



Economic forecasting for the Surat Basin and SME responses

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GISERA Gas Industry
Social & Environmental
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Section 1: Economic forecasting

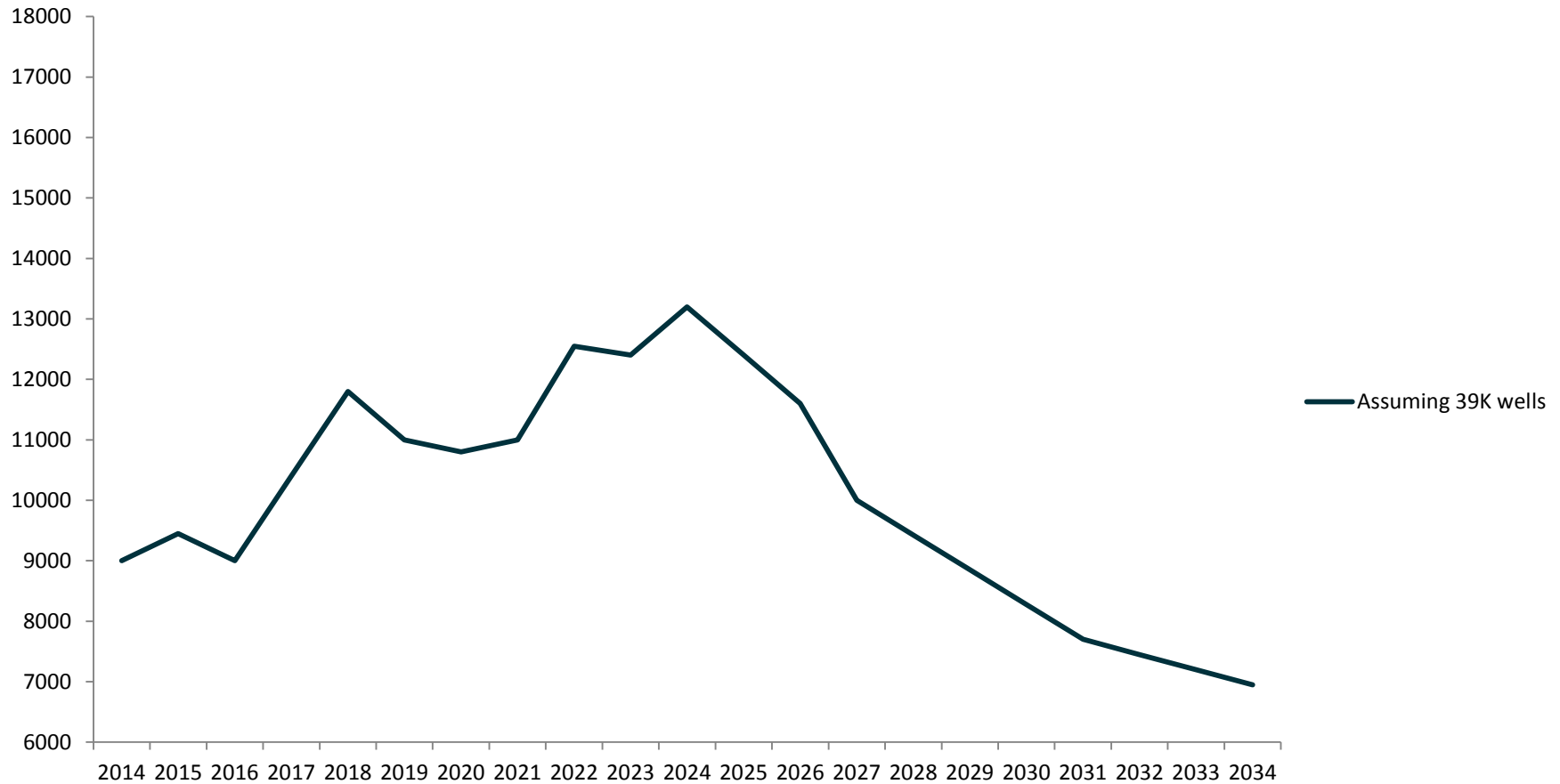
Focus on projecting indirect employment

Forecasts indirect jobs 2014-2034

- Started with estimates for Direct jobs supplied by Energy Skills QLD
- Estimated indirect jobs based on previous GISERA research
 - Robust multipliers derived for the period 2006-2011 based on Census
- These are the most reliable estimates available because they are specific to CSG industry in QLD
- Numbers in Surat adjusted for FIFO-DIDO
- A total of 10 plausible scenarios were selected, considering :
 - a) No changes to direct employment (Business as usual)
 - b) Reduced direct employment (Slow down)
 - c) Reduced multipliers for a) and b)

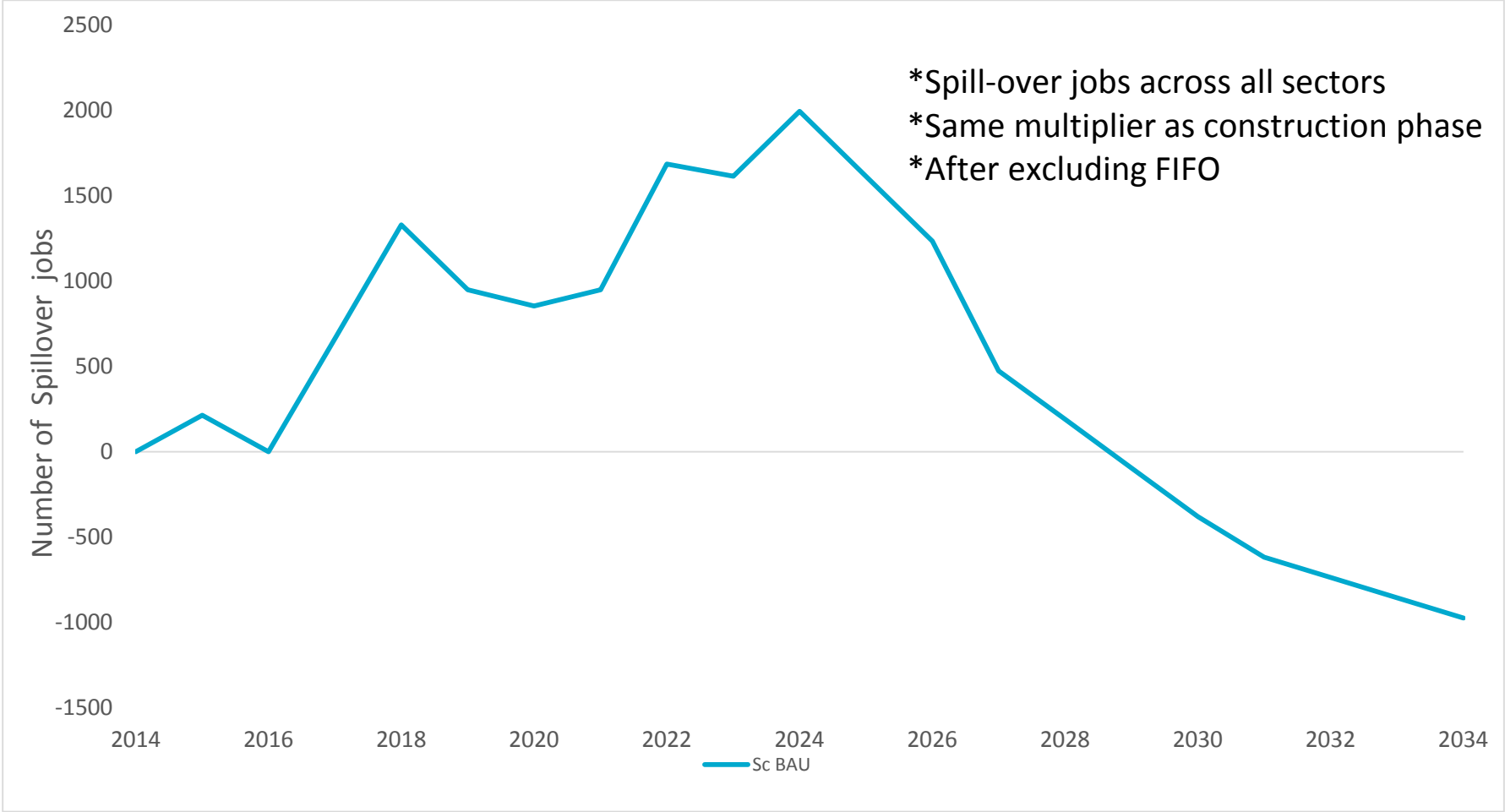
CSG Direct employment (QLD)

