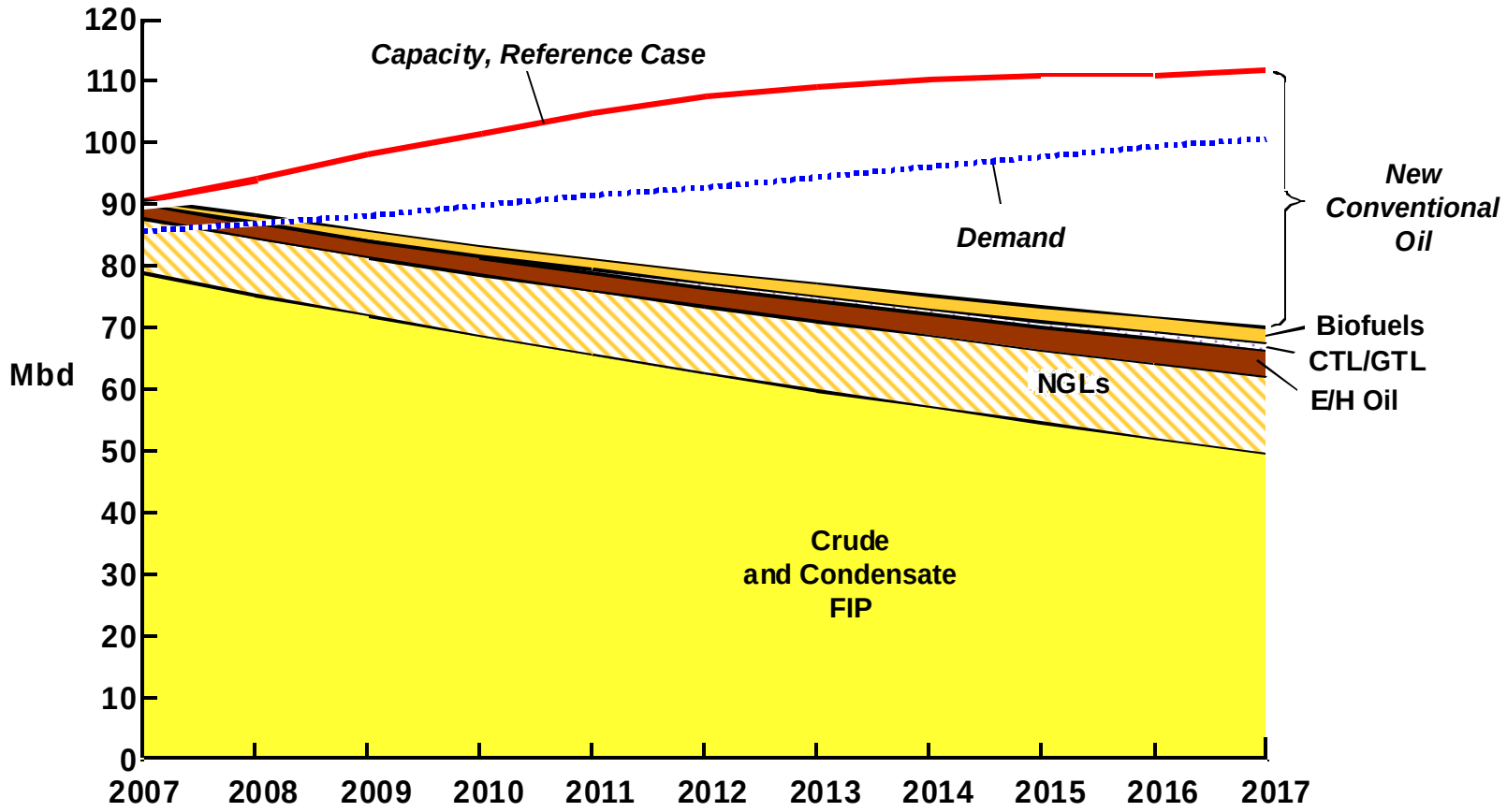
Headlines

- **Complex multi-component system – many possible outcomes**
- **Large volumes of data - robust methodology**
- **Current paradigms will change in future**

- **Total liquids capacity has not peaked**
- **Liquids capacity will continue to grow through 2017**
- **No imminent peak/ no precipitous fall thereafter**
- **CERA's is not the most optimistic view**

- **Complexion of risks evolving – geopolitical, execution.**
- **Eventually liquids supply will struggle to meet demand**
- **The 'undulating plateau' will emerge – but not before 2030**

Upstream Challenge: 31+ Mbd of New Crude + Condensate Capacity Needed by 2017 to Meet Demand



