

Outlook for the Canadian Oil Sands

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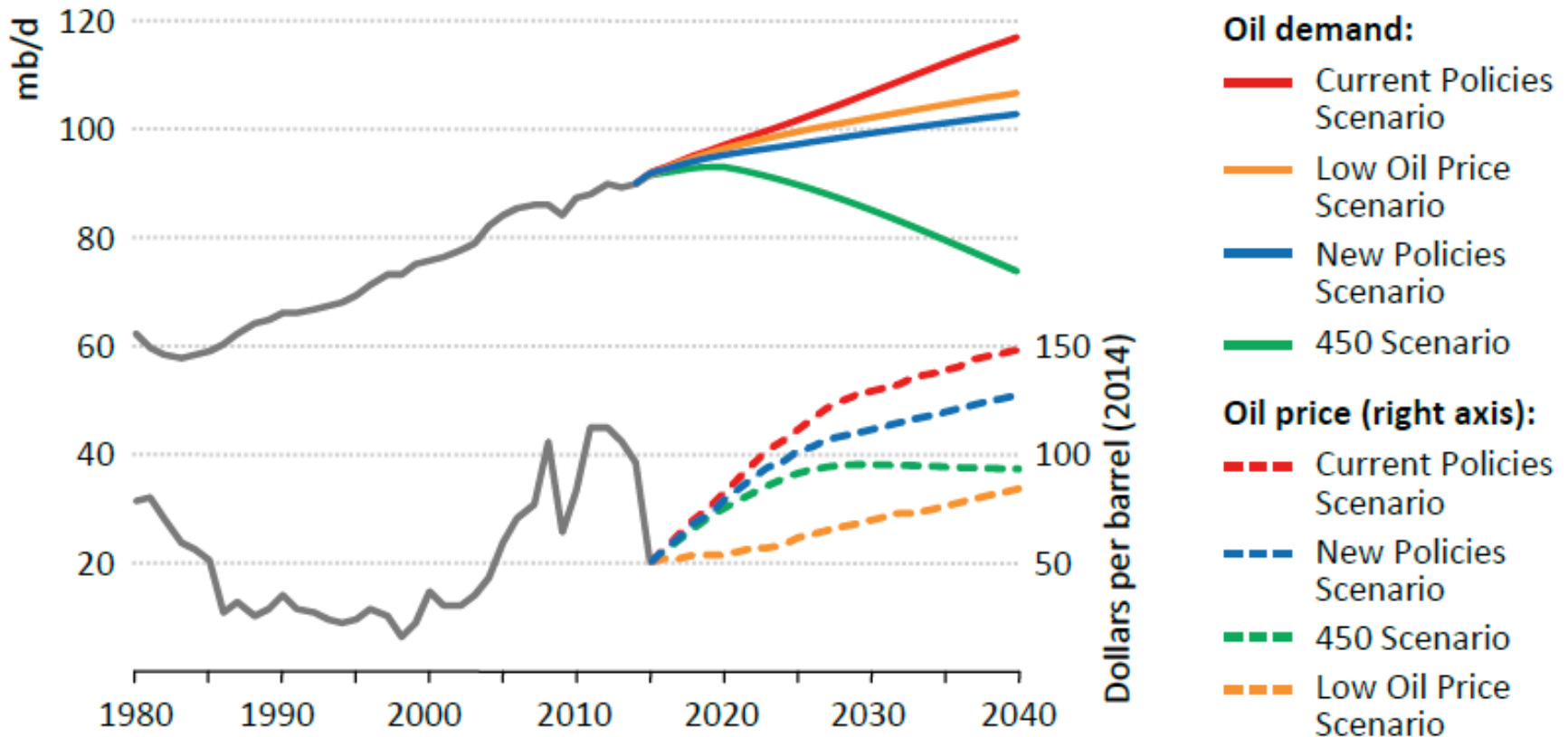


