OECD ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

# Economic Assessment of Biofuel Support Policies

## Summary of OECD Report
## Directorate for Trade and Agriculture

**Press Conference, Paris, 16 July, 2008**

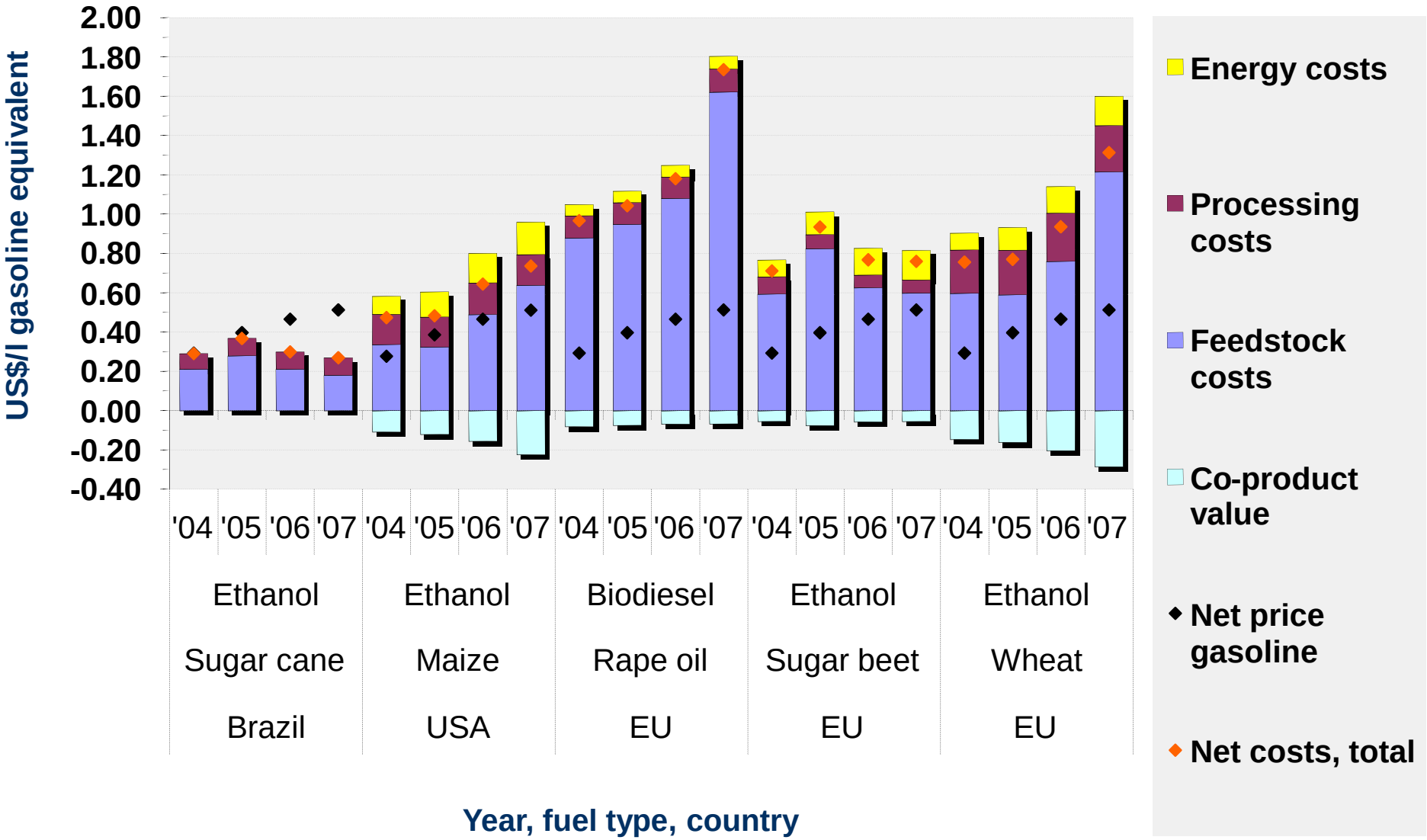
# Biofuels: Technology, Markets and Policies

- Debate on biofuels needs to distiguish between
  - First and second generation biofuels
  - Different feedstocks for first generation biofuels
  - Market-driven developments and support policies
  - Policy objectives pursued
- Focus on support policies in OECD countries