Assuming 39K wells

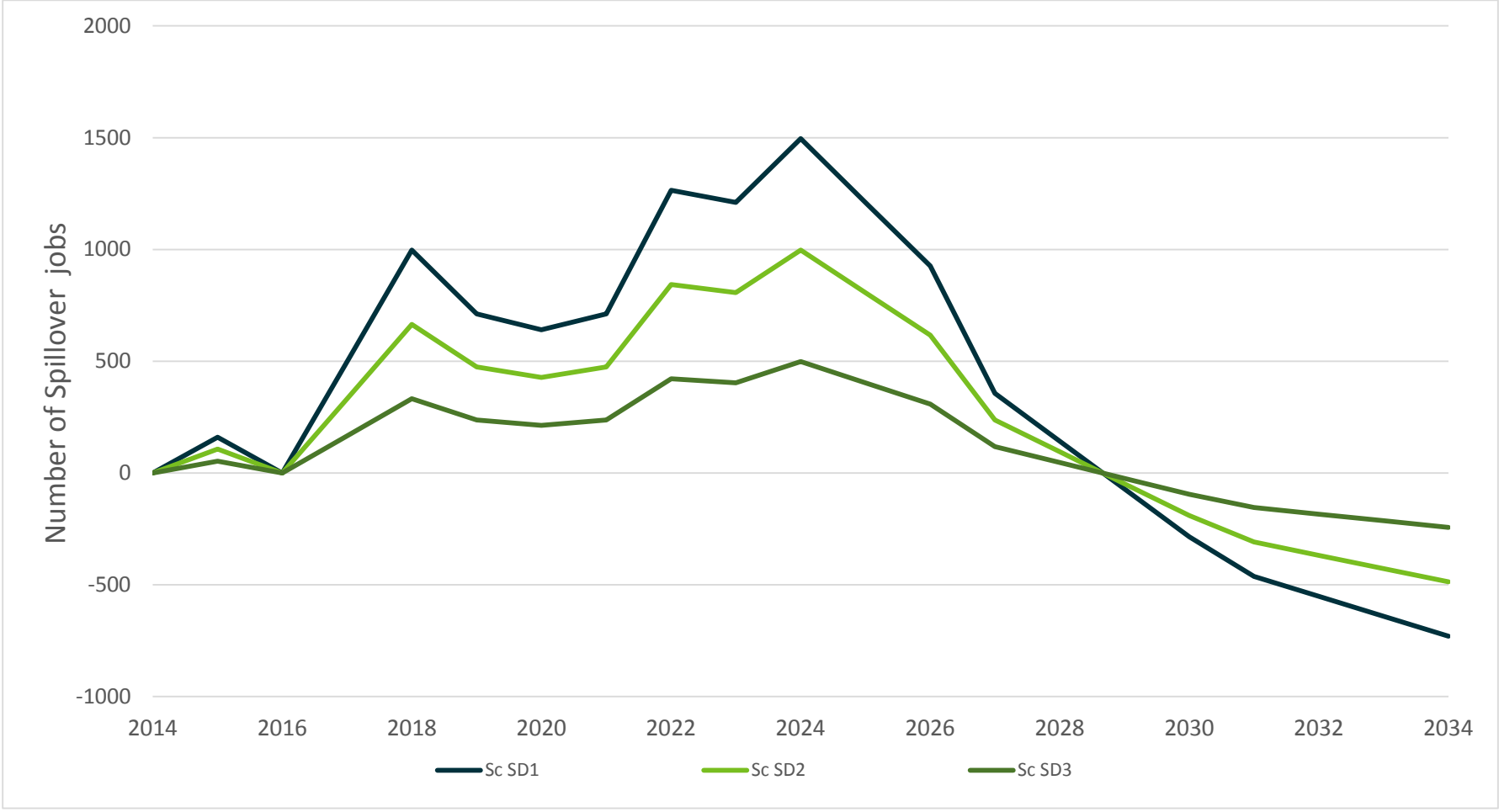


Source: Energy Skills Queensland, 2015

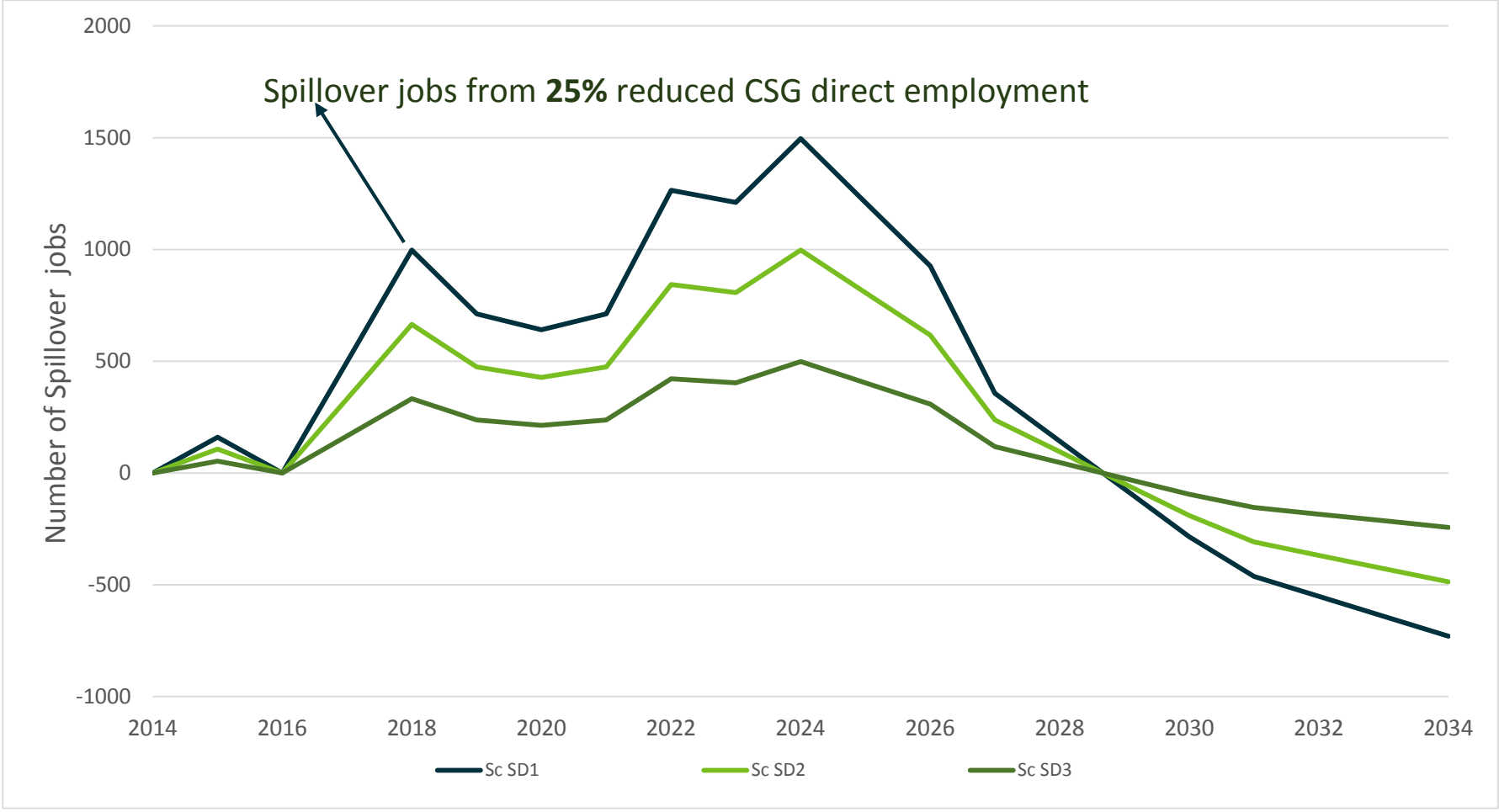
Spillover jobs (Surat residents): Business as usual