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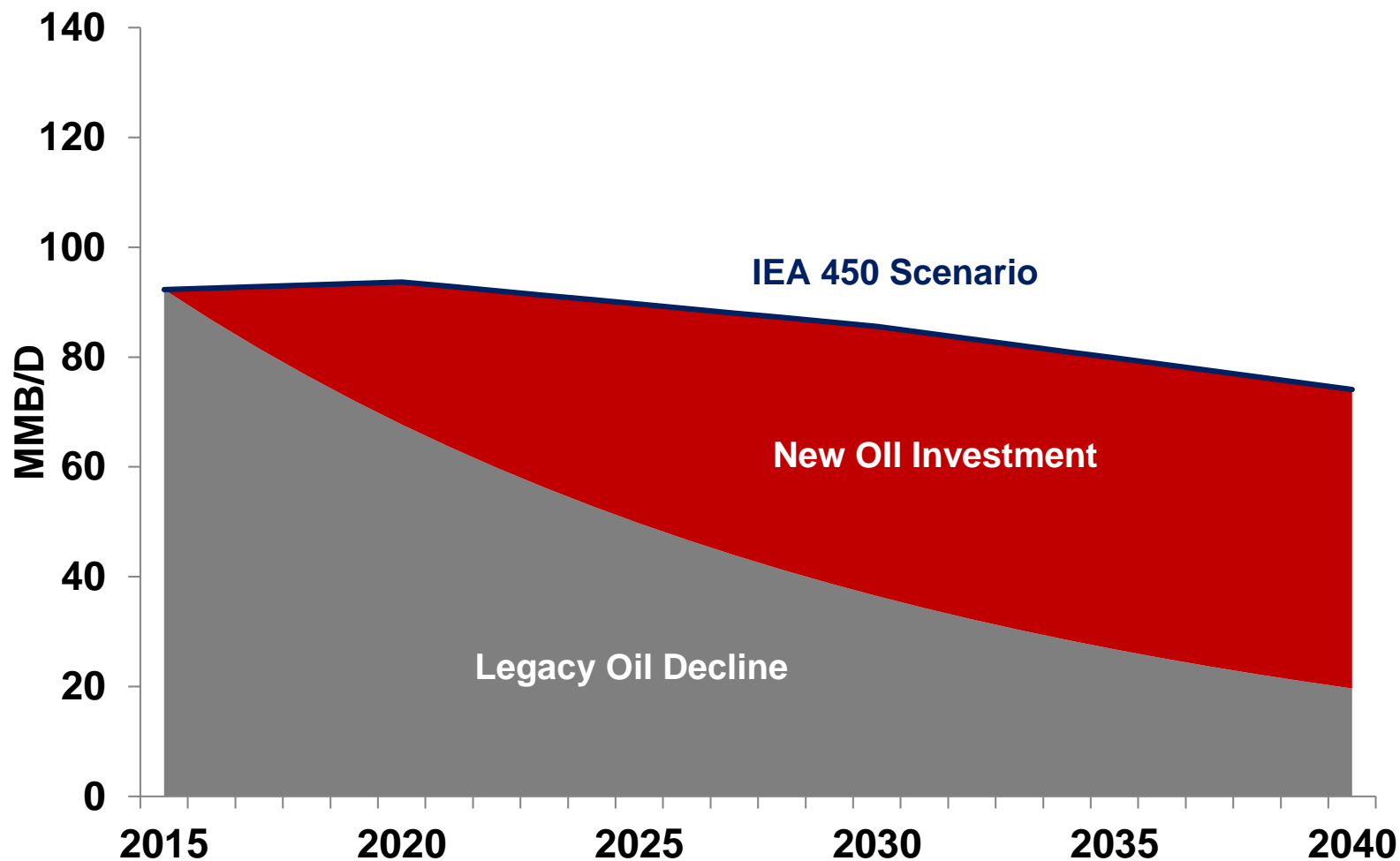


IEA demand and price forecast

Figure 3.1 ▶ World oil demand and price by scenario



IEA outlook for crude oil demand in a 450 ppm scenario (2015 to 2040)



Source: IEA, ARC Financial Corp. (does not include biofuels)