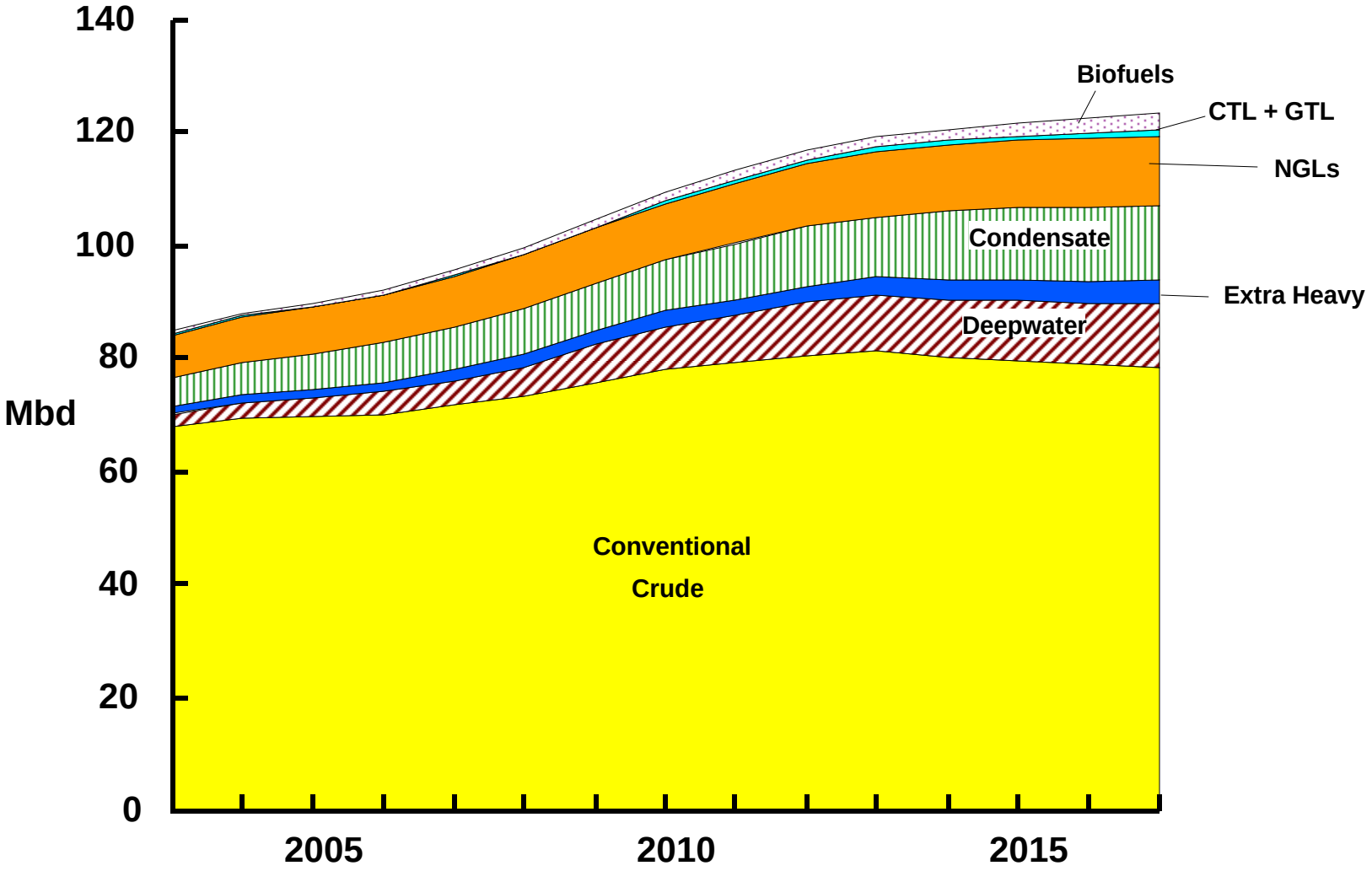
Source: Cambridge Energy Research Associates.
71016-1

"Filling the Hopper"—The Future of Supply

- **Continued evidence of strong growth of productive capacity**
  - — Growing supply-demand balance
  - — No shortage of new projects—'bulge' ahead of the curve
  - — Growth of conventional crude volumes slowing?
  - — Growing contribution from higher-cost liquids – heavy oil, GTL/CTL, and biofuels
  - — Strong growth of gas capacity—drives growth of gas-related liquids
  - — Deepwater will be a major contributor to growth