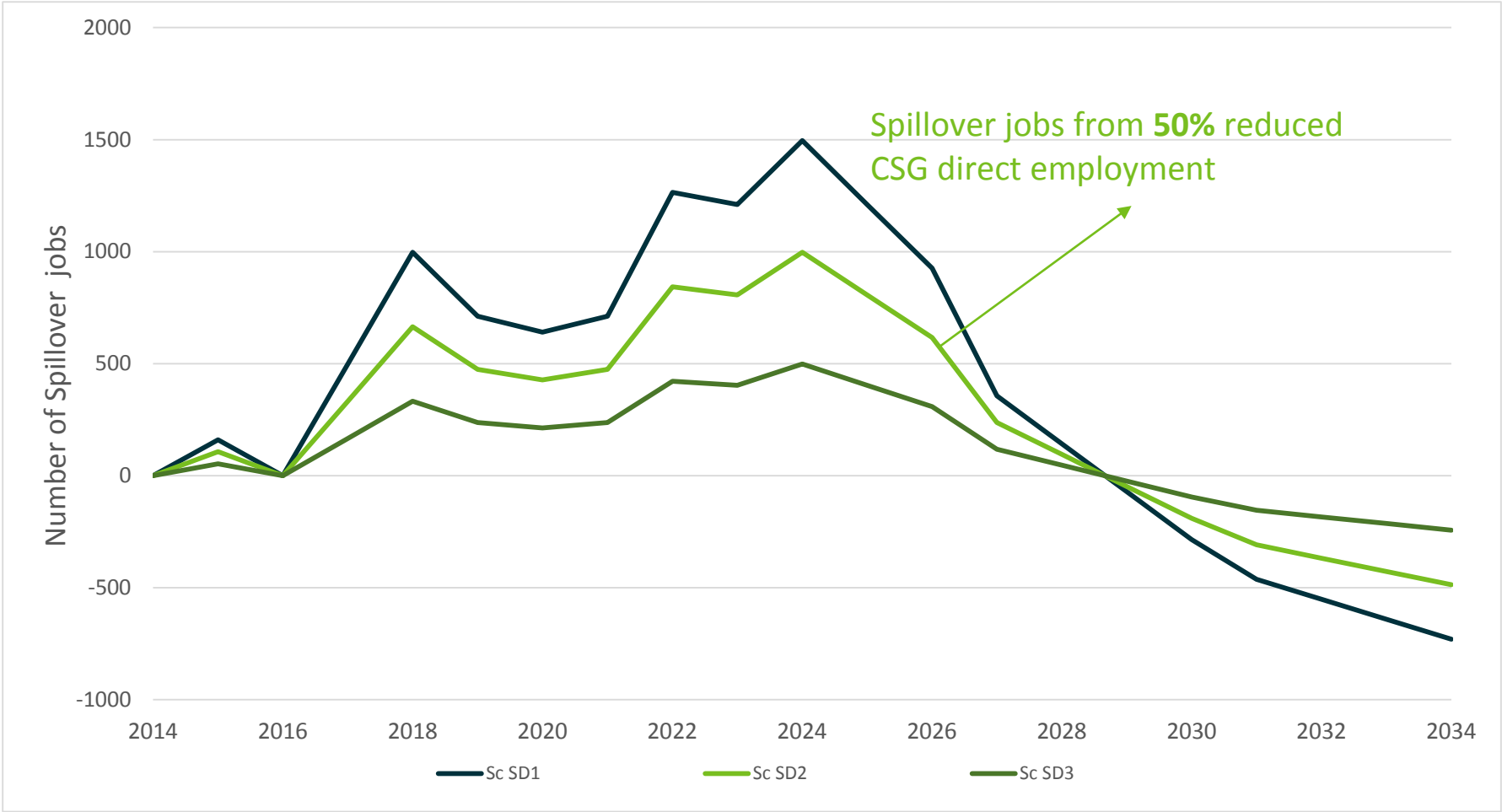
Slow down scenarios



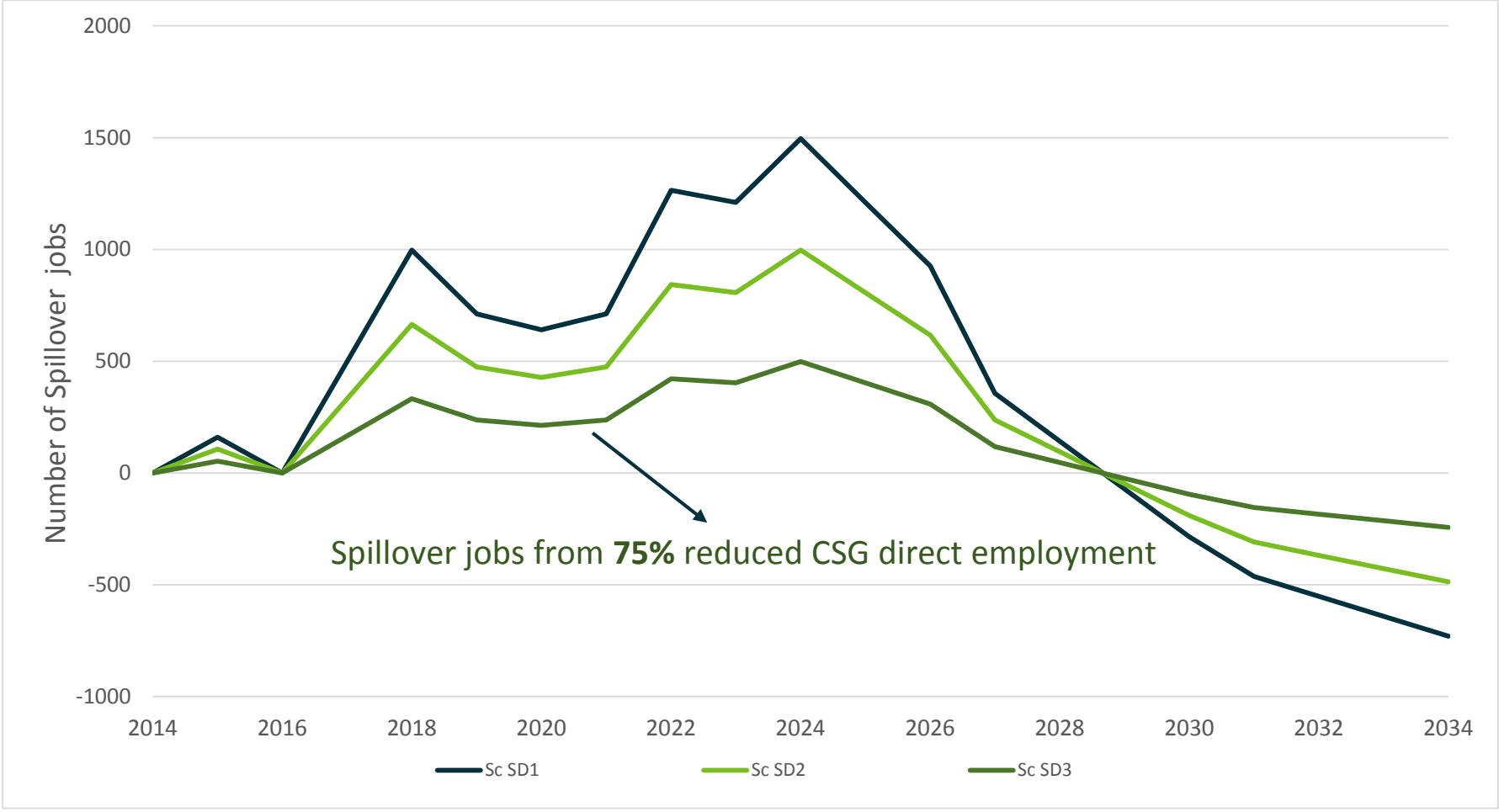
Slow down scenarios