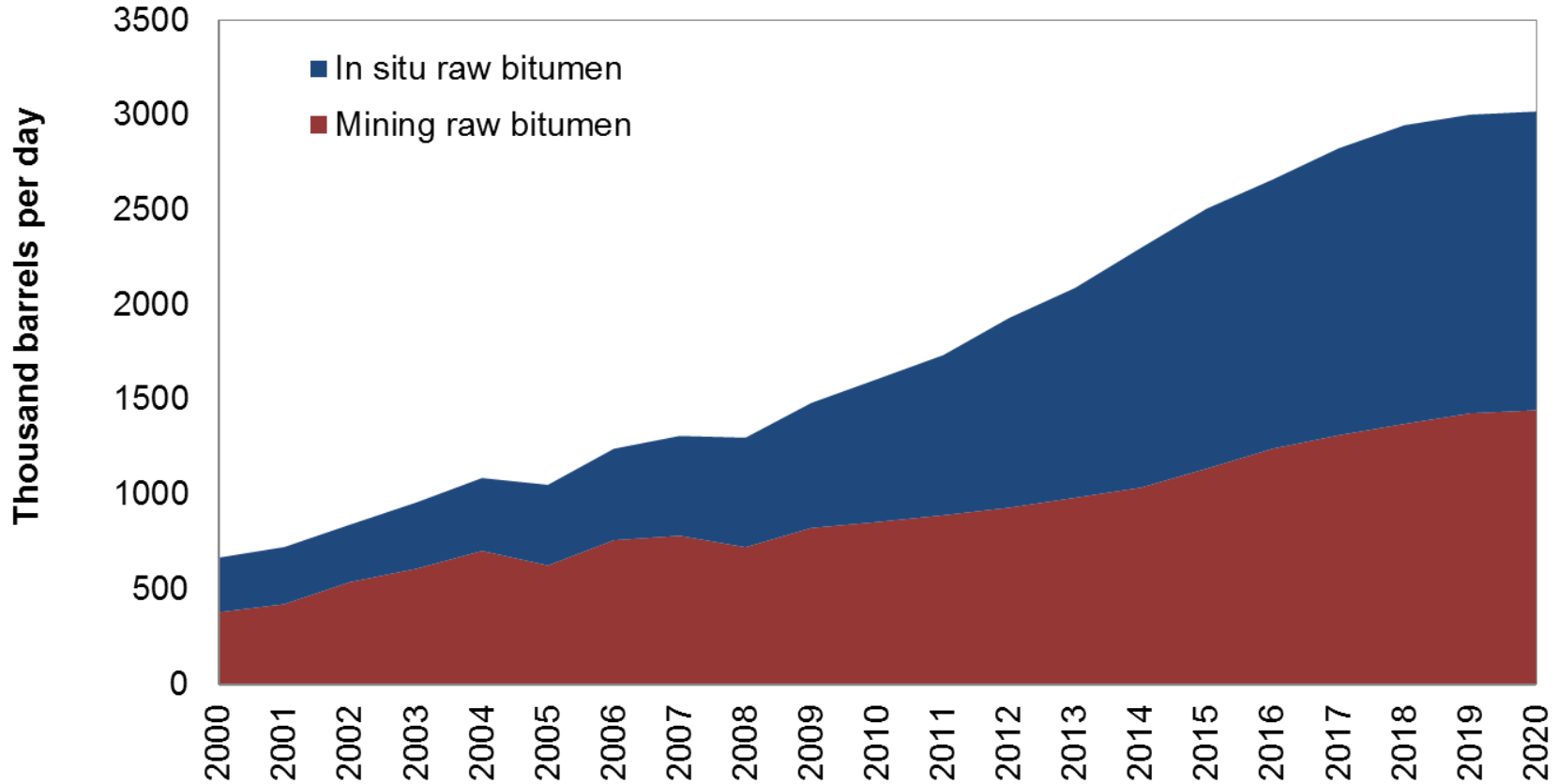


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Canadian oil sands (2000-2020)

Canadian oil sands: raw bitumen production



Source: University of Alberta

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Current oil sands activity

| Company | Project | Process | Capacity (thousand b/d) | In-service date |
|------------------------|------------------|---------|----------------------------|-----------------|
| Cenovus/ConocoPhillips | Christina Lake F | SAGD | 50 | Q3 2016 |
| Cenovus/ConocoPhillips | Foster Creek G | SAGD | 30 | Q3 2016 |
| Japan Canada Oil Sands | Hangingsstone | SAGD | 20 | Q3 2016 |
| CNRL | Horizon 3 | Mining | 80 | Q4 2017 |
| Suncor/Total/Teck | Fort Hills | Mining | 160 | Q4 2017 |