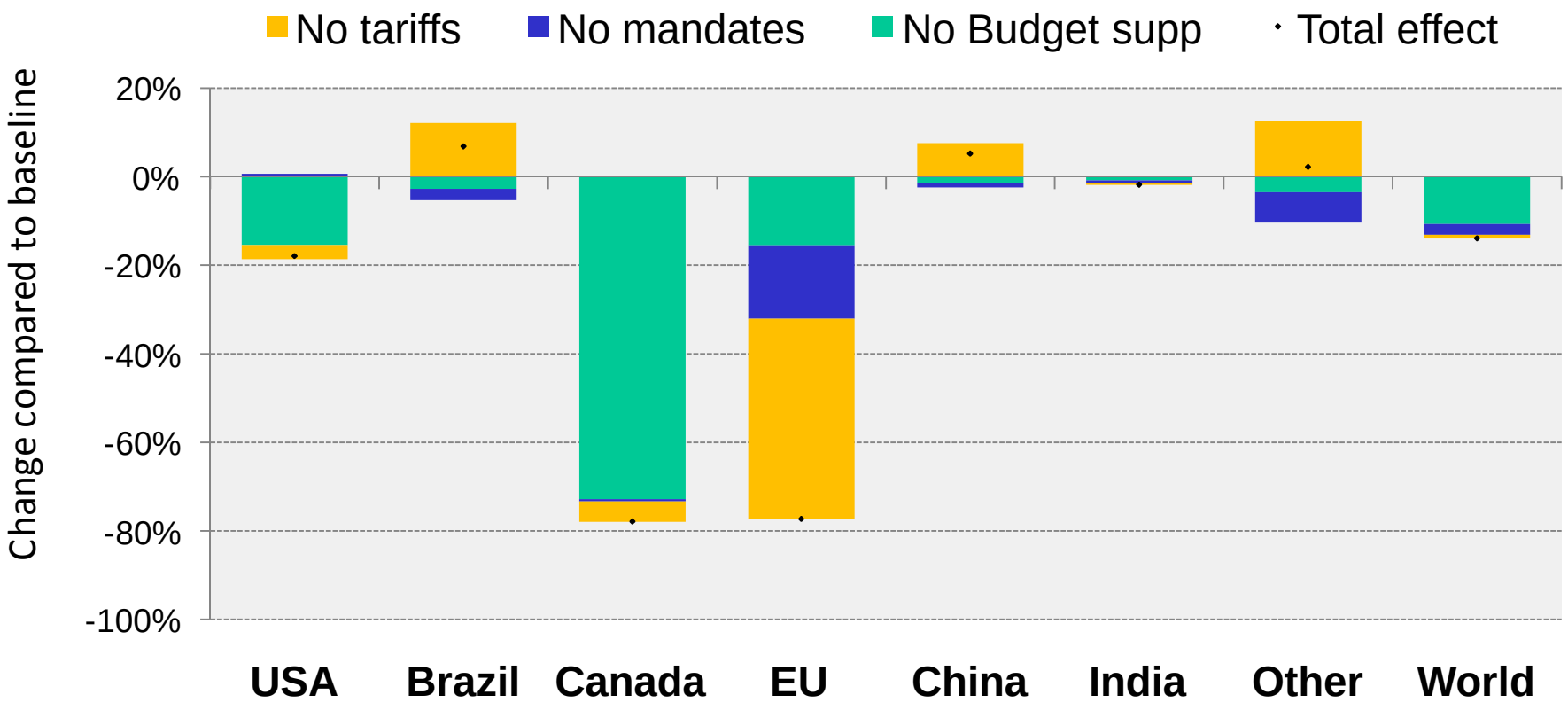
# Policy Issues

- How far does biofuel production and consumption in OECD countries depend on policy support (subsidies, mandates, trade barriers)
- How effective are biofuel support policies in saving GHG emissions?
- How are agricultural prices affected?