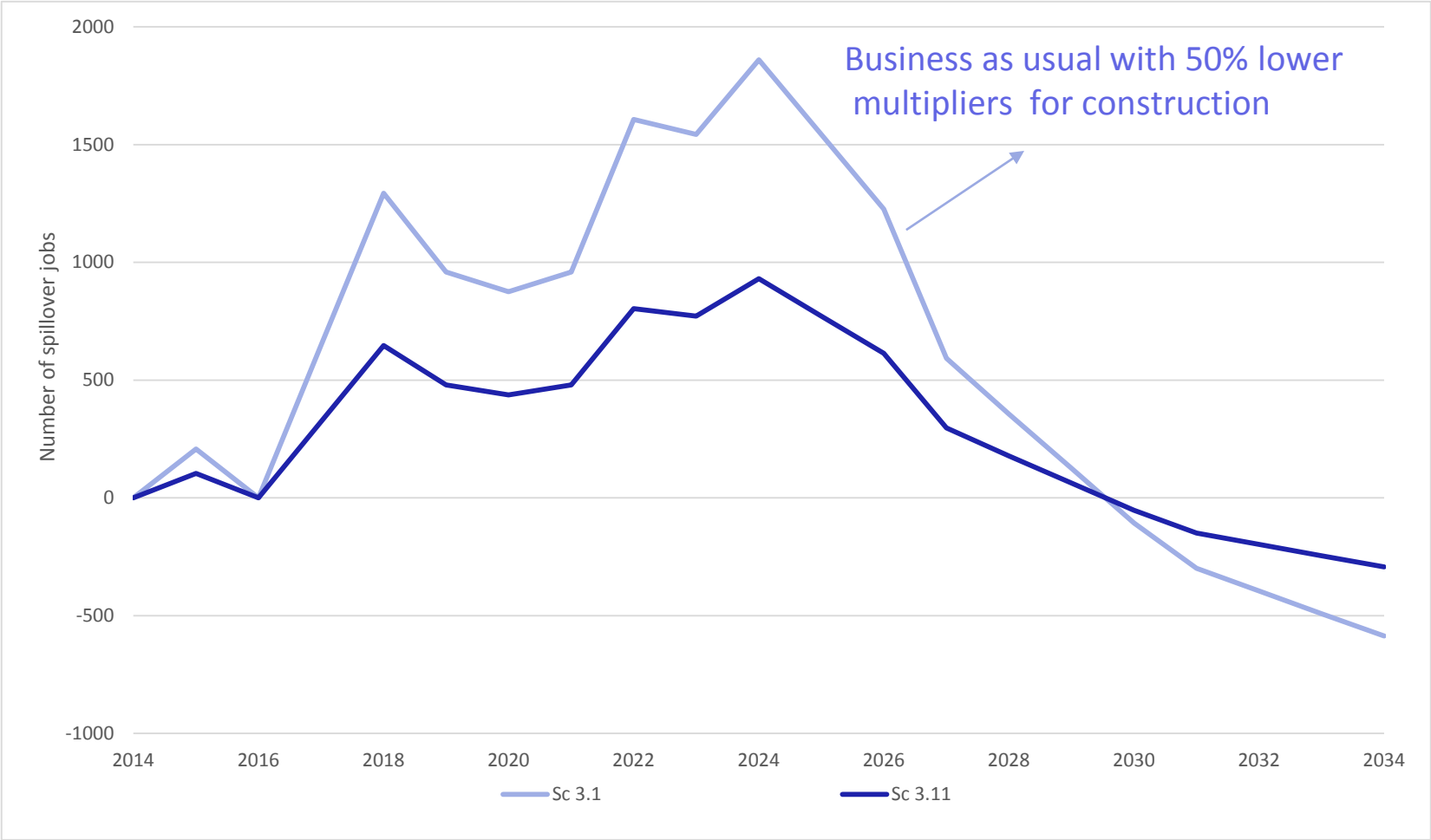
Slow down scenarios



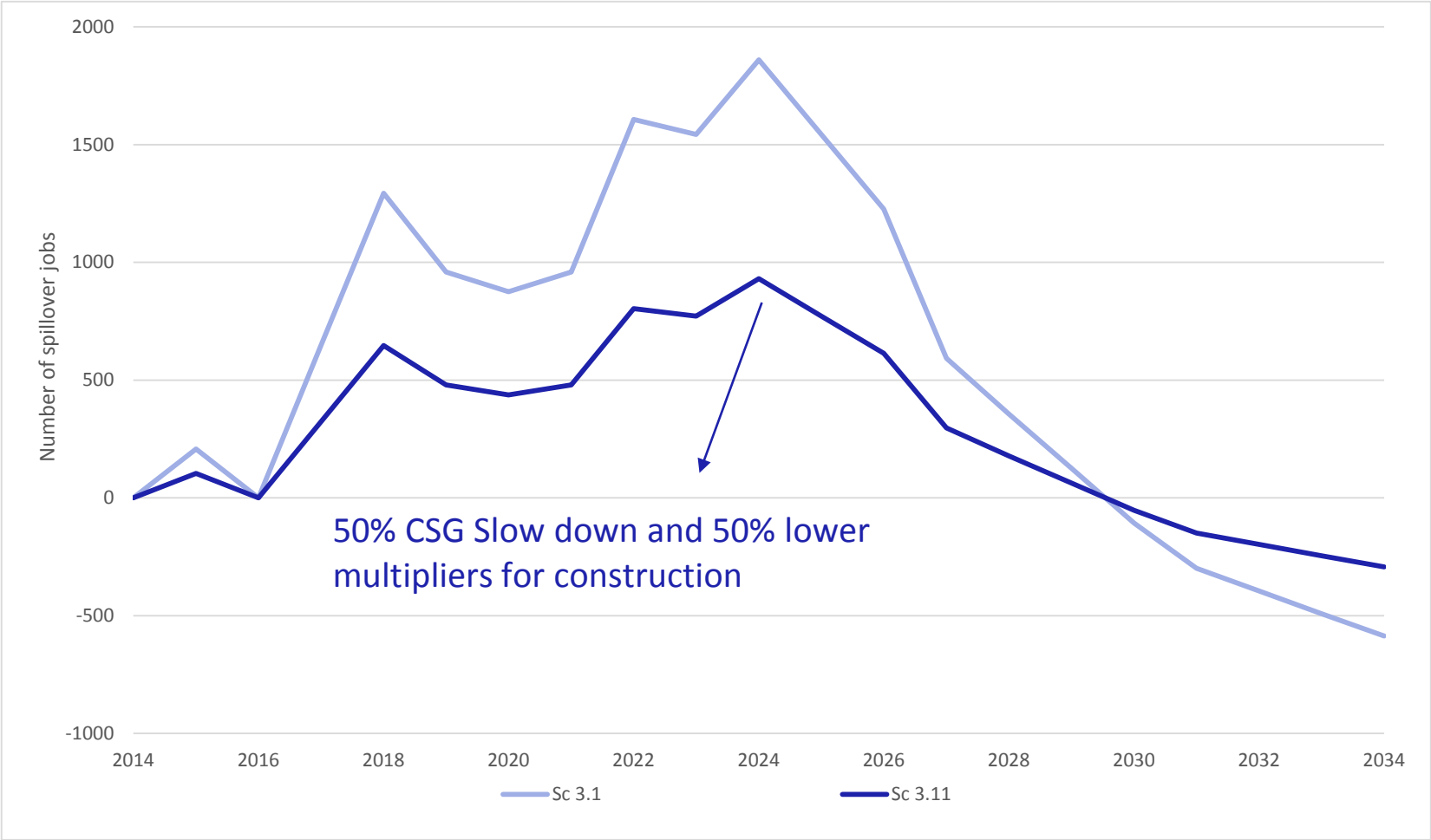
