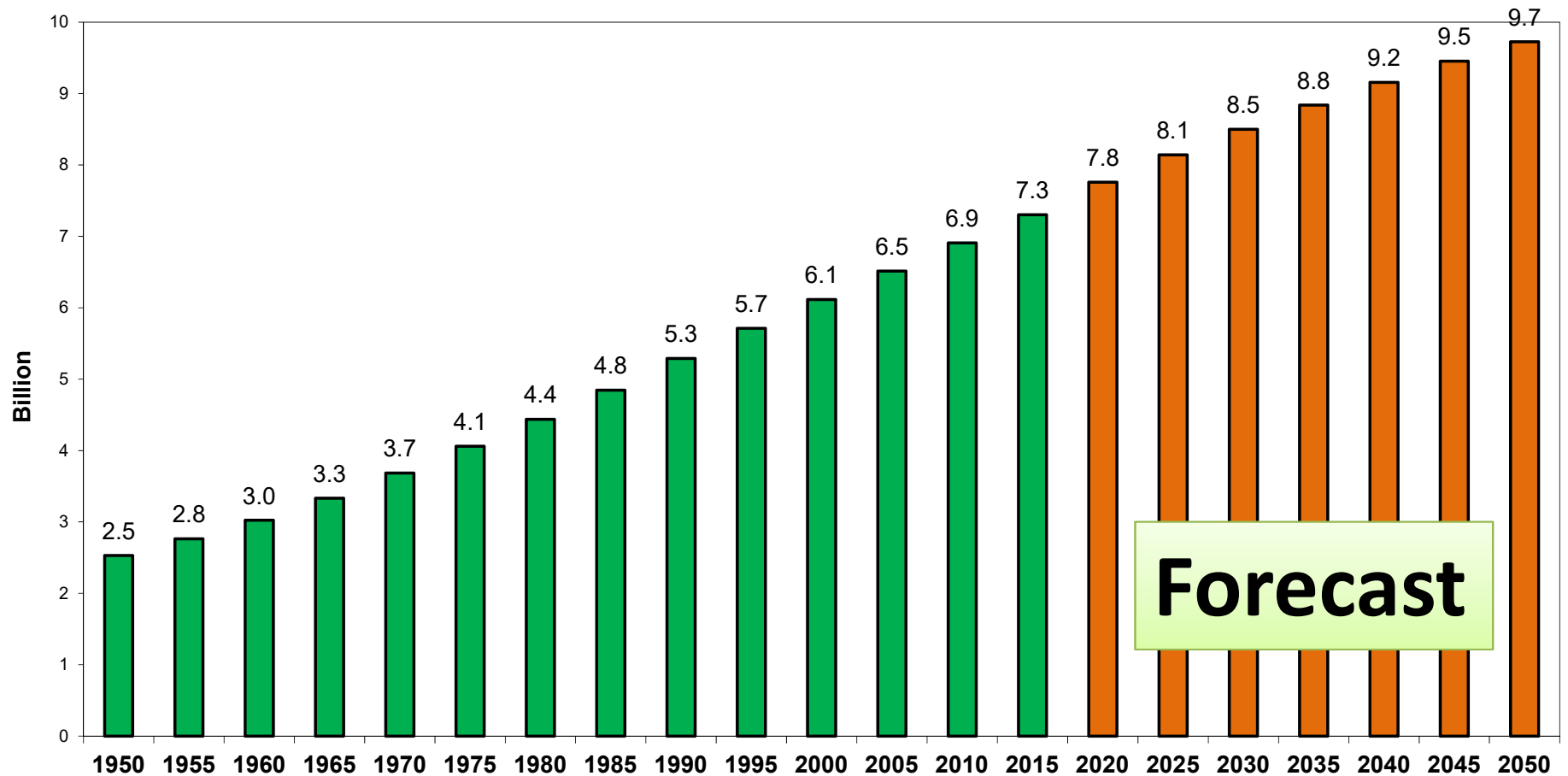
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Population Growth

World Population Growth (billion)



Source: UN

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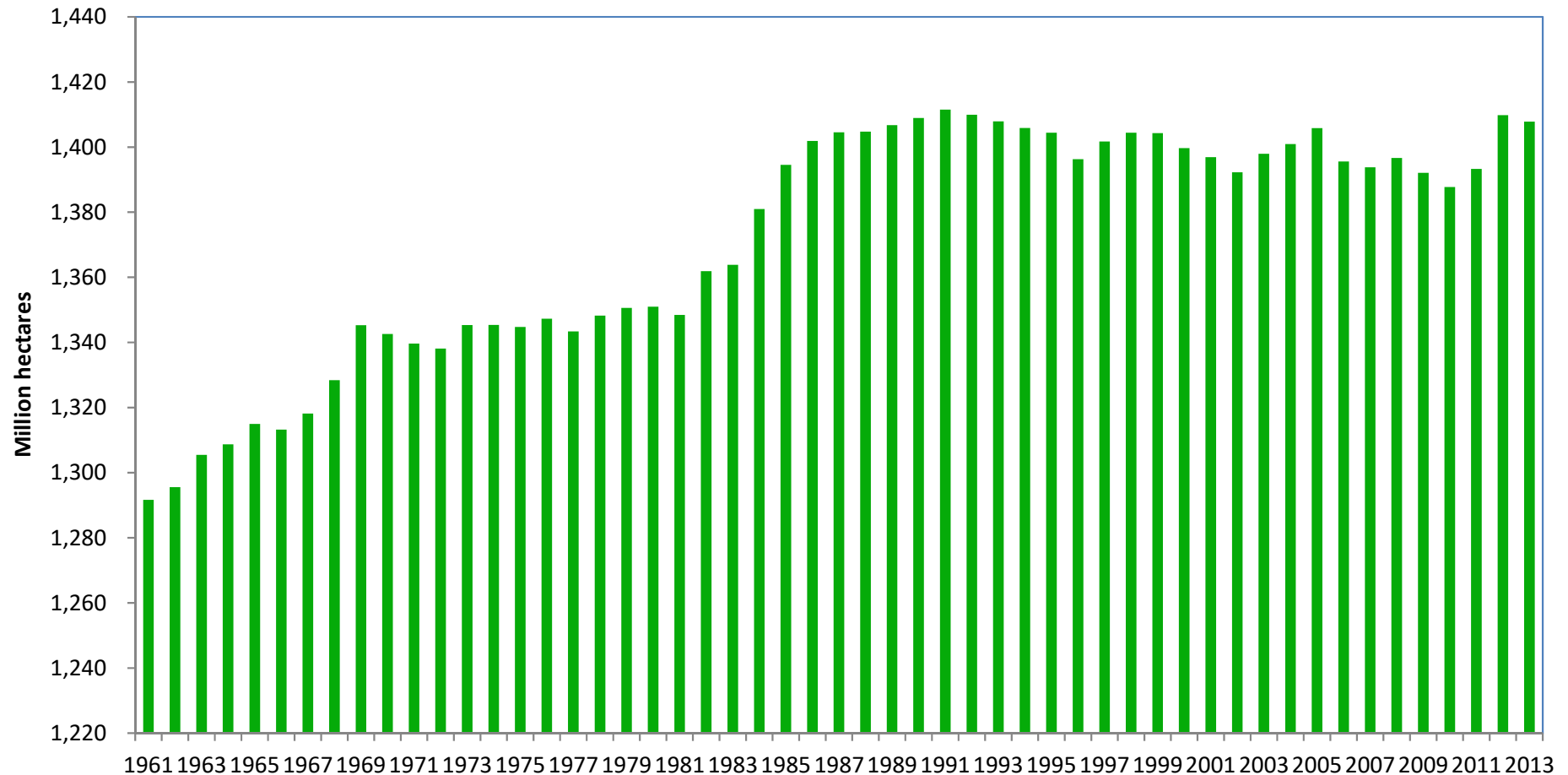
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World Arable Land

World Arable Land (million hectares)



Source: FAO

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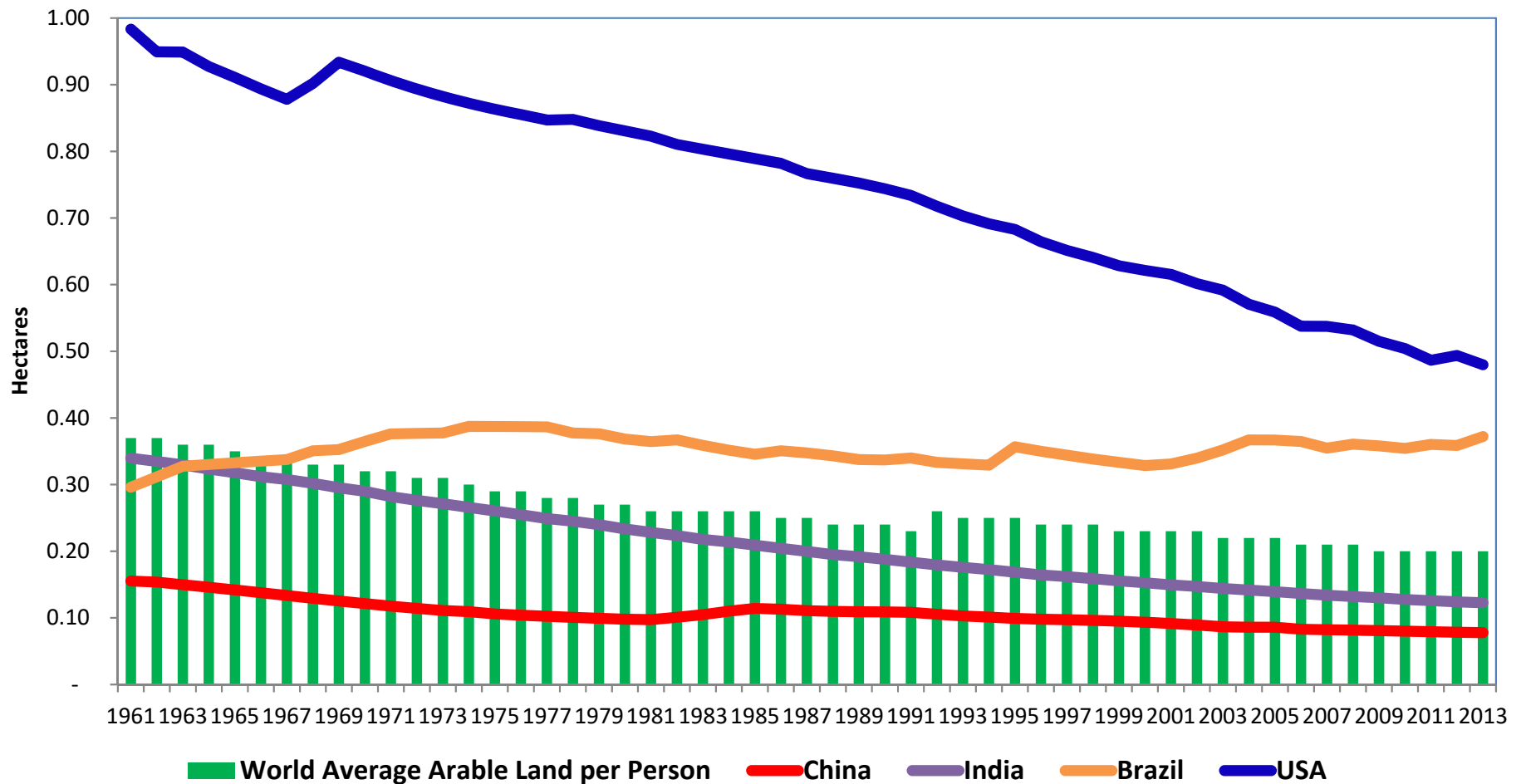
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Arable Land Per Person