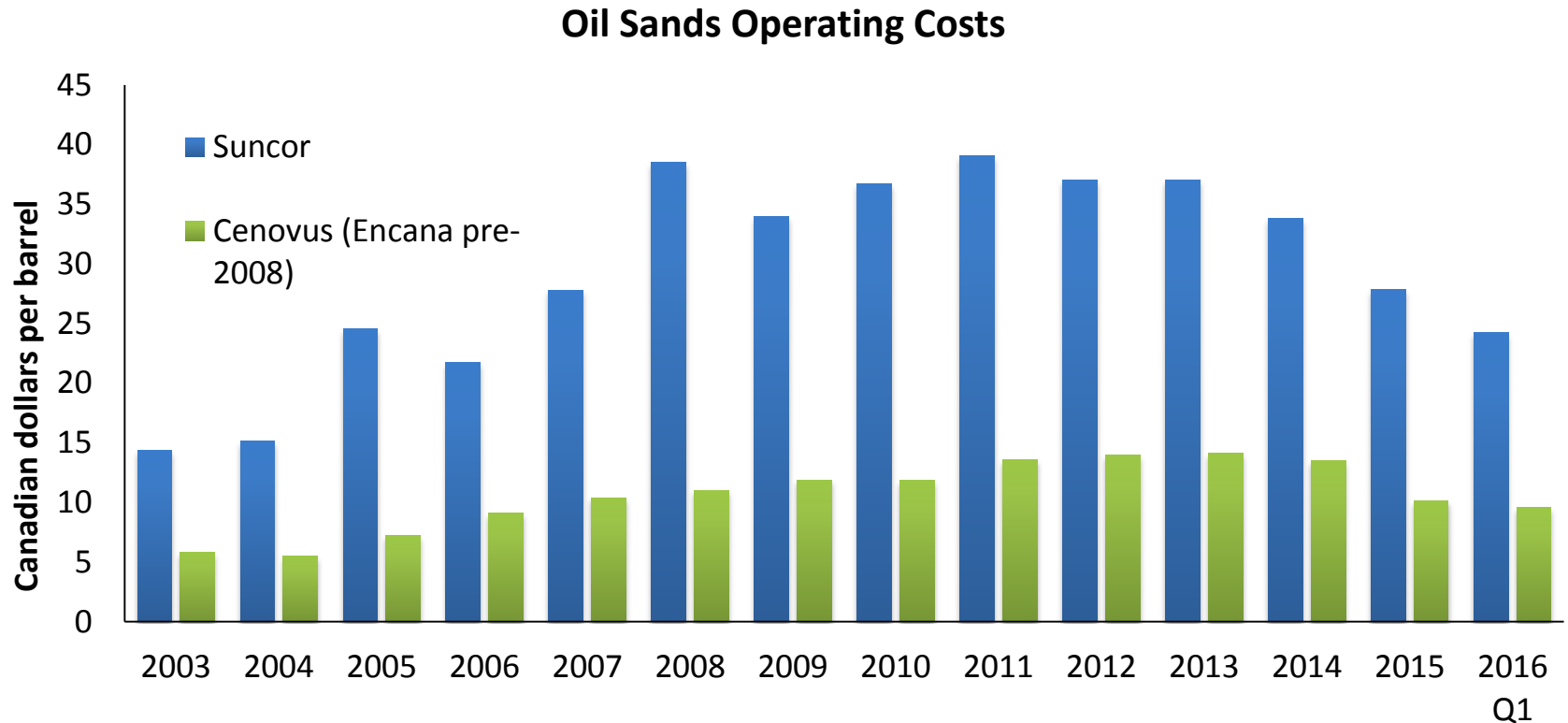
Source: OSR, Company info



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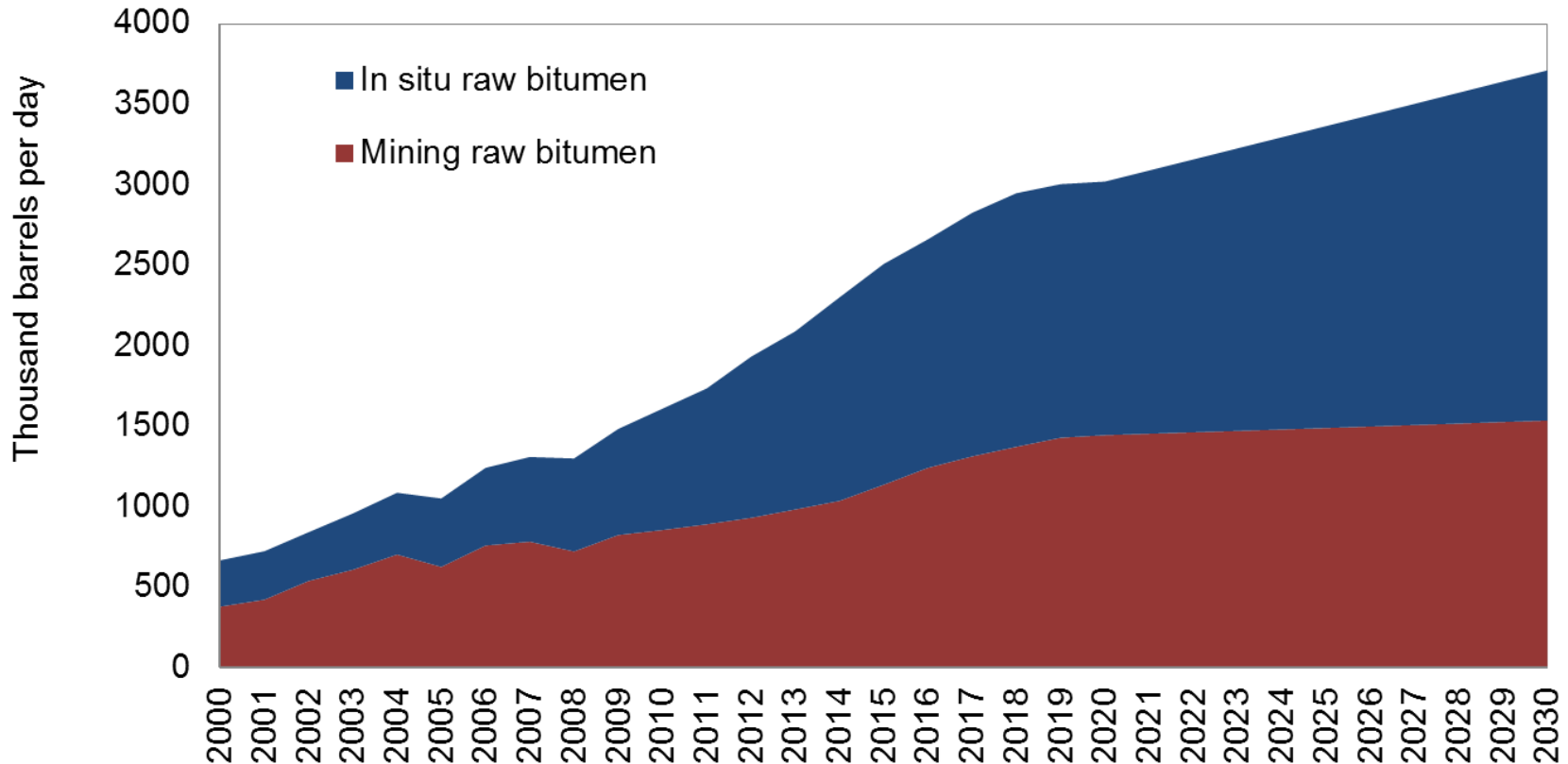
Oil sands operating costs