Slow down scenarios



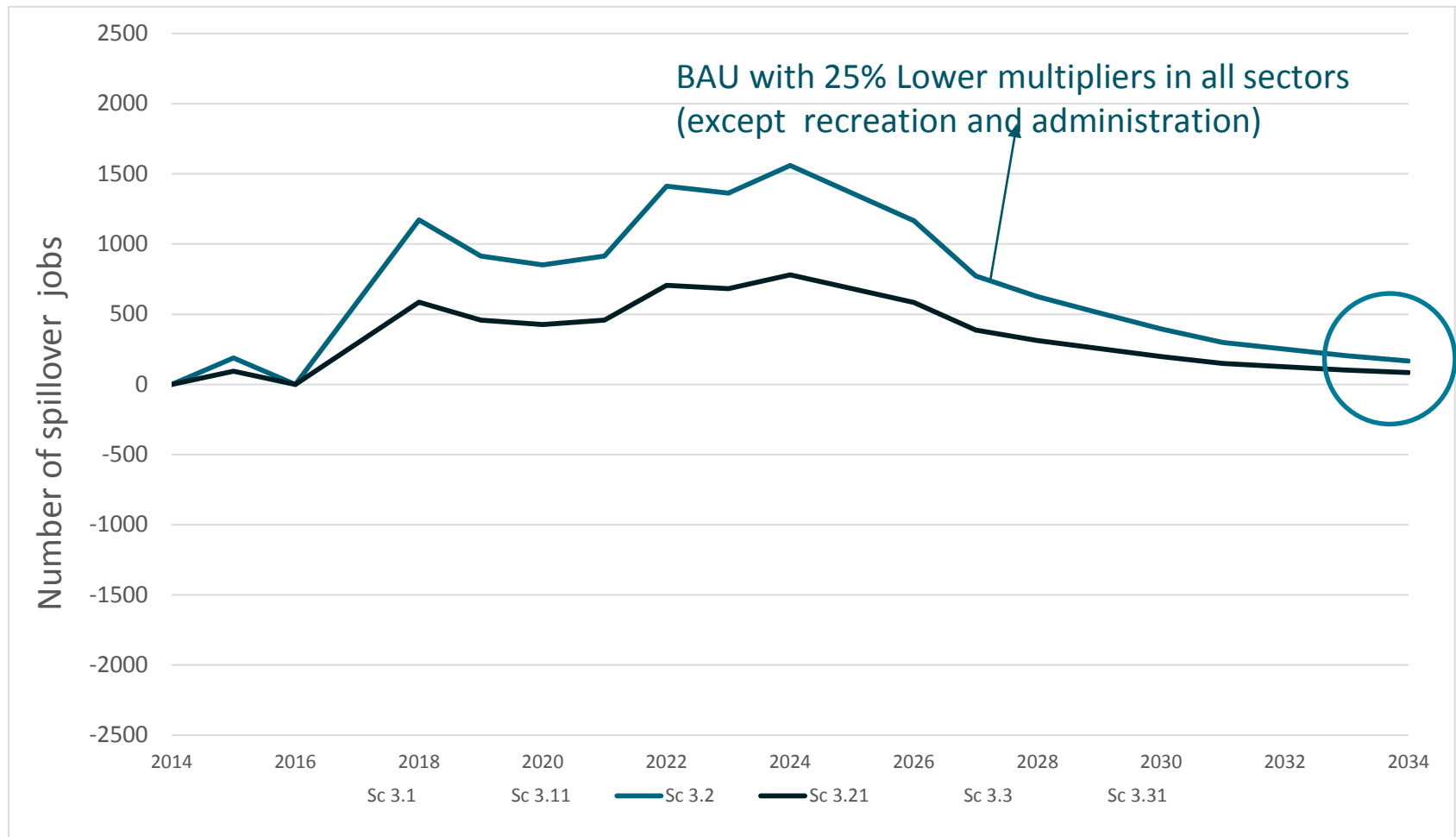
Scenarios with reduced multipliers



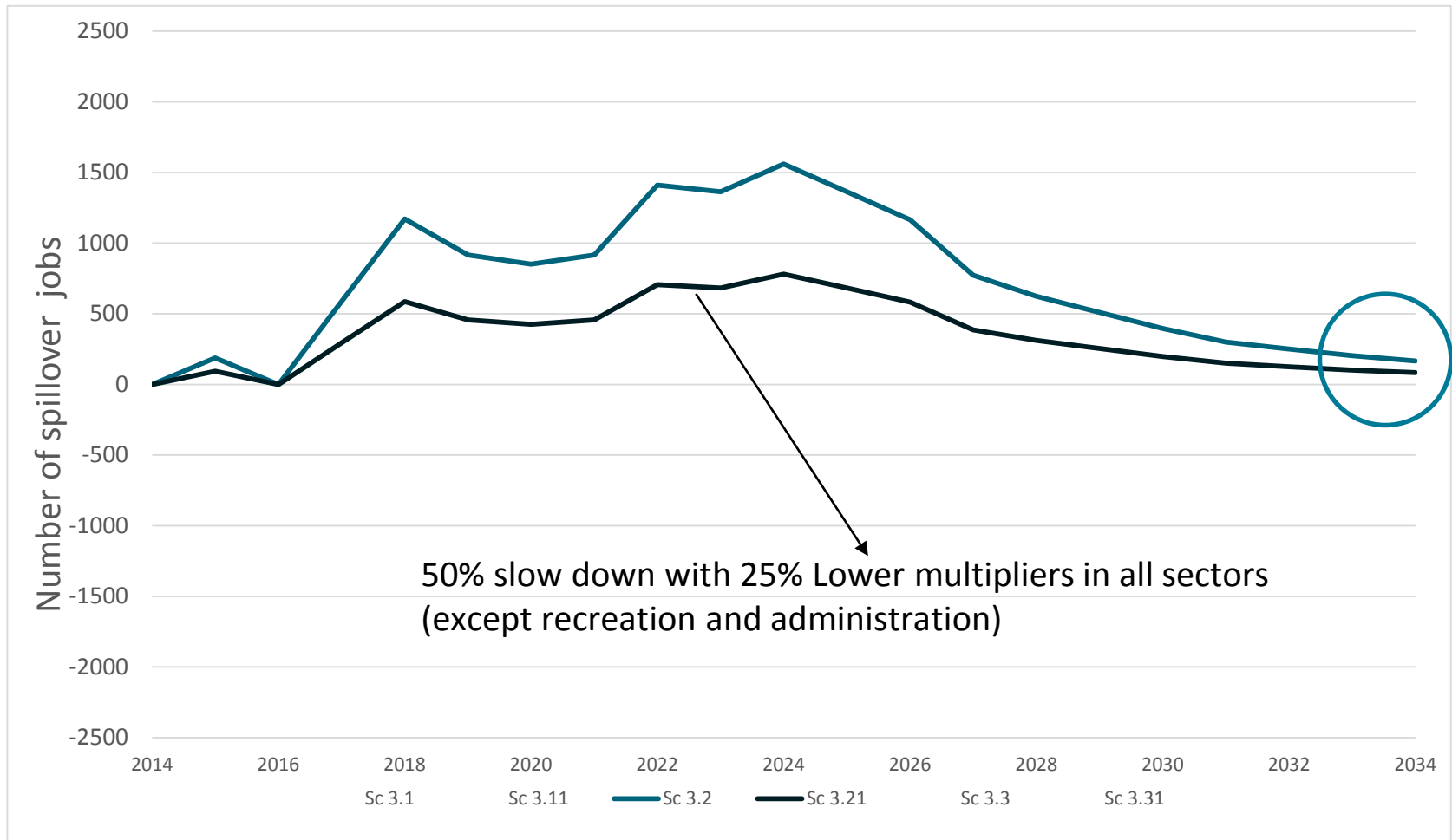