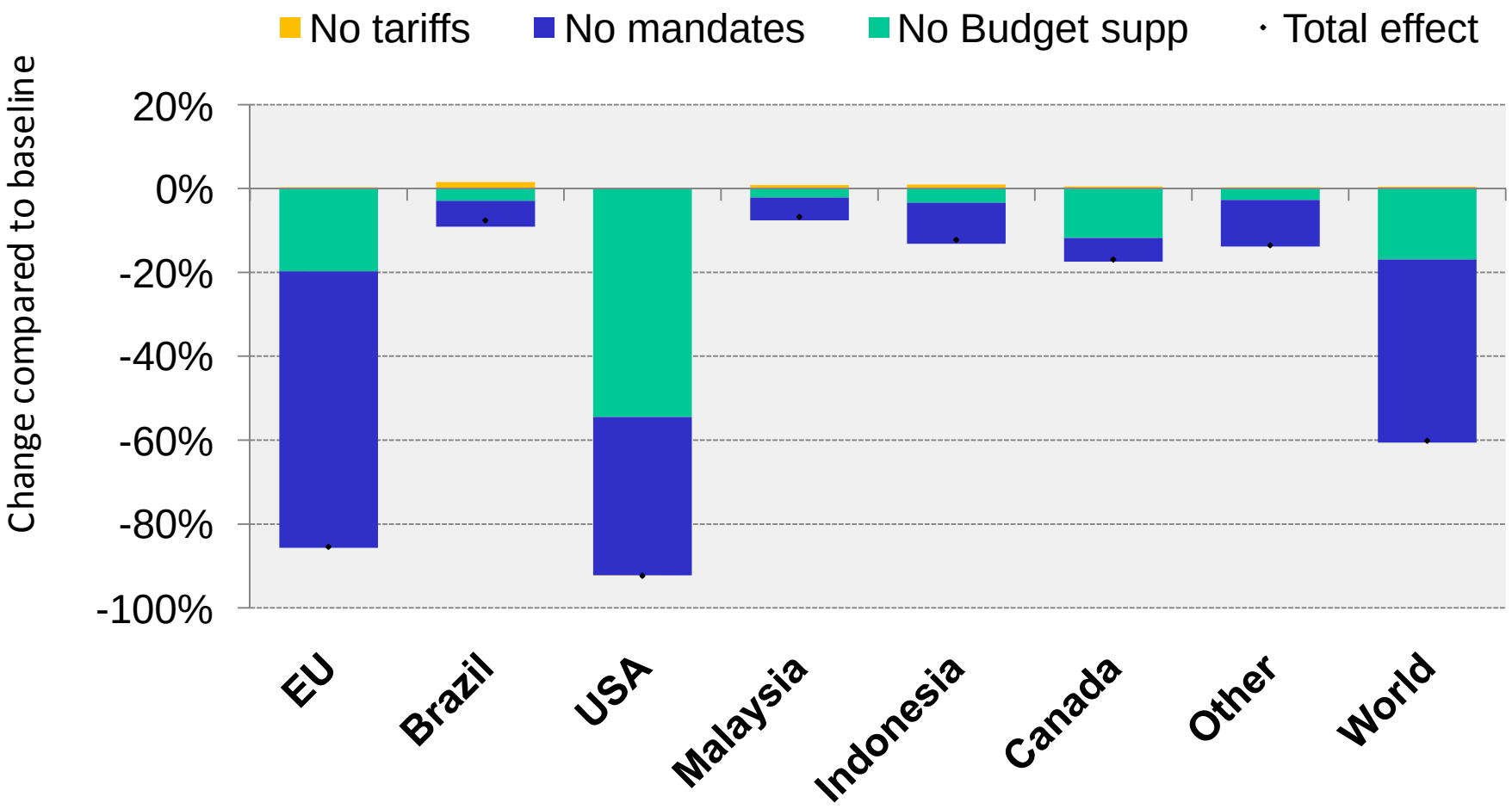
# A major challenge: Production costs



# Impact of biofuel support removal on ethanol production, 2013-2017 average



# Impact of biofuel support removal on biodiesel production, 2013-2017 average



# How Effective Are Biofuels in Saving GHG?

| | GHG savings (CO2 equivalent) | |
|---|---|---|
| | From % | To % |
| Ethanol from wheat | 30 | 60 |
| Ethanol from maize | 20 | 50 |
| Ethanol from sugar cane | 70 | 90 |
| Ethanol from sugar beet | 30 | 50 |
| Biodiesel from vegetable oil | 40 | 55 |