Source: Company info

Canadian oil sands outlook (2000-2030)

Canadian oil sands: raw bitumen production



Source: Oil Sands Review, AER, University of Alberta

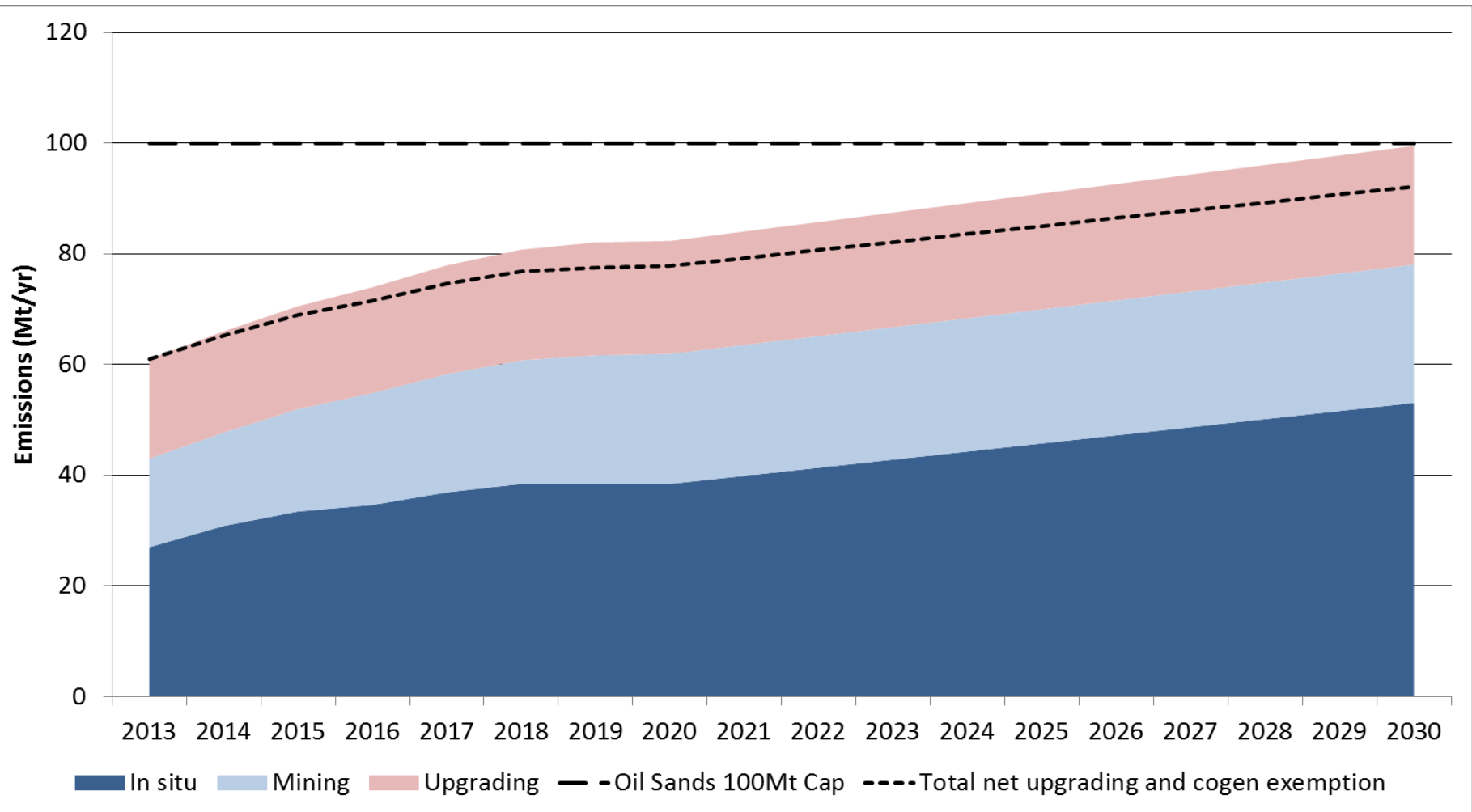
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GHG Policy and the Oil Sands