Scenarios with reduced multipliers



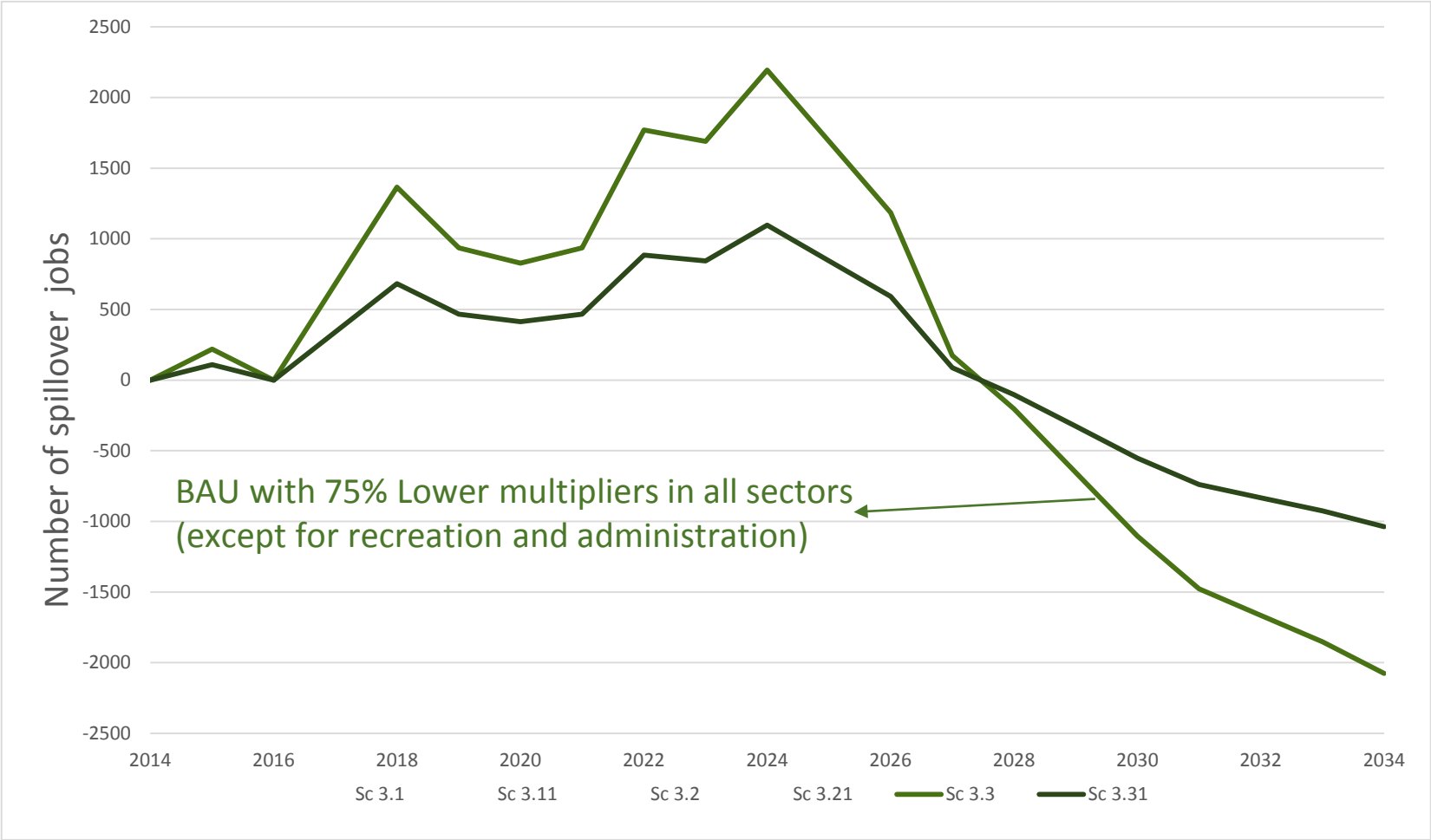
Gradually reducing