Hectares of Arable Land Per Person

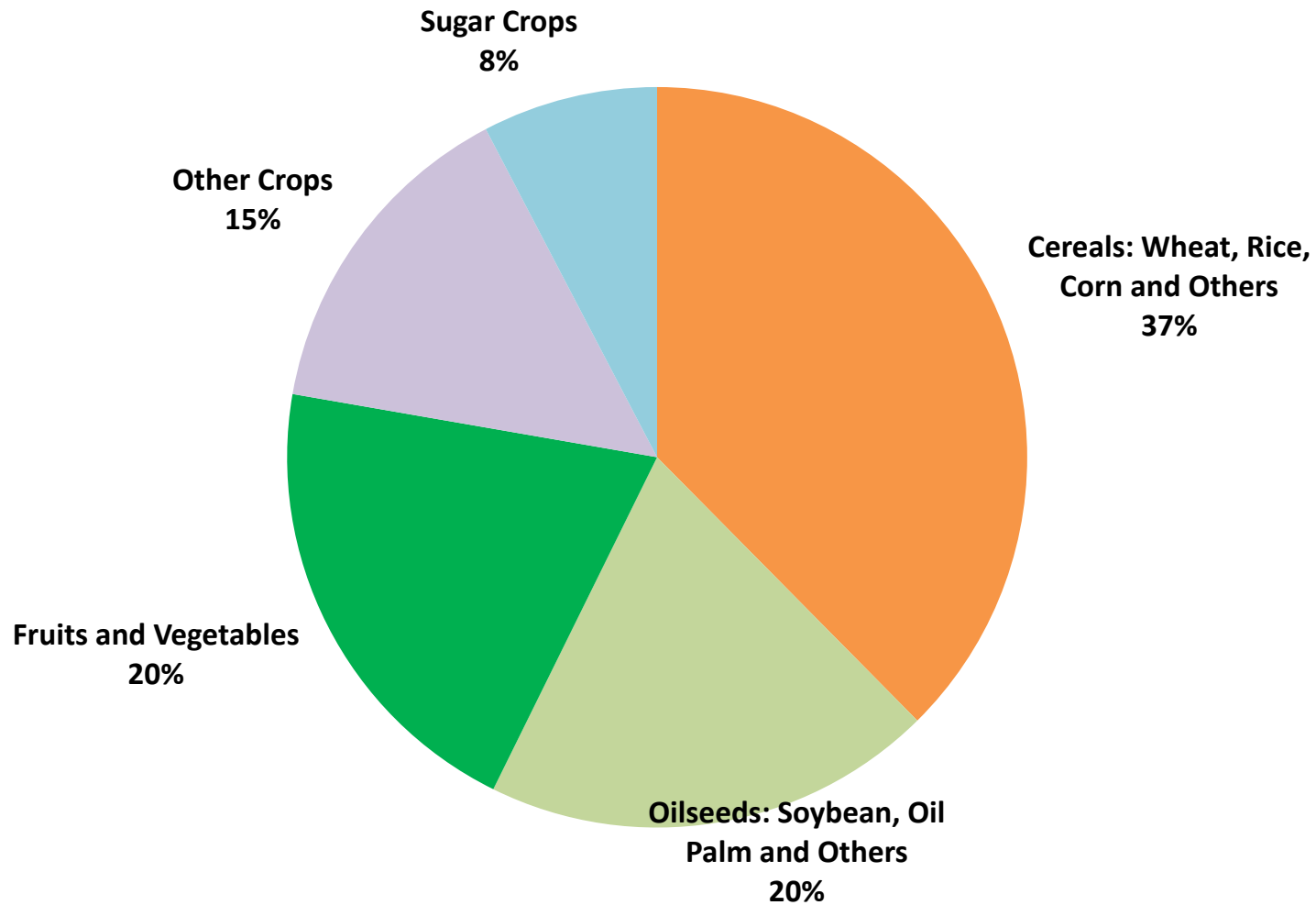


Source: World Bank

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Potash Use by Crop

Global Potash Use by Crops, 2010/11



Source: IFA

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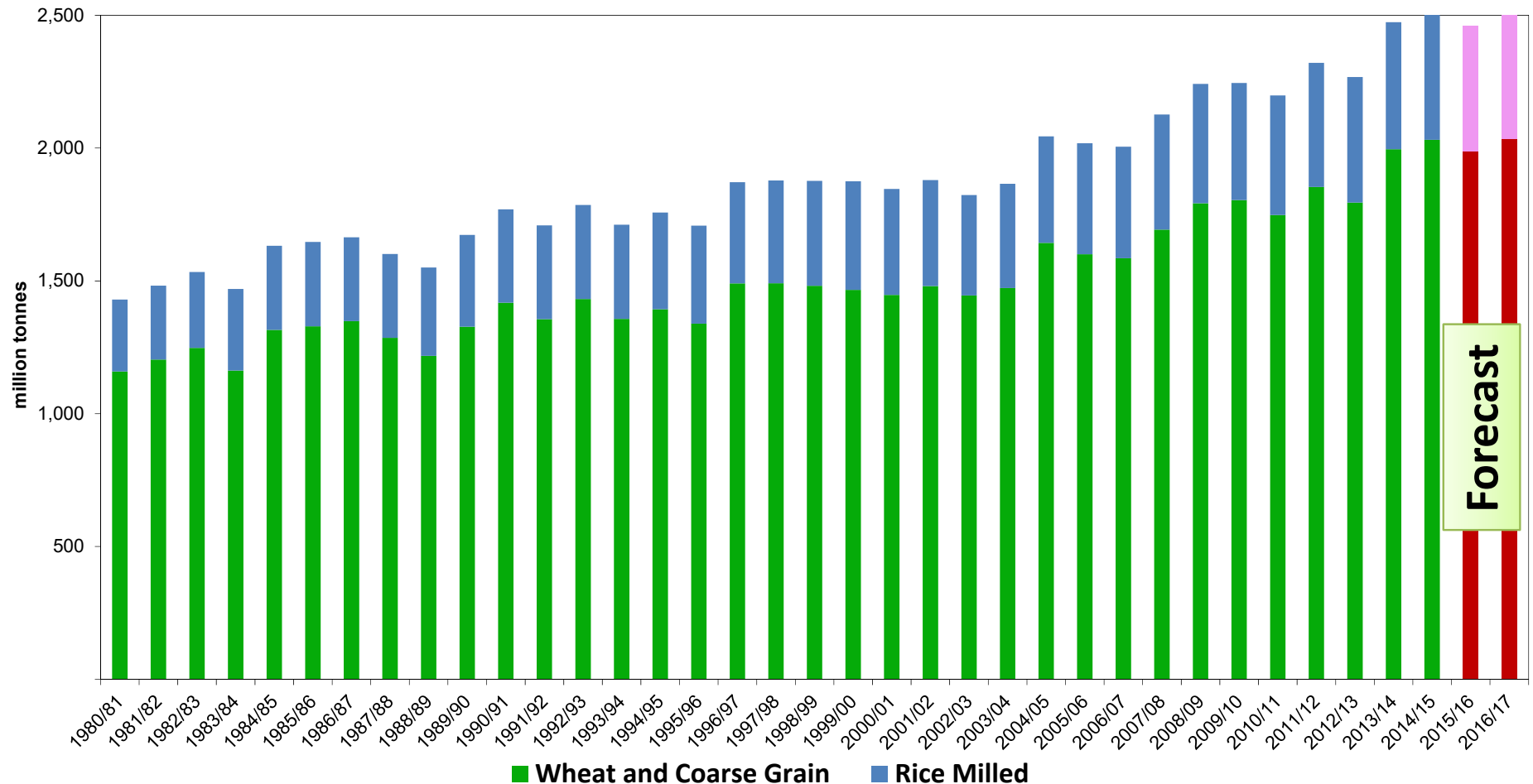
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Grain Production

World Grain Production (million tonnes)



Source: USDA

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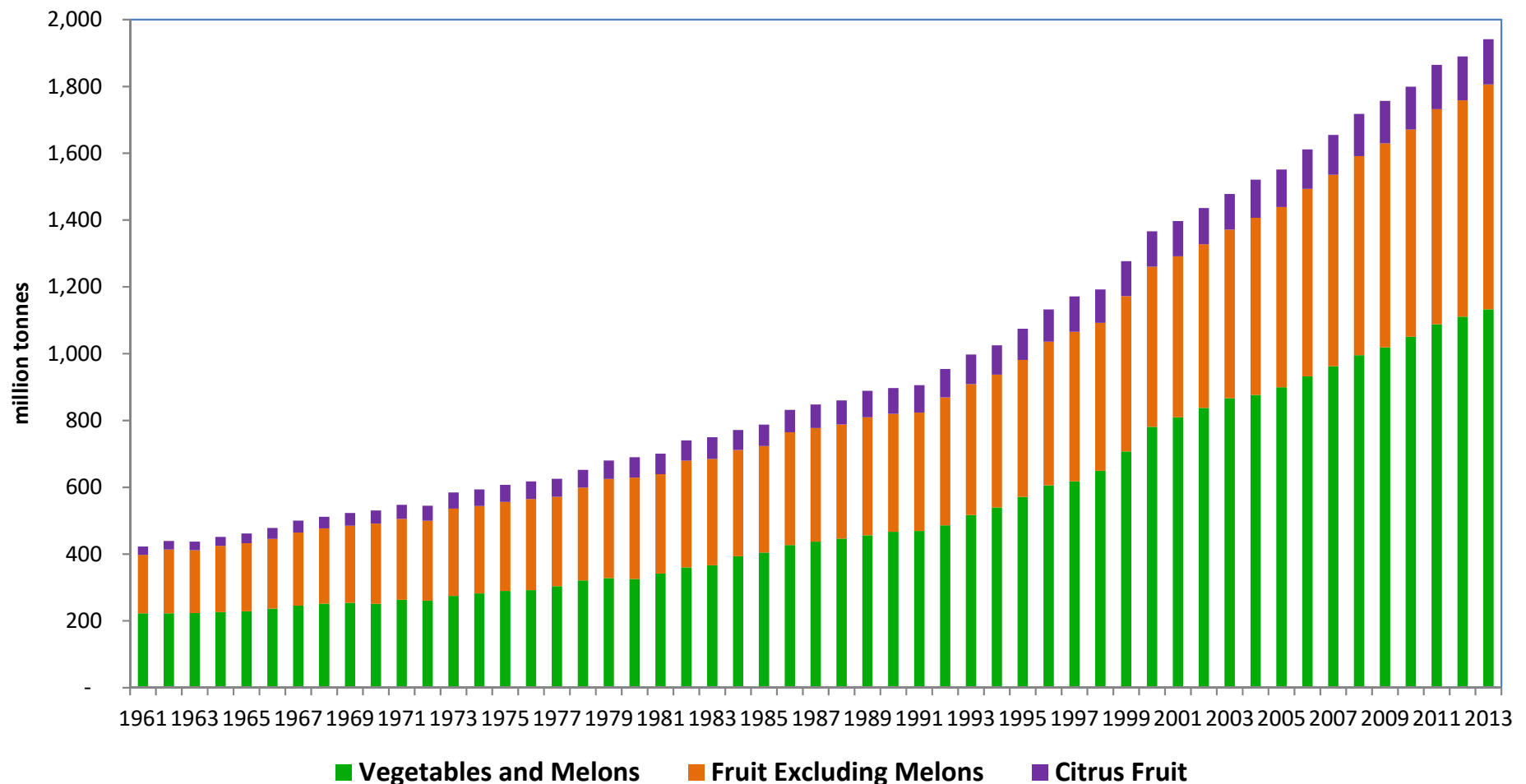
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Fruit and Vegetables Production