Oil sands and greenhouse gases

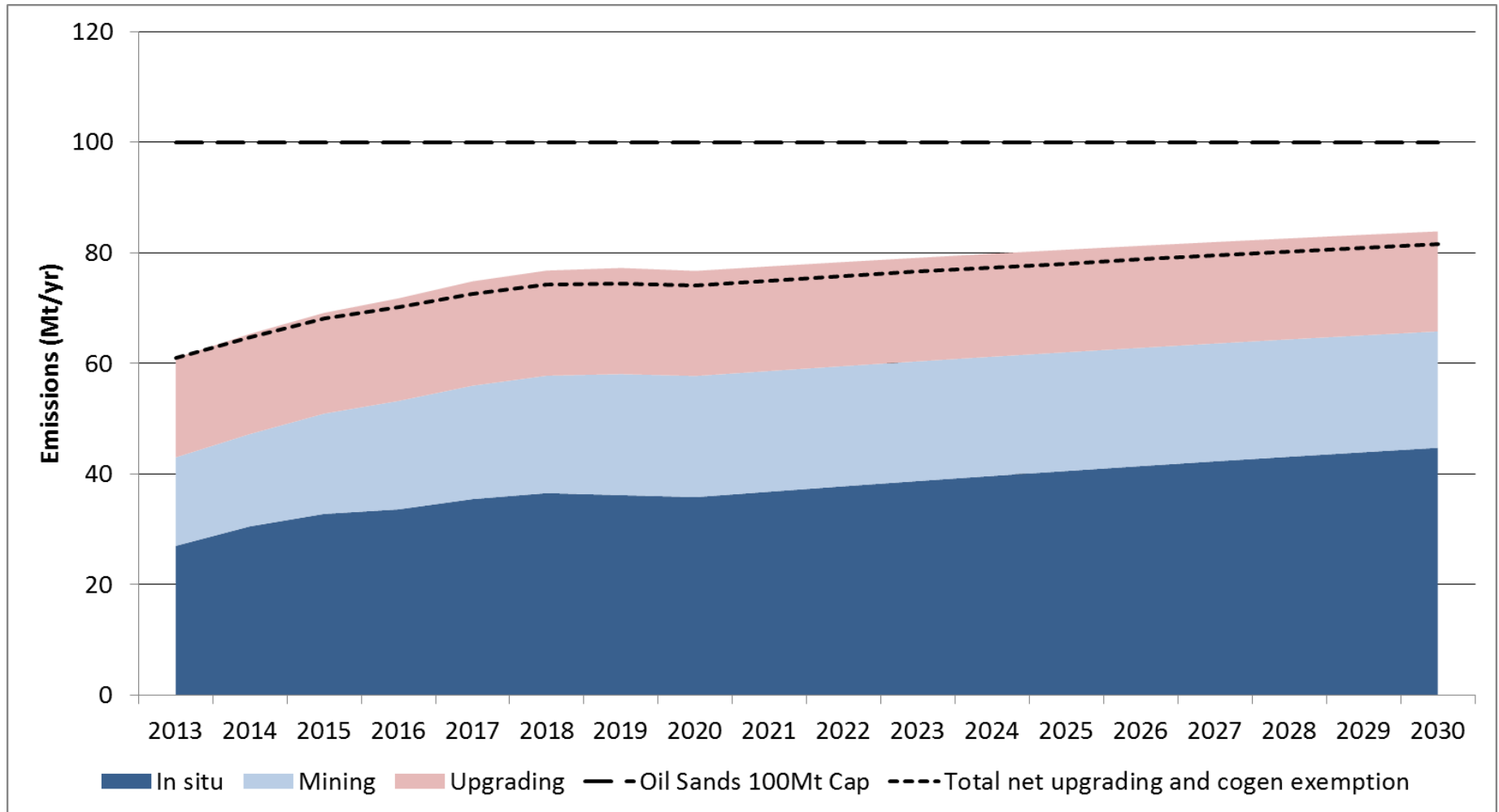
- Two elements introduced (or slated to be introduced) in Alberta Climate Leadership Plan
 - Carbon Competitiveness Regulation (CCR) to replace existing Specified Gas Emitters (SGER)
 - 100 Mt cap on oil sands emissions, with exemptions for new cogeneration and upgrading emissions