dependence on CSG over time



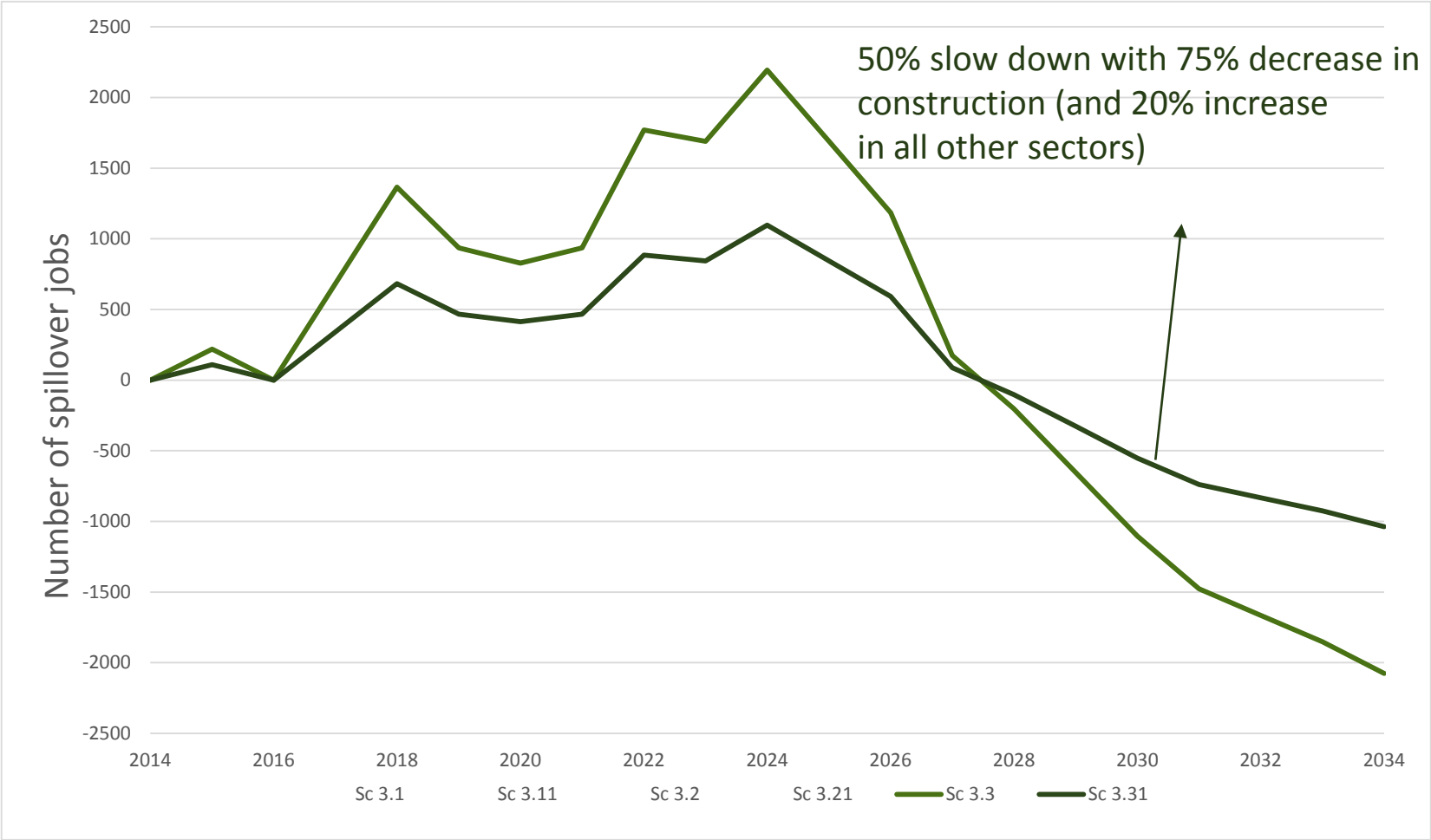
Gradually reducing dependence on CSG over time