World Fruit and Vegetables Production (million tonnes)

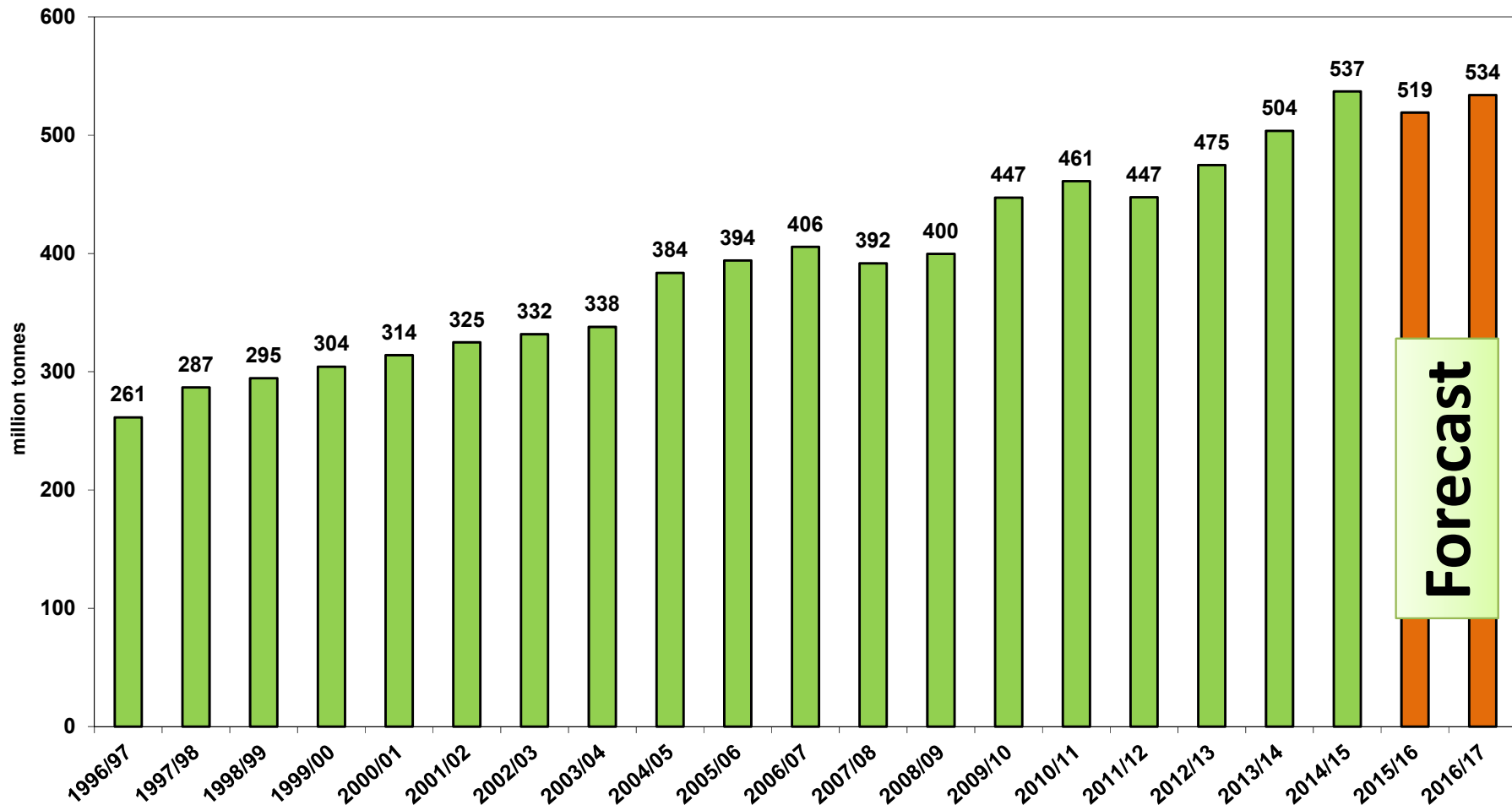


Source: FAO

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Oilseeds Production

World Oilseeds Production (million tonnes)



Source: USDA

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Major Consuming Countries

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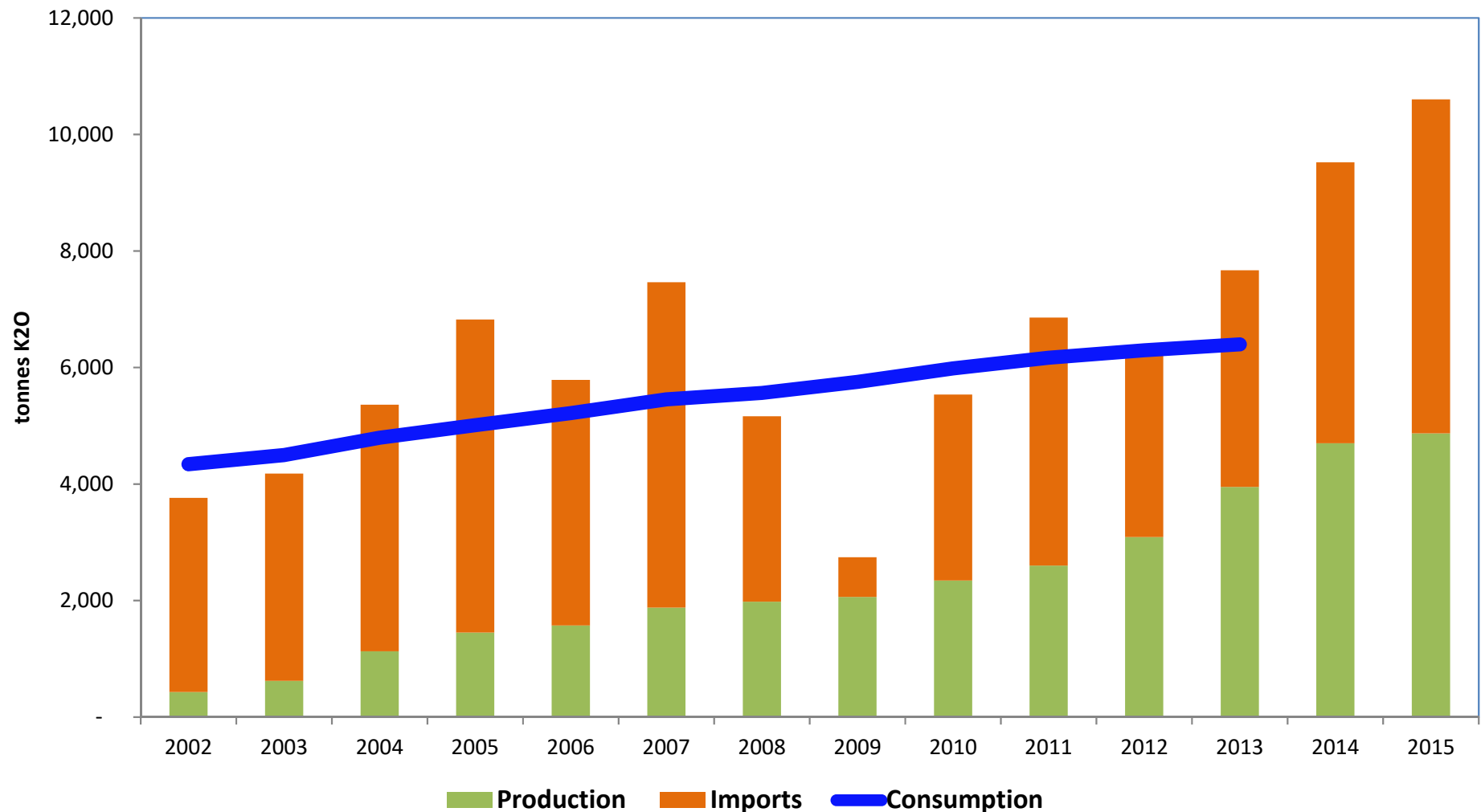
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China

Production, Imports and Consumption (000 t K₂O)

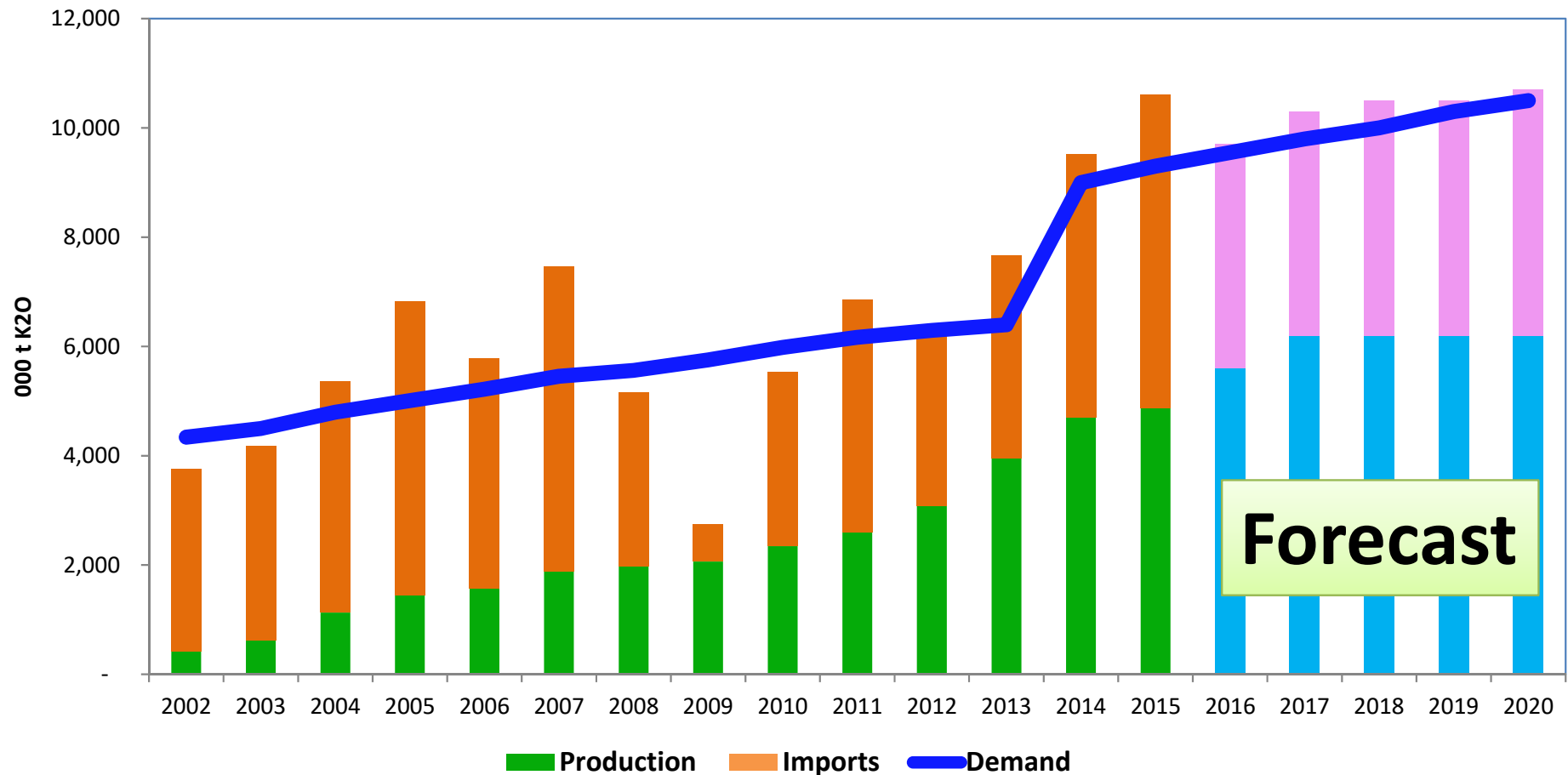


Sources: FAO, IFA

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China – Demand/Supply Outlook