Our outlook and the 100mt cap



Source: University of Alberta

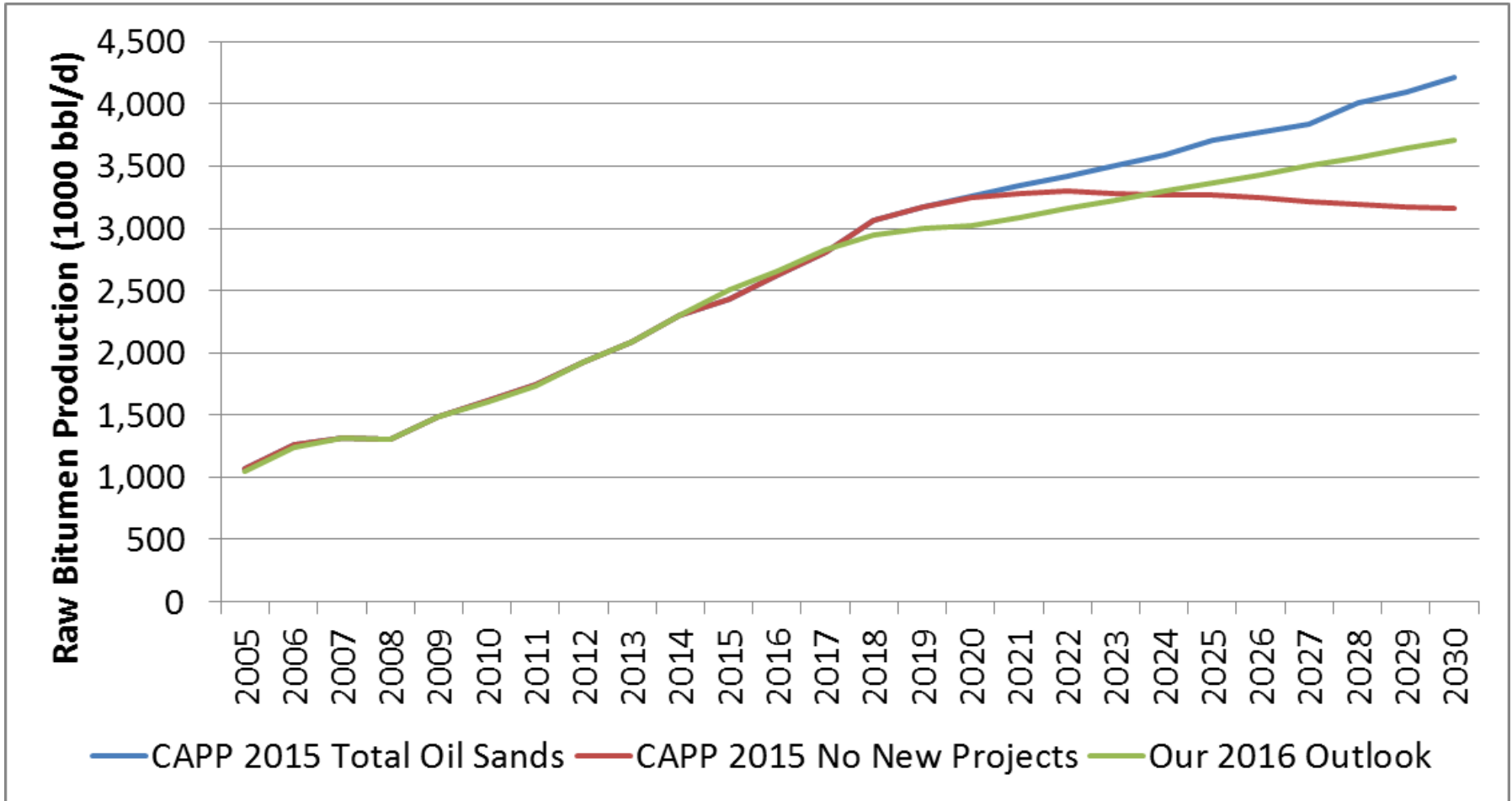
The impact of a 1% per year improvement in emissions intensity



Source: University of Alberta

Market Access

Our outlook compared to CAPP 2015



Source: CAPP, University of Alberta

What will this map look like in 5 years?