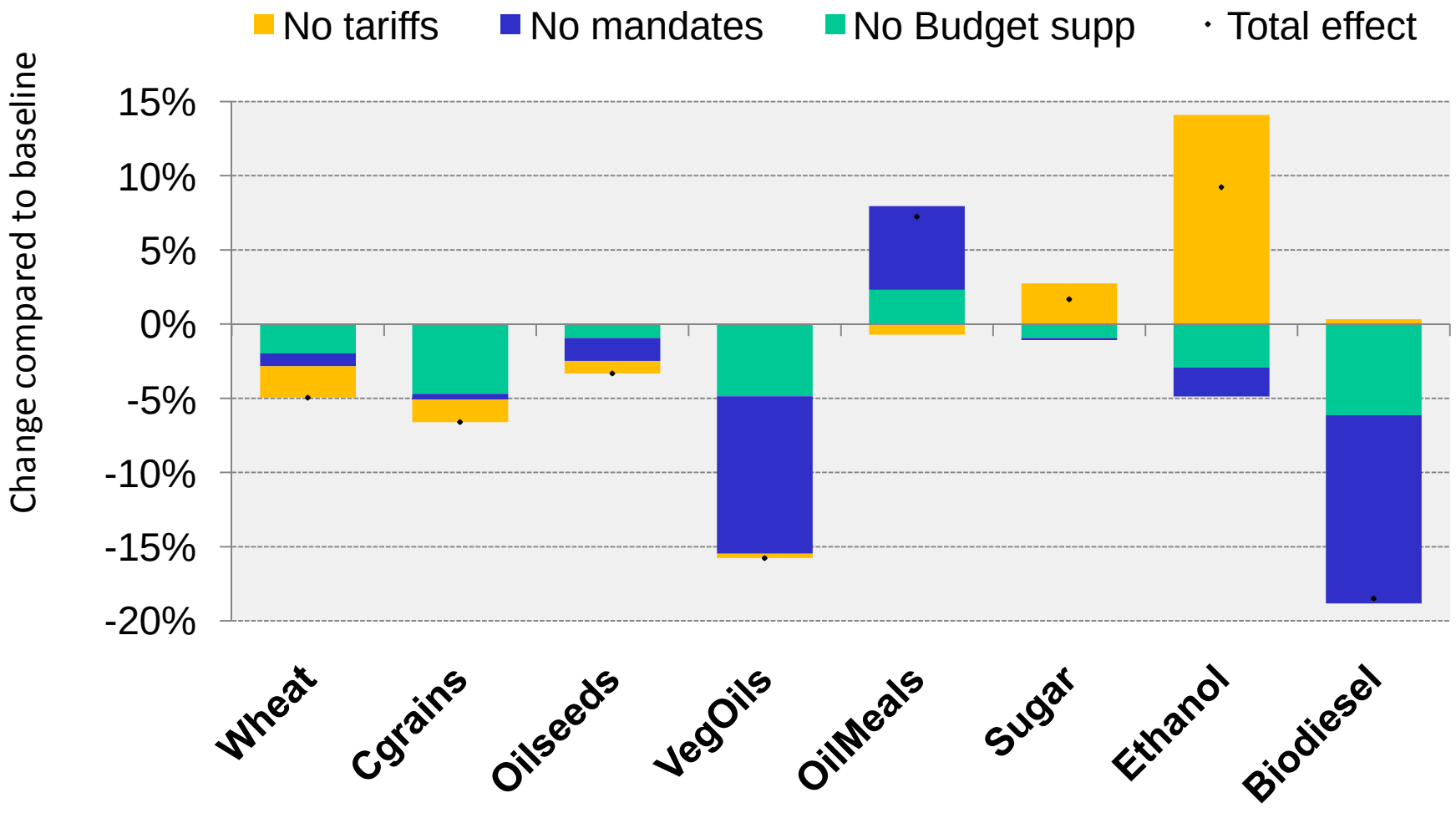
# How Effective are Biofuels Support Policies?

- Support policies in Canada, US and EU save 0.5% to 0.8% of GHG emissions from transport in 2015
- Support policies are estimated to cost USD 25 billion per year in 2015
- Policy support to biofuels costs USD 960 to USD 1700 per tonne of GHG ($CO_2$ equivalent) saved