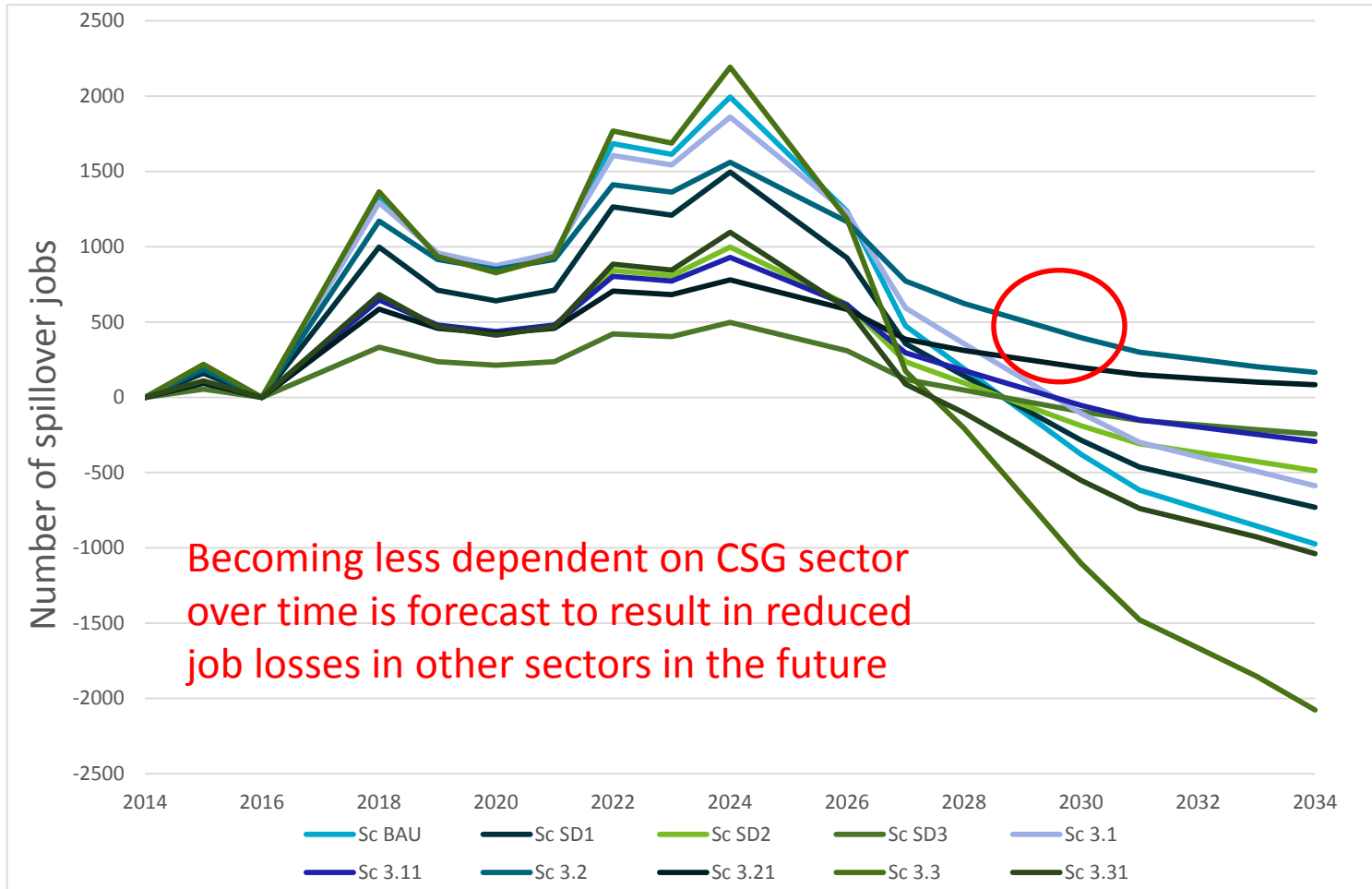
Abrupt de-link from CSG



Abrupt de-link from CSG



All scenarios alongside



Projected changes by sector

Industry sector	2006 jobs	2011 jobs	2014 jobs	Jobs from Scenario BAU 2034	Jobs from Scenario SD2 2034	Jobs from Scenario 3.3 2034
Electricity, gas, water and waste management services	591	798	1,250	↓ 1,167 ↑	1,209	1,002
Construction	3,577	4,350	6,650	6,291 ↑	6,470	6,769
Accommodation and food services	2,679	3,215	2,950	↓ 2,623	2,787	1,971
Arts and recreation services	196	303	225	243 ↑	234	243
Other services	1,694	1,919	2,725	↓ 2,572 ↑	2,649	1,809
Administrative and support services	711	847	900	↓ 830 ↑	865	830

Observations

- Direct industry jobs are forecast to rise and fall
- For indirect jobs (spillovers):
 - Some sectors are more strongly linked to the CSG industry than others
 - Therefore some sectors are more affected by change in CSG than others
- Most scenarios have:
 - a general **upward** trend from 2014 to 2024
 - a general **downward** trend from 2024 to 2034

Section 2:

Implications for local businesses

Based on interviews with small to medium enterprises

10 Lesson Learned

1. Look after core customers

- throughout the busy times



2. Be diversified

- Think carefully about putting all your eggs in one basket.
- Keep a broad base of customers.
- Look for new markets with any new capacity developed

3. Understand the industry

- Where you fit in the supply chain
- The ups and downs of activity
- Things change fast
- Prepare for the quieter times
- Big companies think and act differently from SMEs

4. Stay connected

- Supply chain, industry bodies, regional development groups, local Chambers, govt programs
 - possible opportunities
 - possible collaborations
 - prepared for what's coming
 - learn



5. Keep a close eye on your business

- Manage your costs for project type work,
- Understand your contracts,
- **Beware of possible risks**
 - Bad debts during slow downs
 - External economic factors

6. Be careful not to overcapitalise

7. Seek business advice early

- Outside advisor, business mentor, accountant
- Tough decisions may be needed
- You may not want to know what you're hearing

8. Seek out reliable information

- Be wary of spin

9. Personal considerations

- How involved do you want to be?
- Boom times and quieter times can be stressful.
- Consider exiting when you can

10. Take opportunities to learn and grow with the CSG industry

- Position yourself for the next increase in economic activity



What could have helped

- Smoother transition into operations
- Some signals as to when construction finishes
- As much local content in operations as possible
- Clarify the IT systems and platforms
- Not putting wasted investment into compliance training
- Don't overstate benefits: accurate information is most useful
- Correction misinformation wherever possible
- Steps to avoid a housing bubble



Conclusion

- Forecasting economics is like forecasting the weather
 - Forecasts are projections based on best available info (*not predictions*)
- The research considered a range of plausible scenarios
- In 2034, most scenarios indicate:
 - **lower** indirect jobs compared to 2014
 - **higher** indirect jobs compared with 2006
- Oscillating periods of increase and decrease are likely
- Lessons learned from the construction phase are highly relevant for local businesses during the operations phase

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