Forecast: Production, Imports and Demand (000 t K₂O)

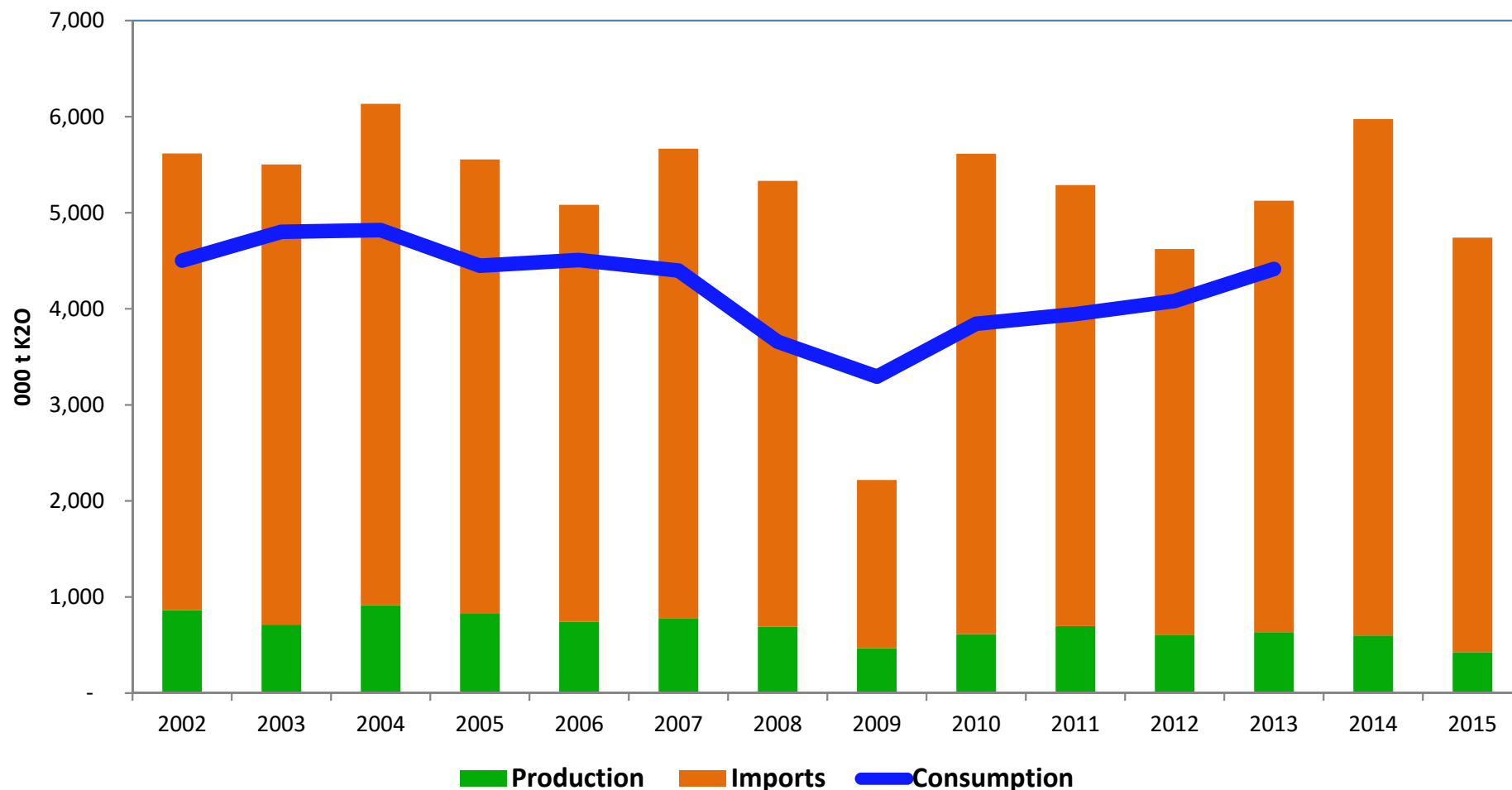


Sources: FAO, IFA

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United States

Production, Imports and Consumption (000 t K₂O)



Sources: FAO, IFA

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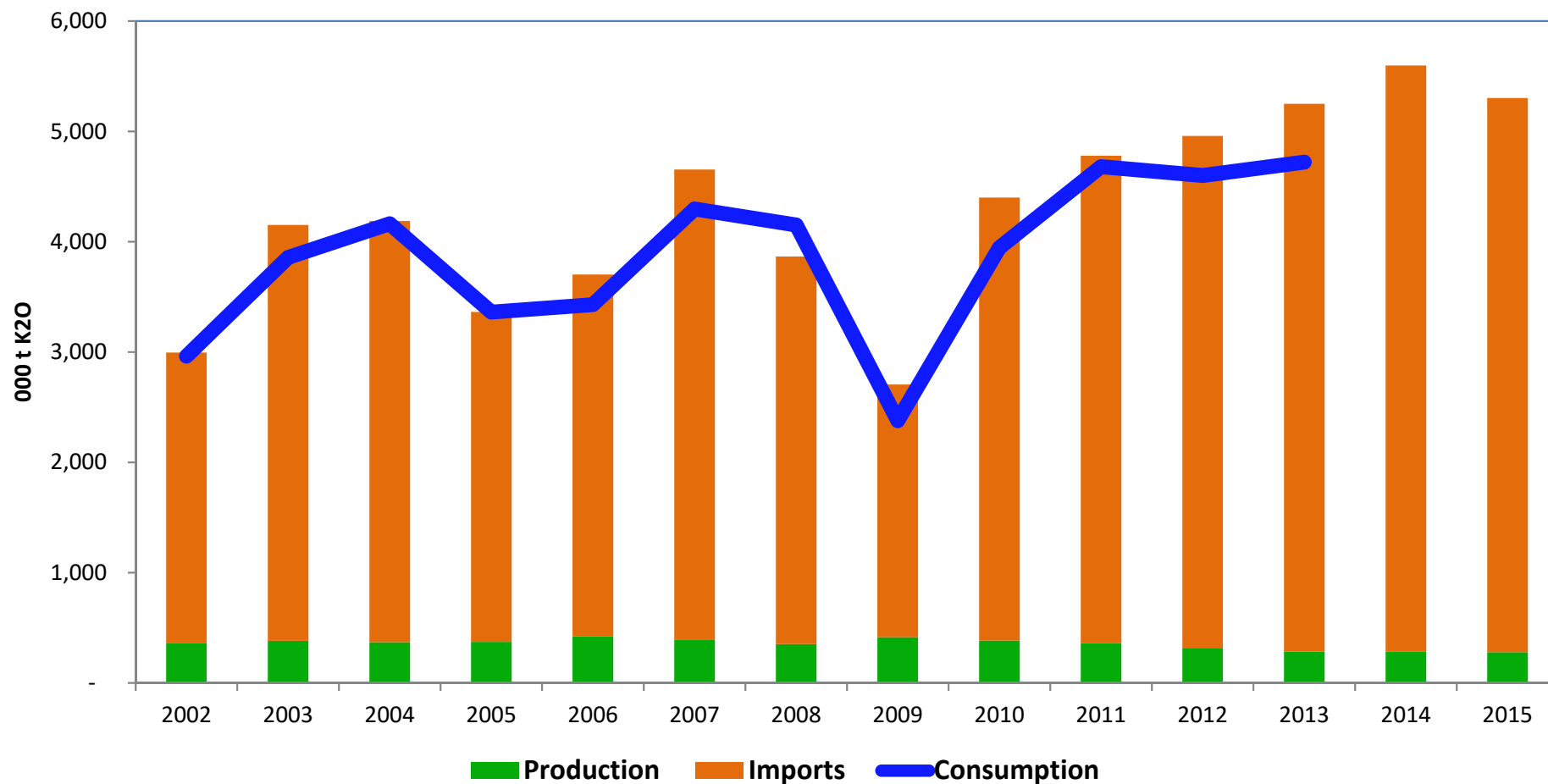
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Brazil

Production, Imports and Consumption (000 t K₂O)

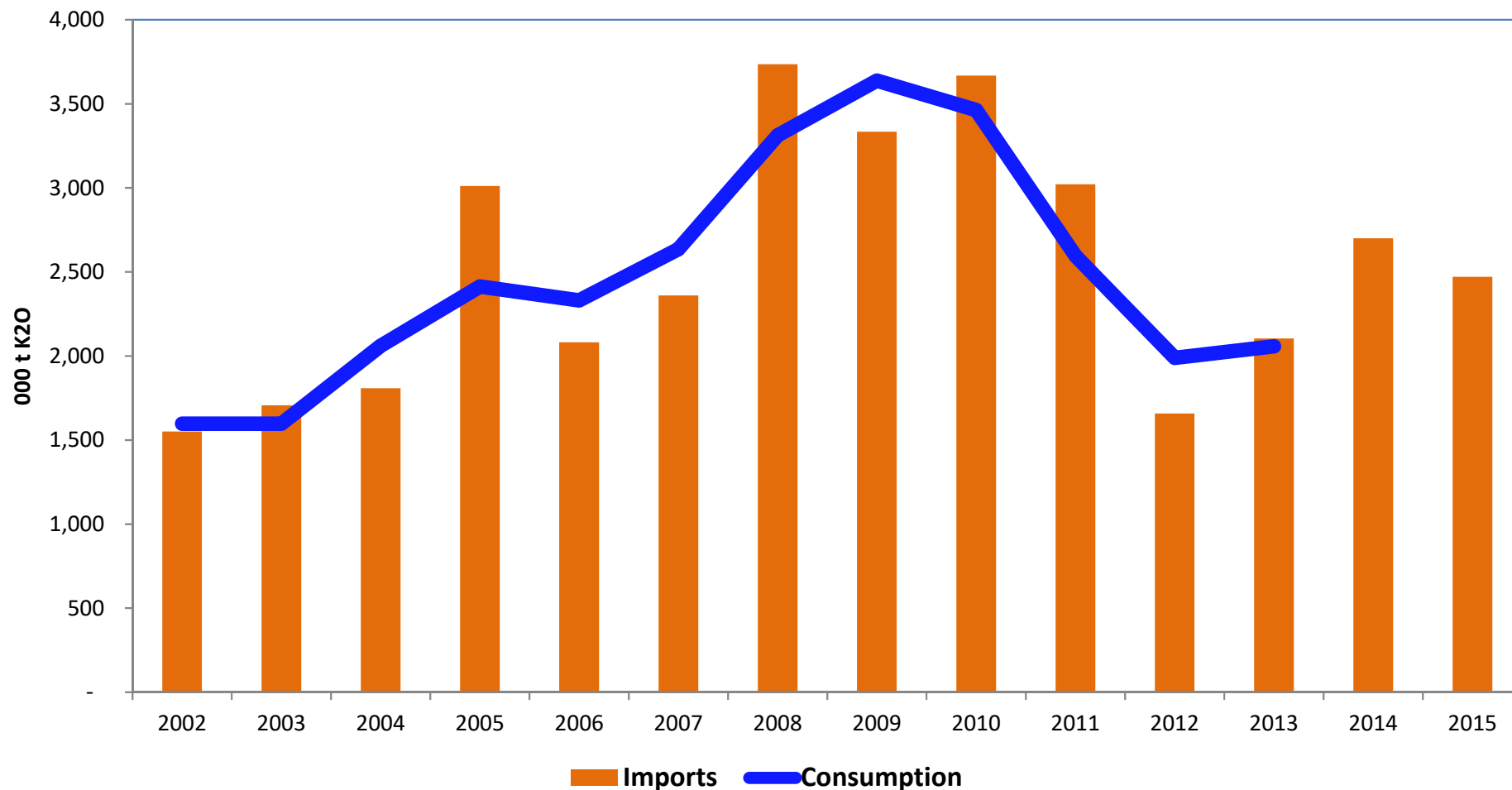


Sources: FAO, IFA

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India

Imports and Consumption (000 t K₂O)