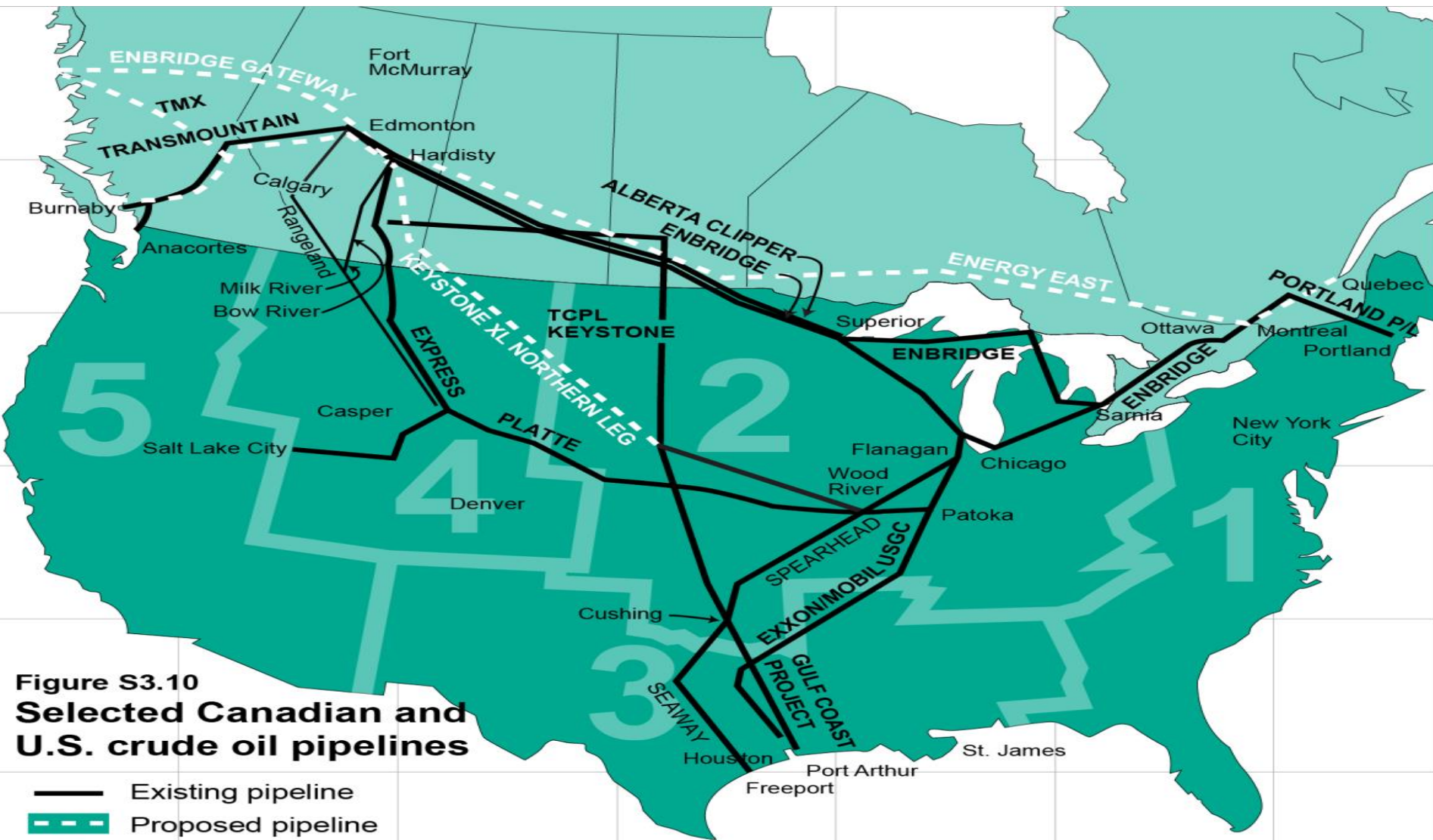


Figure S3.10
Selected Canadian and U.S. crude oil pipelines

- Existing pipeline
- - - Proposed pipeline
- 5 Petroleum Administration Defense District (PADD)

Source: AER 2015

Contact Information

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Crude oil

Week of May 10, 2016