- **Demand will be met through 2017**

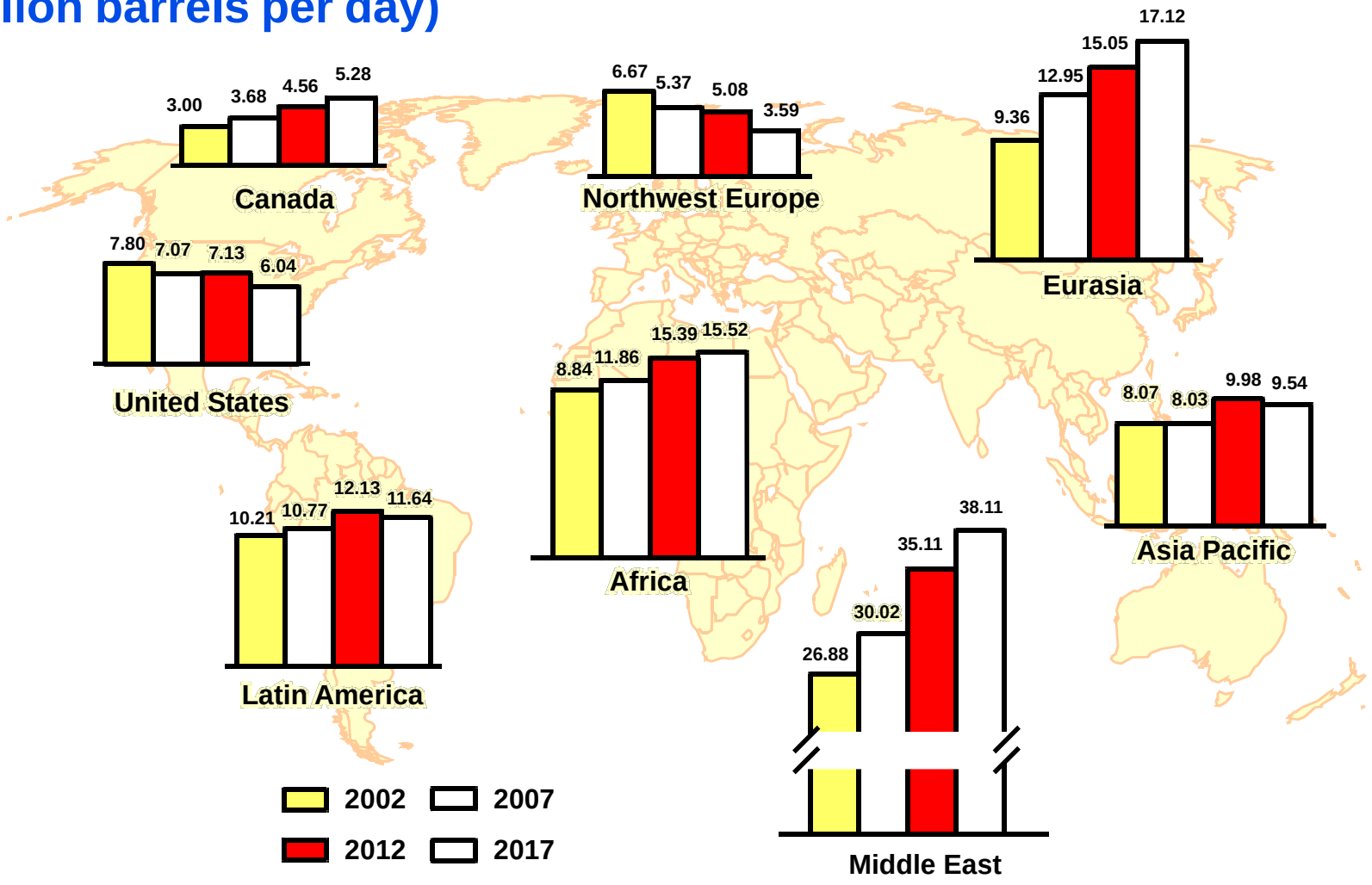
Nontraditionals Shoulder an Increasing Burden



Source: Cambridge Energy Research Associates.