Sources: FAO, IFA

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Our films

The Power of Potash

[The Power of Potash](#)

[Using the Power of Digital Technology](#)

[Sharing Fertilizer News & Evidence at Farmer Meetings](#)

[Our Work in India](#)

[Potash for Life in India at a Glance](#)

[Potash improves crop yield, quality, plant protection and farm income](#)

[Potash for Life - advertisement in Bengali for West Bengal](#)



<http://www.potash4life.com/films/the-power-of-potash/>

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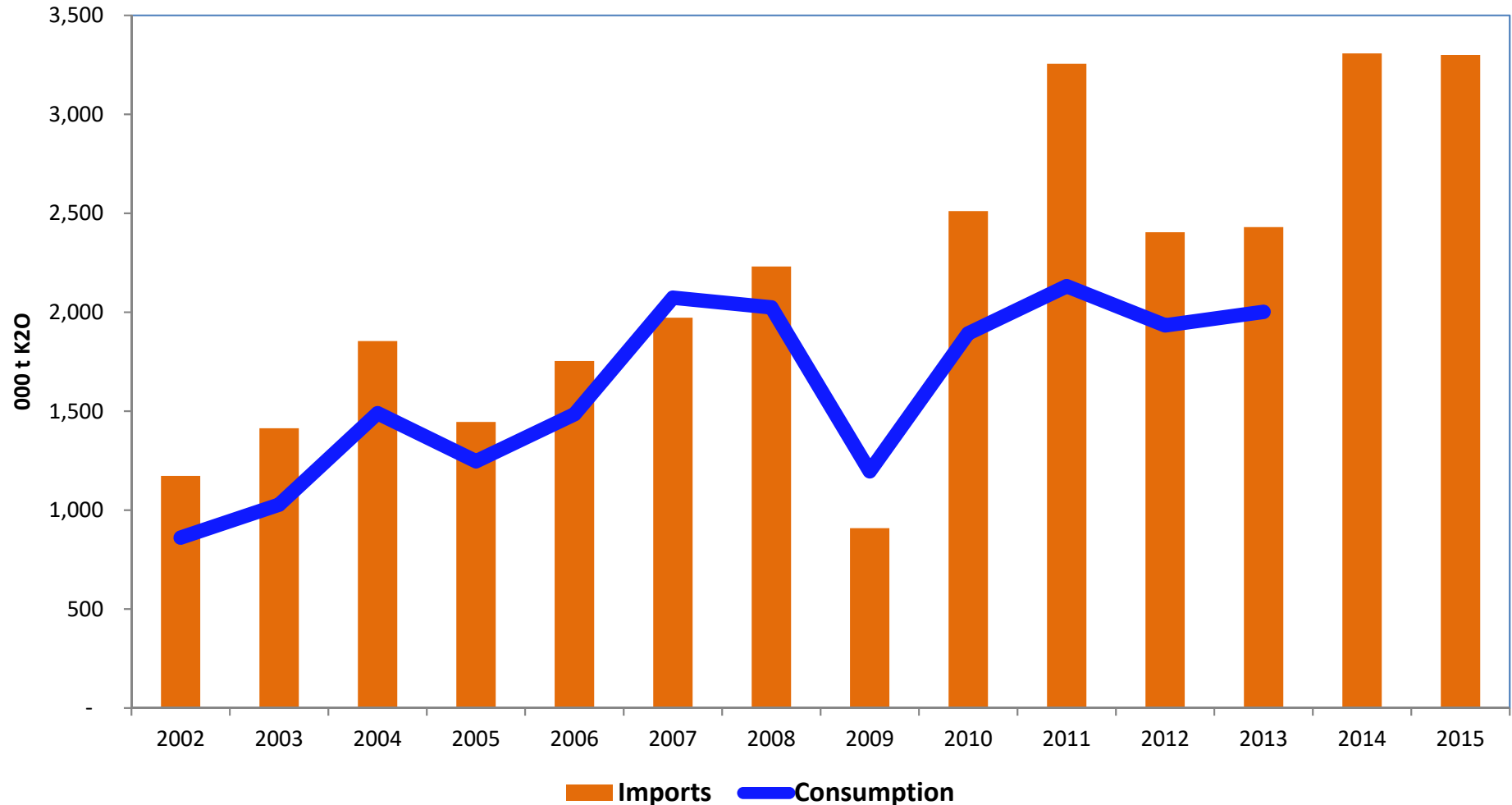
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Malaysia and Indonesia

Imports and Consumption (000 t K₂O)



Sources: FAO, IFA

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Major Suppliers

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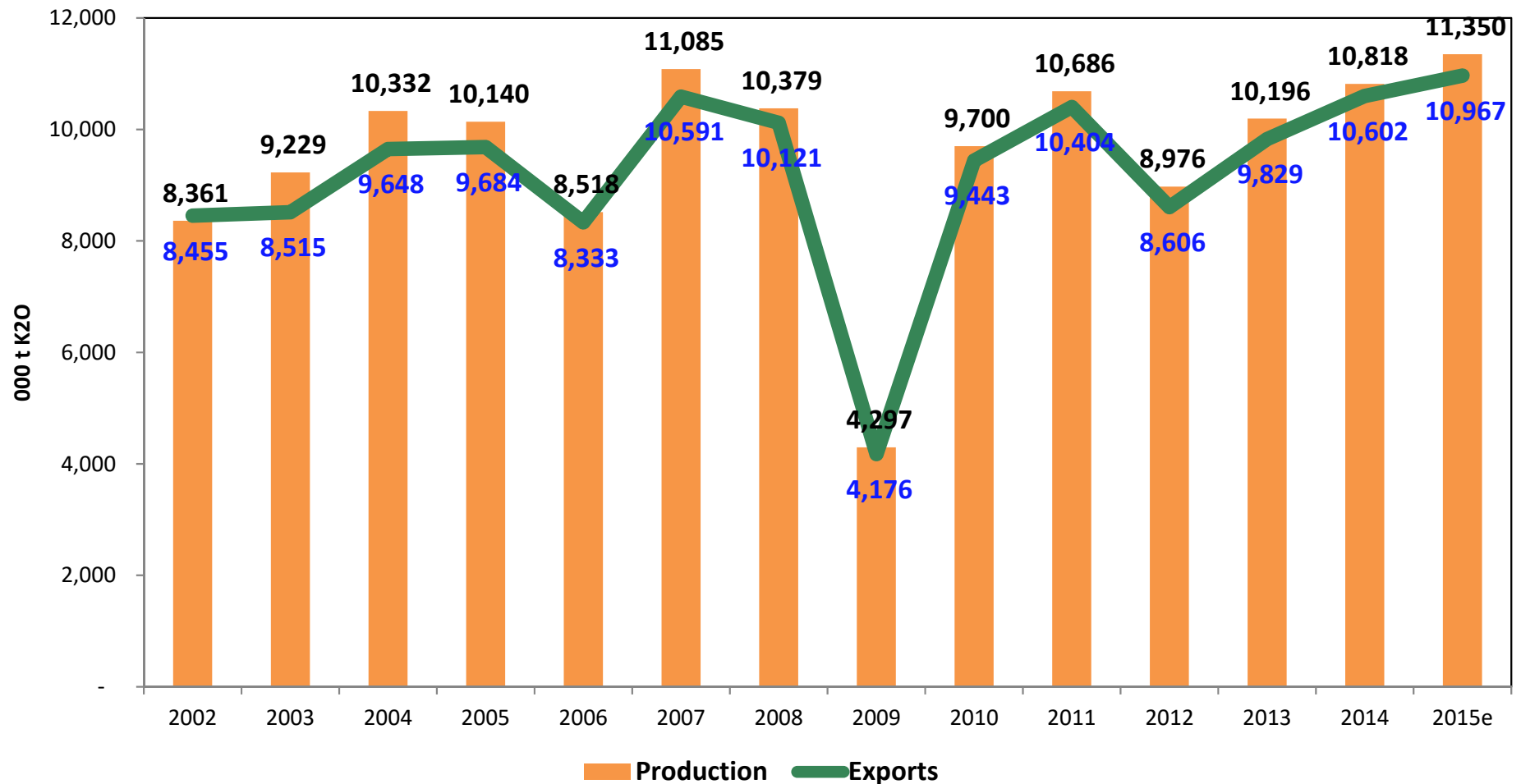
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Production and Exports (000 t K₂O)