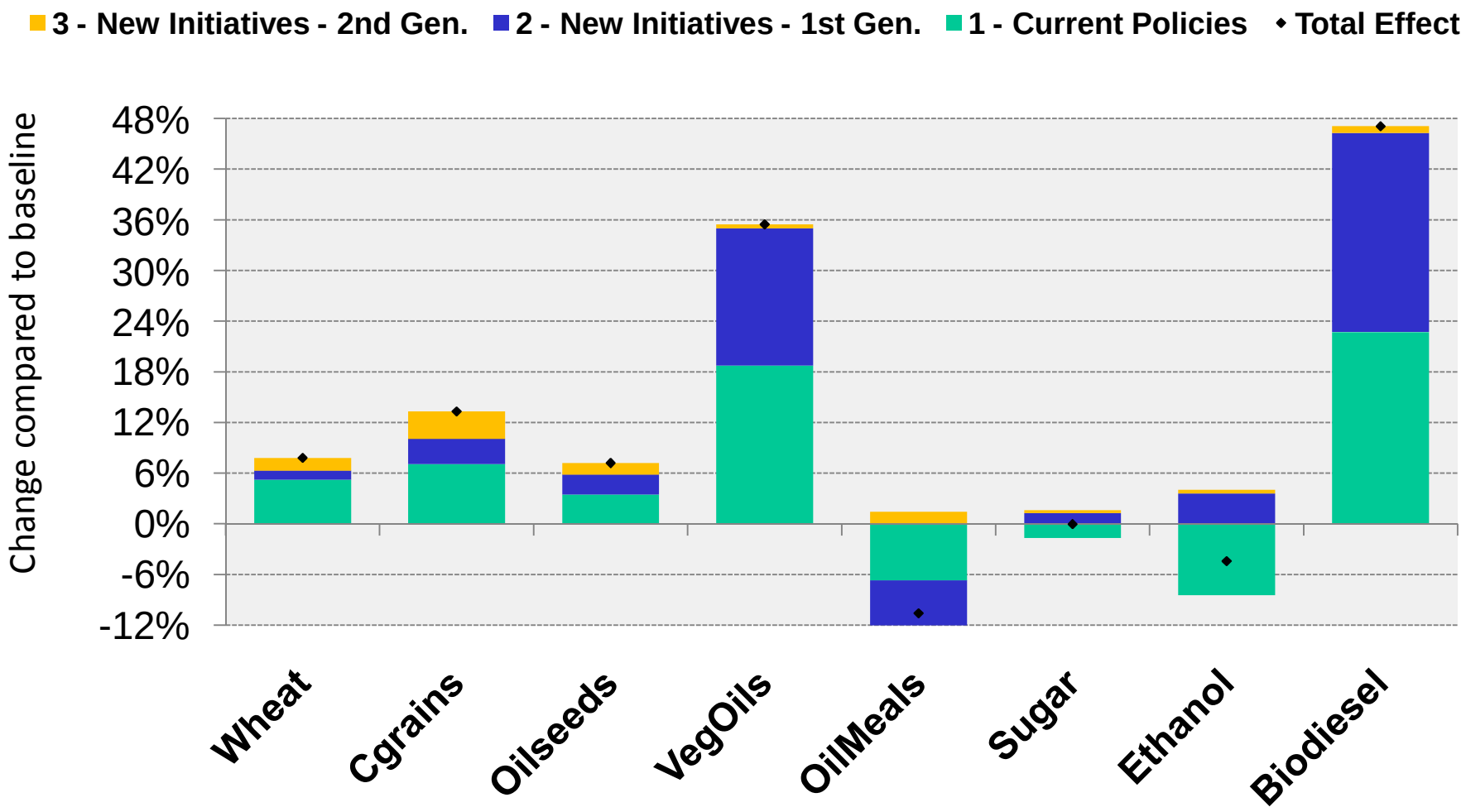
# Biofuels use high share of agricultural output

| | 2007 actual | 2013-2017 average 2007 policies | 2013-2017 average New US and EU initiatives |
|---|---|---|---|
| **Coarse grains (mainly US)** | | | |
| Share in US output | 23.2% | 36.3% | 37.7% |
| Share in world output | 8.4% | 12.4% | 13.4% |
| | | | |
| **Vegetable oils (mainly EU)** | | | |
| Share in EU output | 47.2% | 86.8% | 129.3% |
| Share in world output | 8.7% | 14.0% | 19.6% |

# Impact of biofuel support removal on world commodity prices, 2013-2017 average



# Impact of existing and new biofuel policy programmes on world crop prices, 2013-2017 average



# Policy Conclusions

- Biofuels support policies in OECD countries are costly
- The impact of biofuels policies on GHG emissions is limited
- Biofuels support policies have significant impacts on global commodity prices
- New policy initiatives add to existing problems

# The Way Forward

- **Alternative policy approaches may offer greater benefits**
  - **Reduced energy demand, GHG emissions**
  - **Freer trade in biofuels**
  - **Accelerated introduction of second generation biofuels that do not rely upon current commodity feedstocks**