Shifts in World Liquids Capacity to 2017

(million barrels per day)



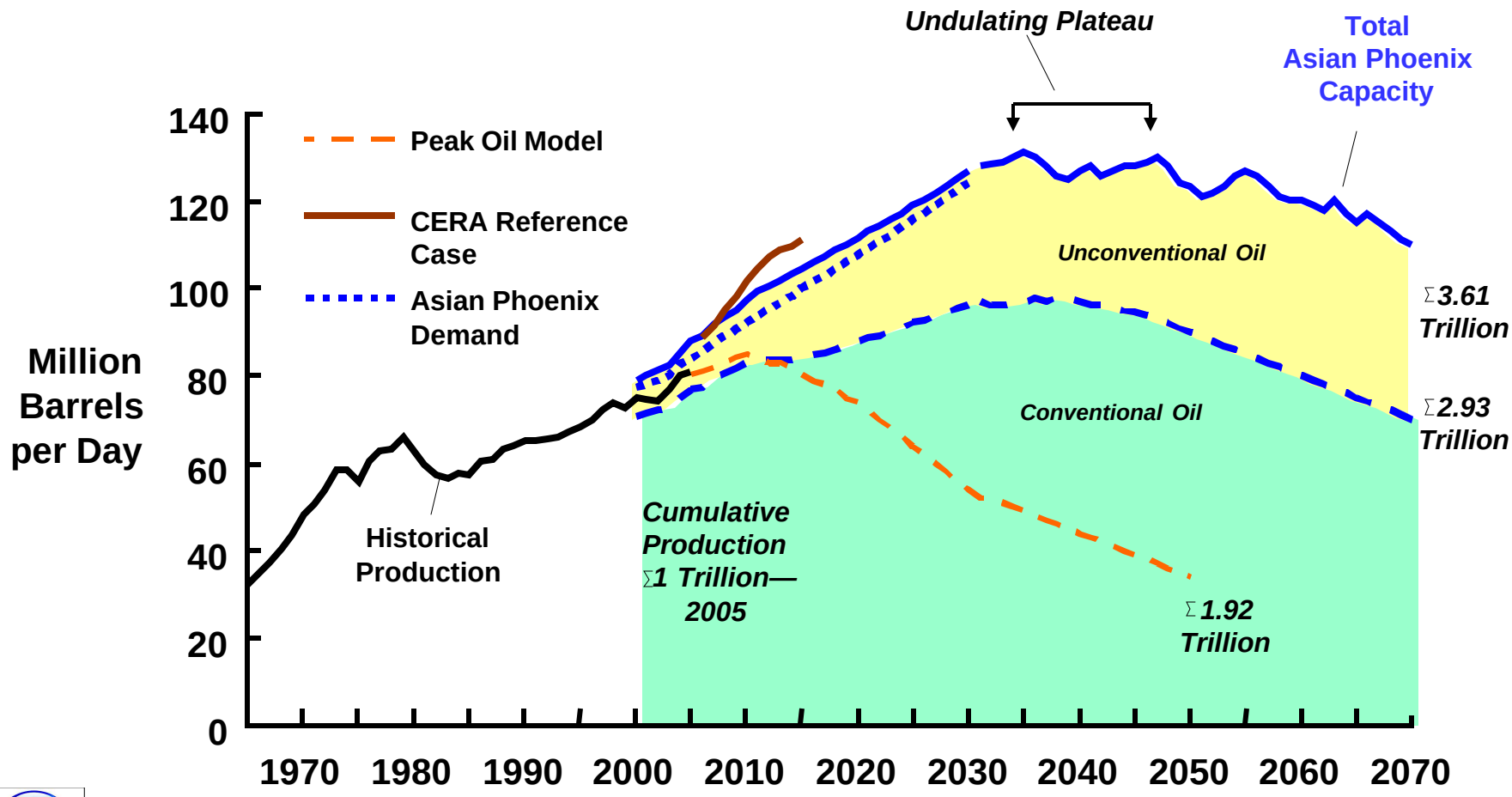
Source: Cambridge Energy Research Associates..
Updated October 2007.
60305-8

‘Imminent’ Peak vs ‘Undulating Plateau’

- **Reserves are plentiful - but poorly quantified/understood**
- **Field decline rates are not increasing with time**
- **Less than 50% of production comes from fields in decline**
- **Giant fields – growing contribution in absolute terms**
- **Field Reserves Growth continues to deliver**
- **Exploration will continue to deliver**
- **Access problems long term**

- **Geology and scale are complex issues - but the real problems are aboveground**

Undulating Plateau vs Peak Oil—Schematic



Source: Cambridge Energy Research Associates.
60907-9

CERA's - Future Liquids Supply

- **Will supply continue to meet demand?**
- **What is the most likely outcome – imminent peak vs undulating plateau?**
- **What are the drivers?**
- **What are the major risks?**
- **What are the signposts?**

If you have any questions about this presentation or CERA in general, please feel free to contact

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