Sources: NRCan

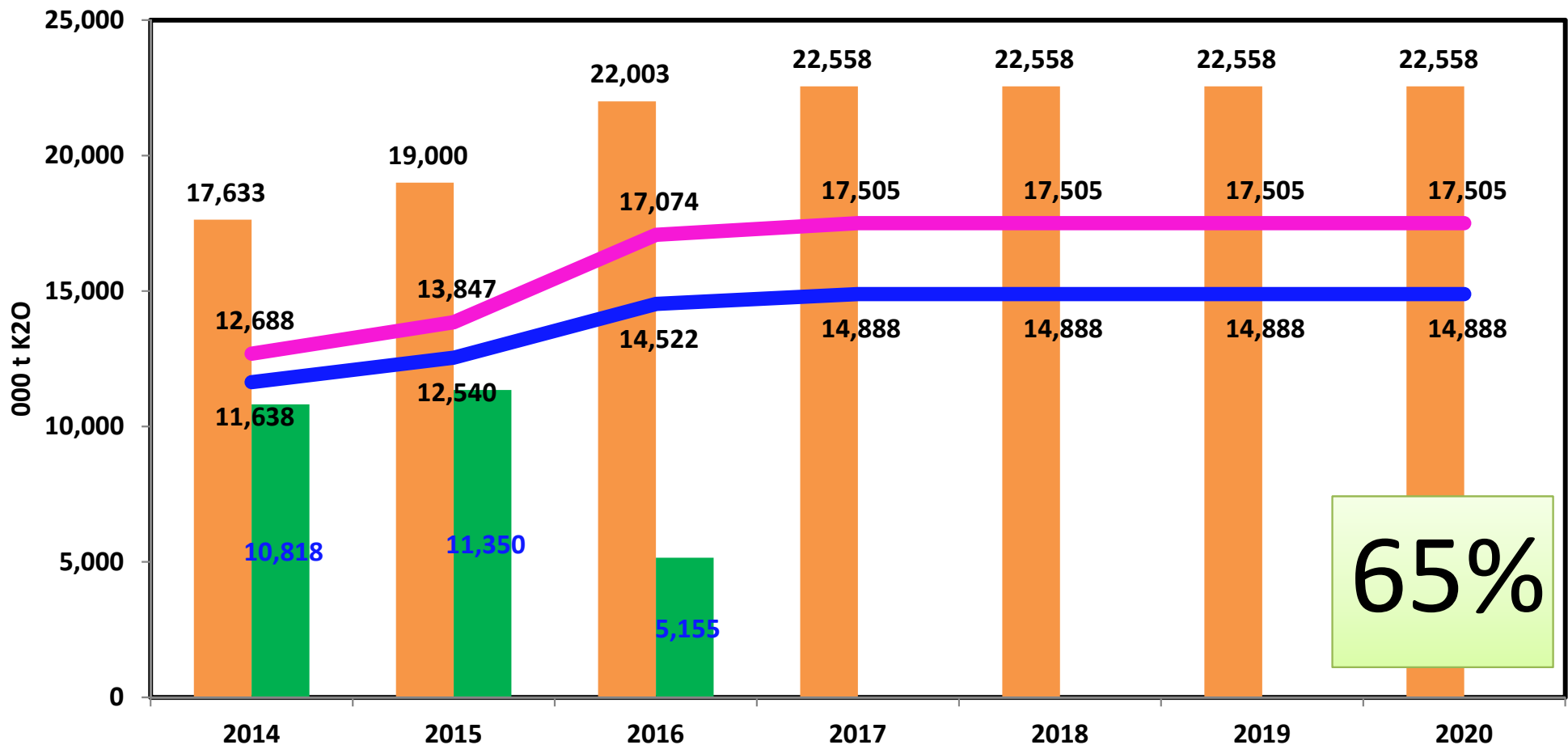
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**Forecast Methodology:
Potential production is
based on average of the
actual operating rates in
the last five years.**



Canada - Supply Outlook

Capacity and Production Potential (000 t K₂O)



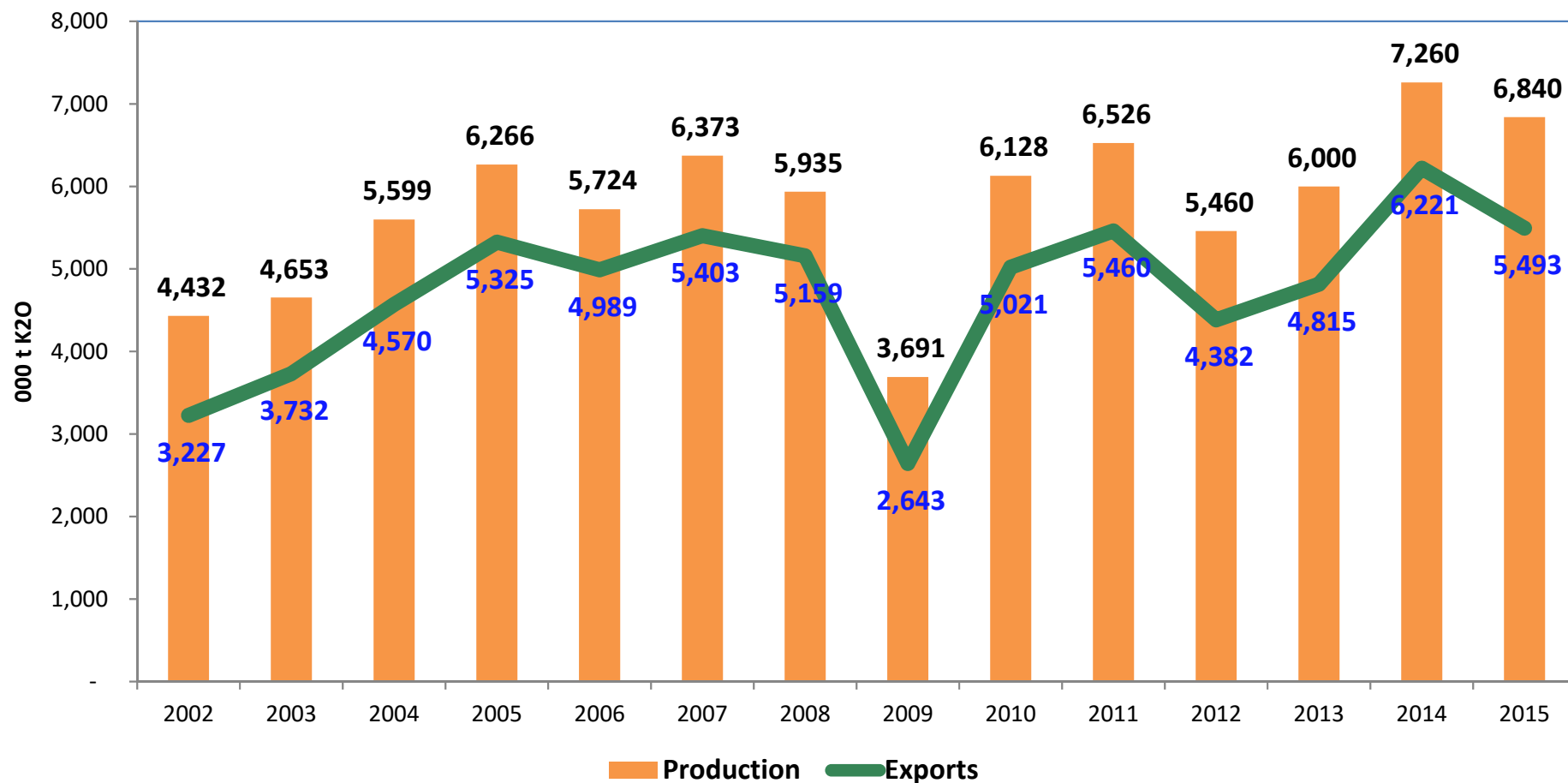
Sources: NRCan

Capacity Actual Production Capability Production Potential

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Russia

Production and Exports (000 t K₂O)



Sources: IFA, NRCan

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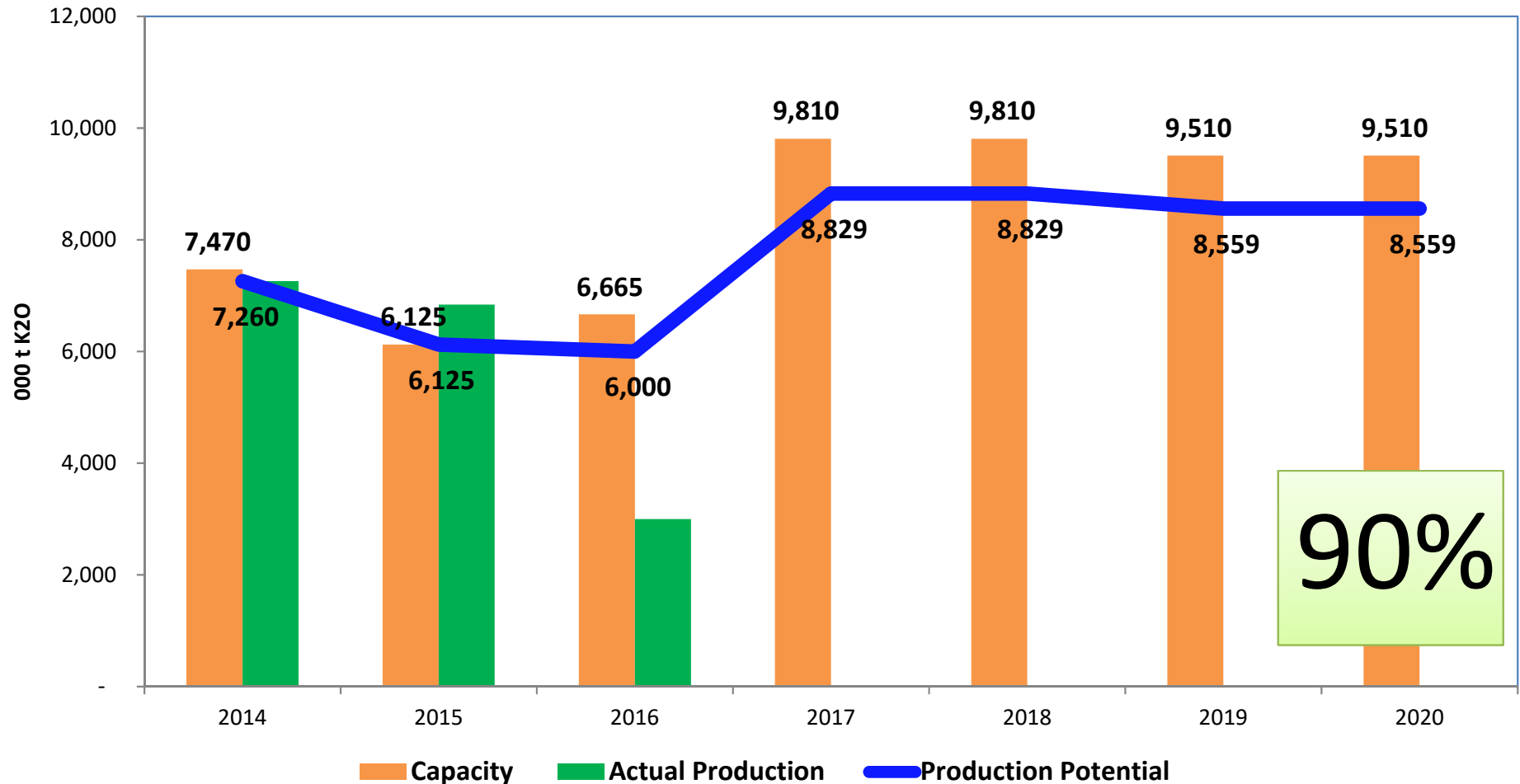
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Russia - Supply Outlook

Capacity and Production Potential (000 t K₂O)



Sources: NRCan

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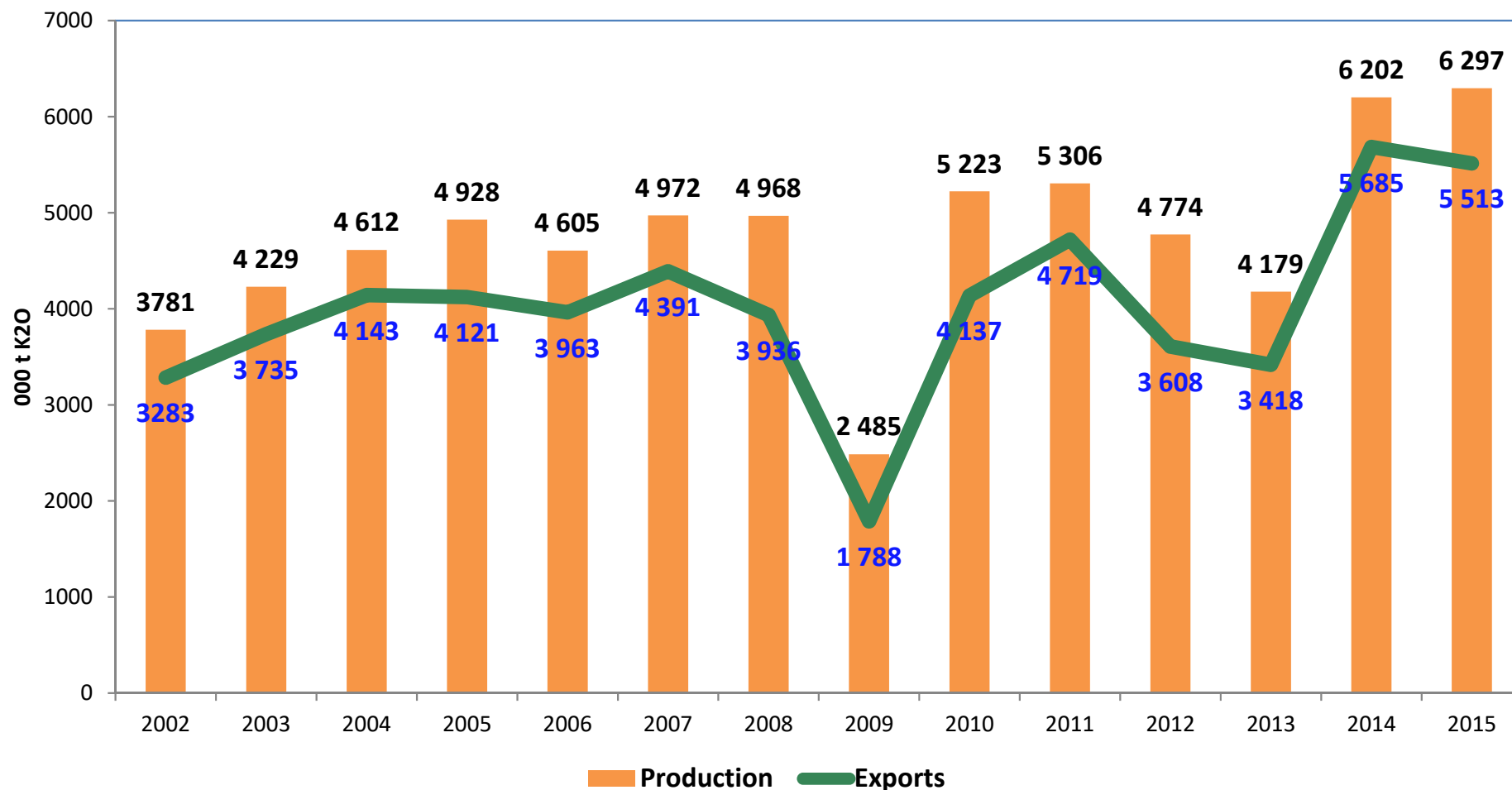
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Belarus

Production and Exports (000 t K₂O)

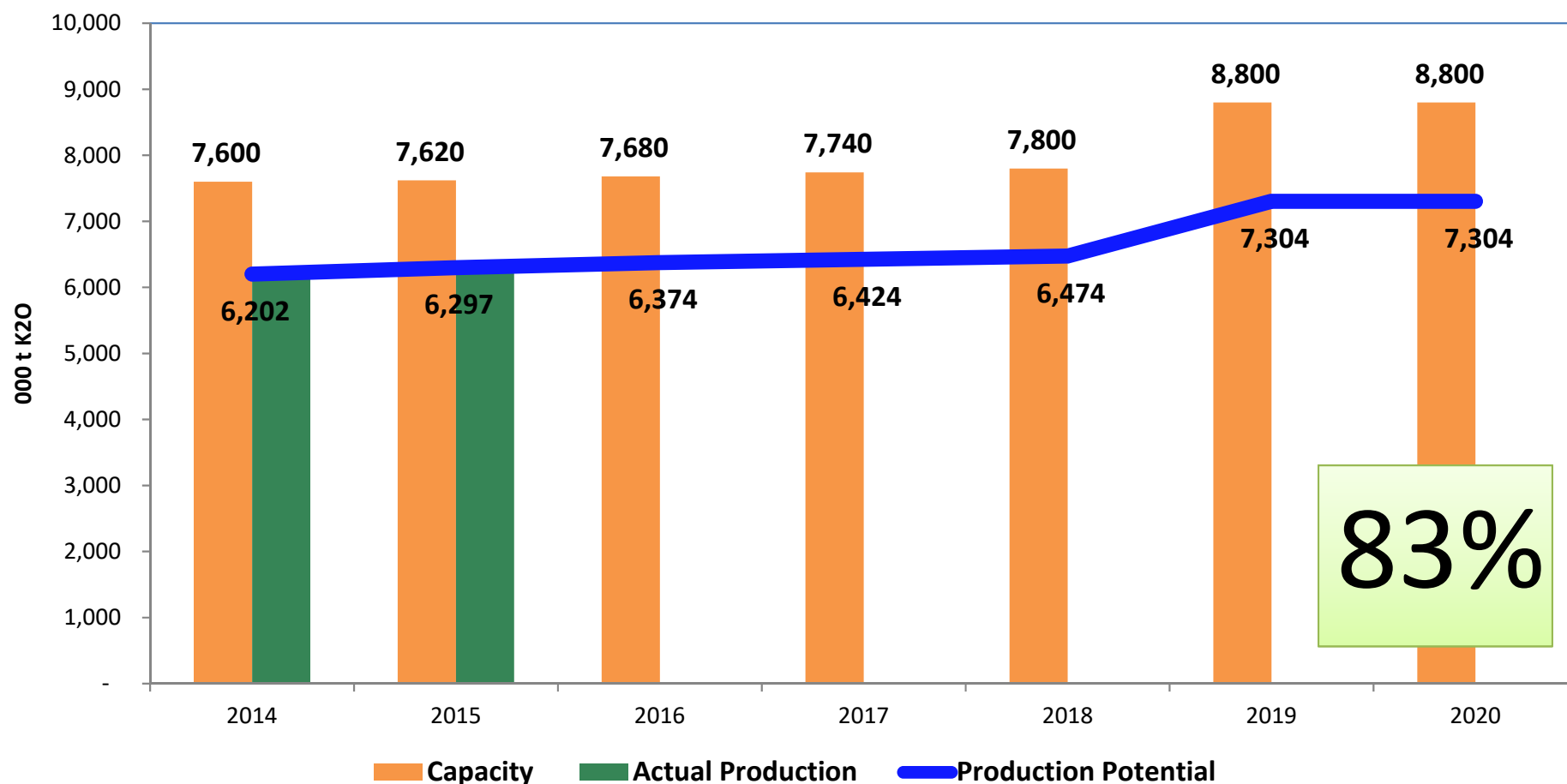


Sources: IFA, NRCan

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Belarus - Supply Outlook

Capacity and Production Potential (000 t K₂O)

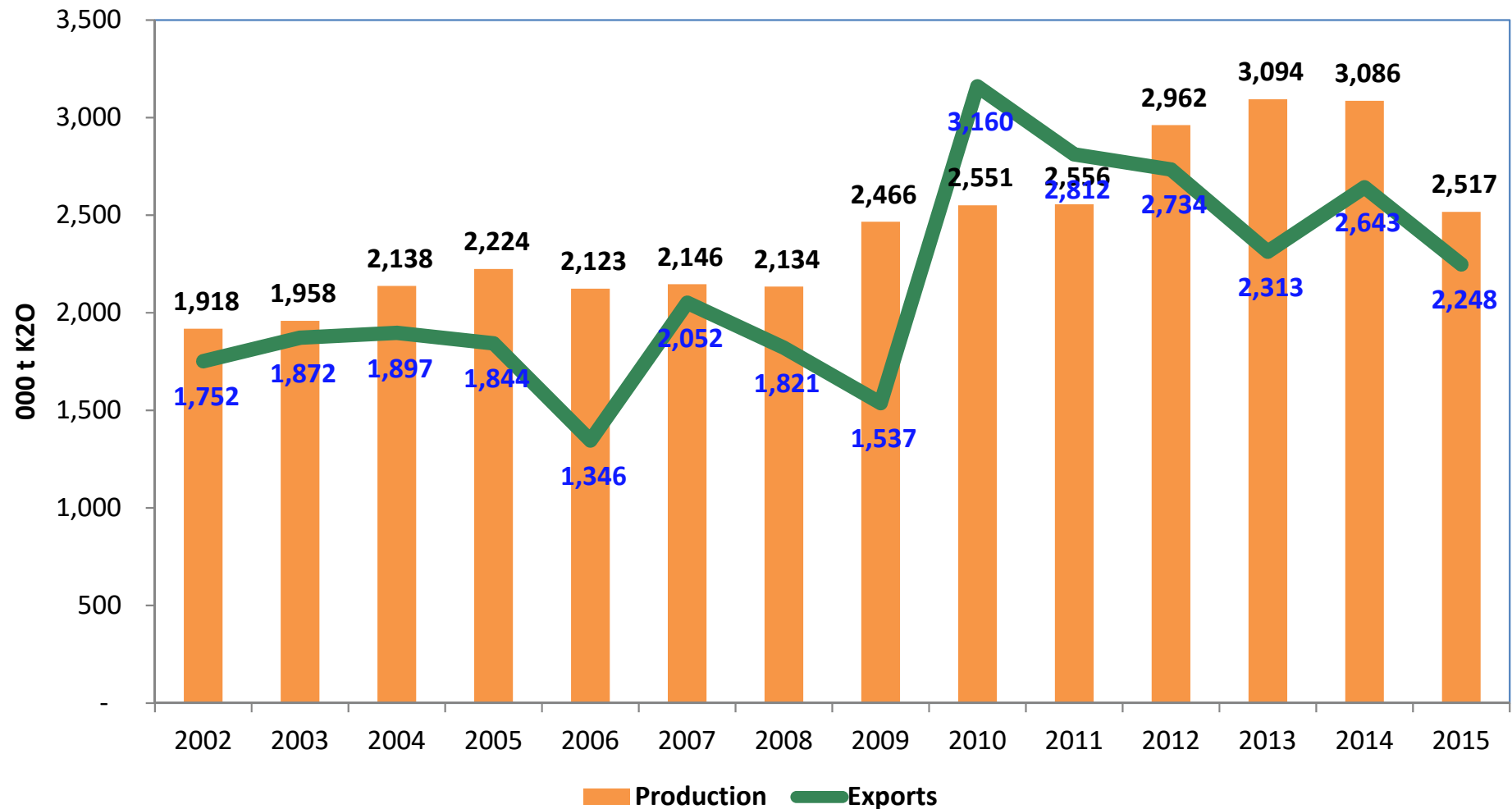


Sources: NRCan

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ICL

Production and Exports (000 t K₂O)

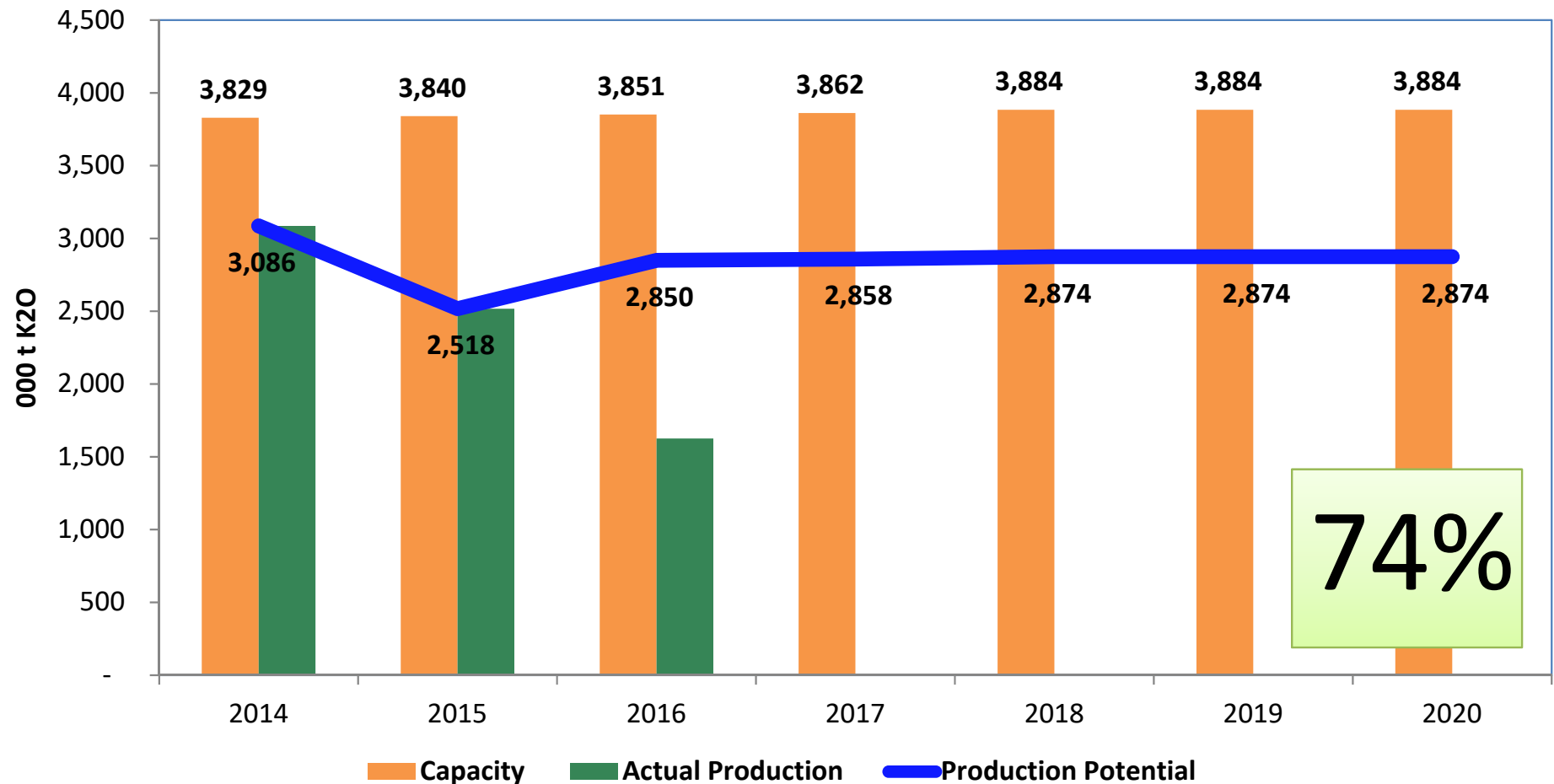


Sources: IFA, NRCan

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ICL - Supply Outlook

Capacity and Production Potential (000 t K₂O)



Sources: NRCan

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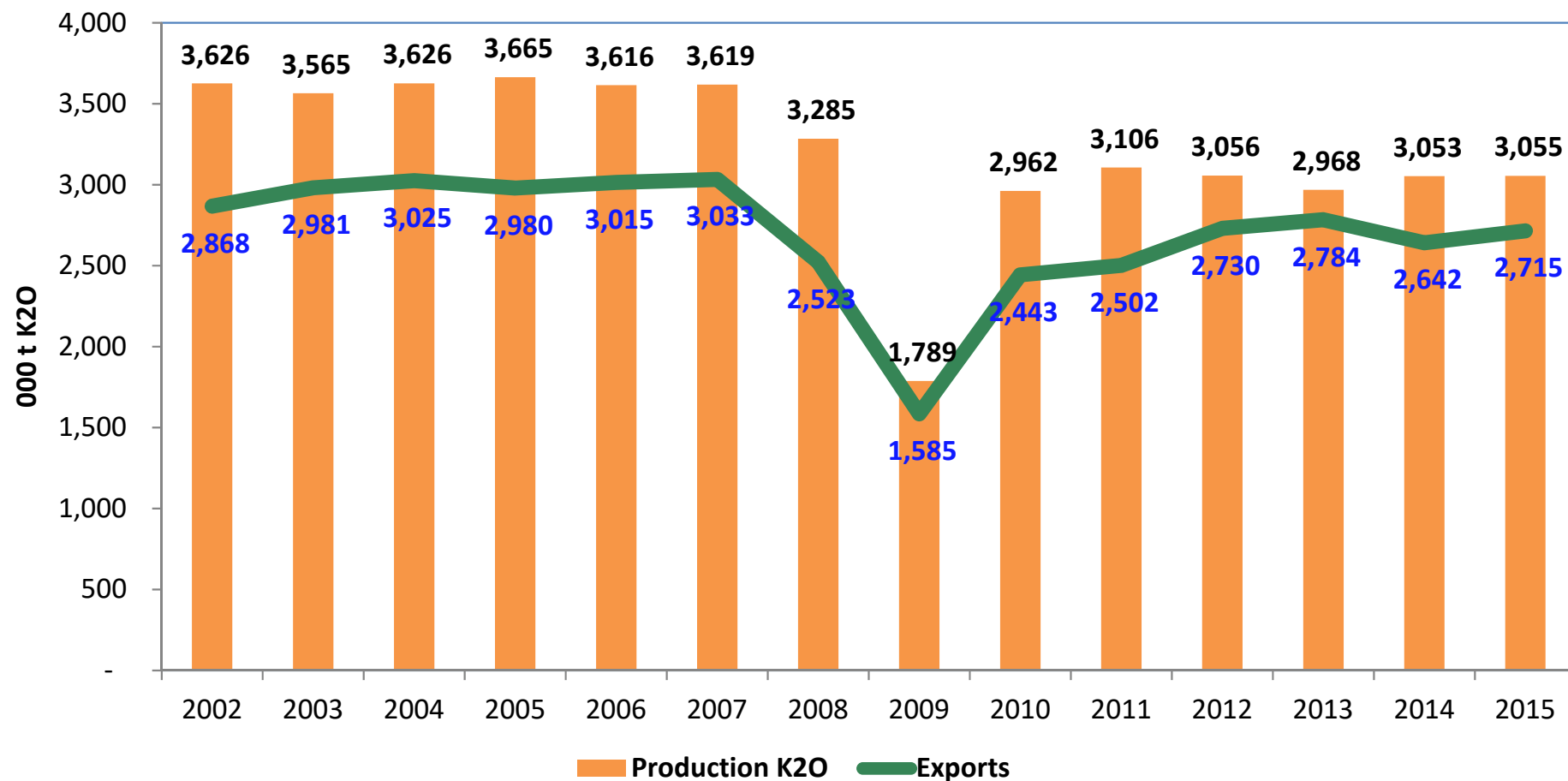
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Germany

Production and Exports (000 t K₂O)

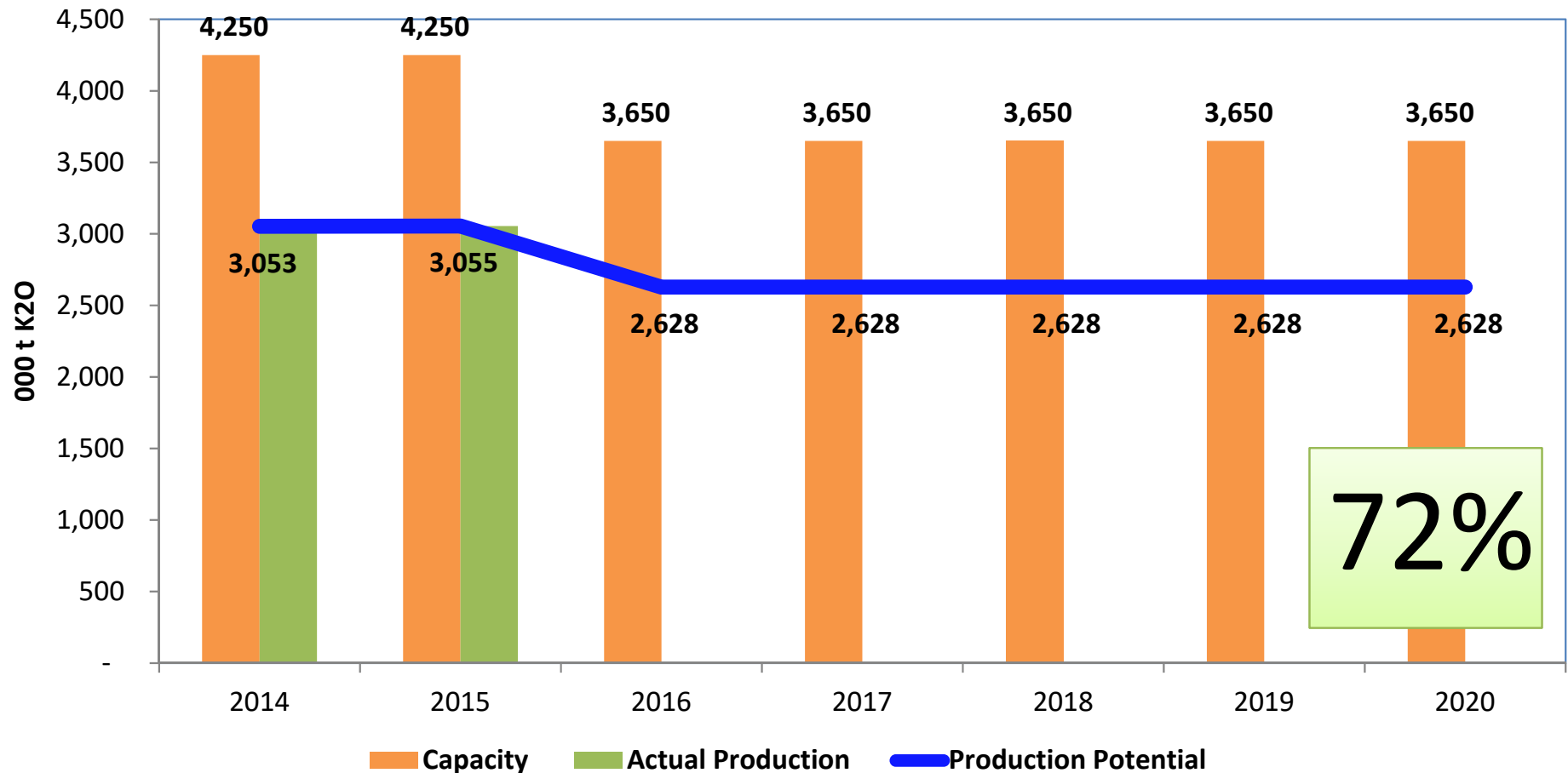


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Germany - Supply Outlook

Capacity and Production Potential (000 t K₂O)



Sources: NRCan

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Summary

- Demand is projected to grow at a slow pace of 2.3% per year between 2016 and 2020
- Supply growth is projected to increase at 2.5% per year for the same period
- Capacity is projected to grow at 4.5% per year between 2016 and 2020
- Global operating rate is forecast to be lower than 80% per year between 2016 and 2020 (86% in 2010-15)
- Oversupply is projected to follow the historical trend

■ Bottom line is both demand and supply will grow, but just at slower pace

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