

When you need to be sure

CONTACT US

IE.CQV.INFO@SGS.COM



Semiconductor Commissioning

Commissioning that enables
program delivery

SAFER
GREENER
SMARTER





Integrated commissioning is the foundation of reliable semiconductor production."

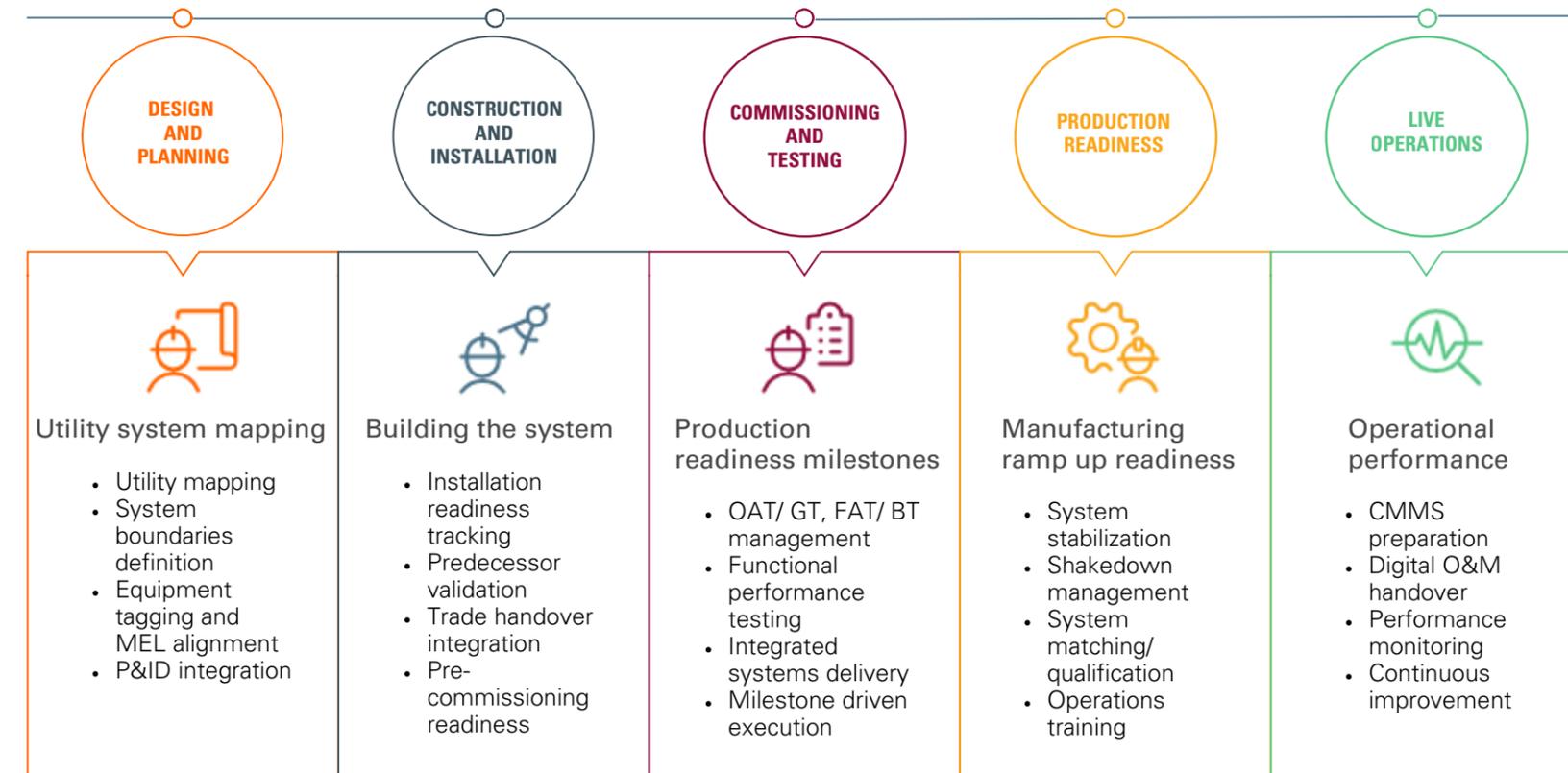
We build trust in semiconductor manufacturing

Semiconductor fabrication facilities operate at the highest level of technical complexity and operational sensitivity. Production stability, contamination control and utility reliability are critical to protecting yield and ensuring long term performance.

SGS supports semiconductor manufacturers and EPC partners with integrated commissioning (Cx) solutions that reduce delivery risk and enable predictable production readiness.

By combining global expertise, structured commissioning methodology and local delivery capability, SGS helps transform complex construction projects into stable high performance manufacturing environments.

Digital commissioning flow for semiconductor facilities



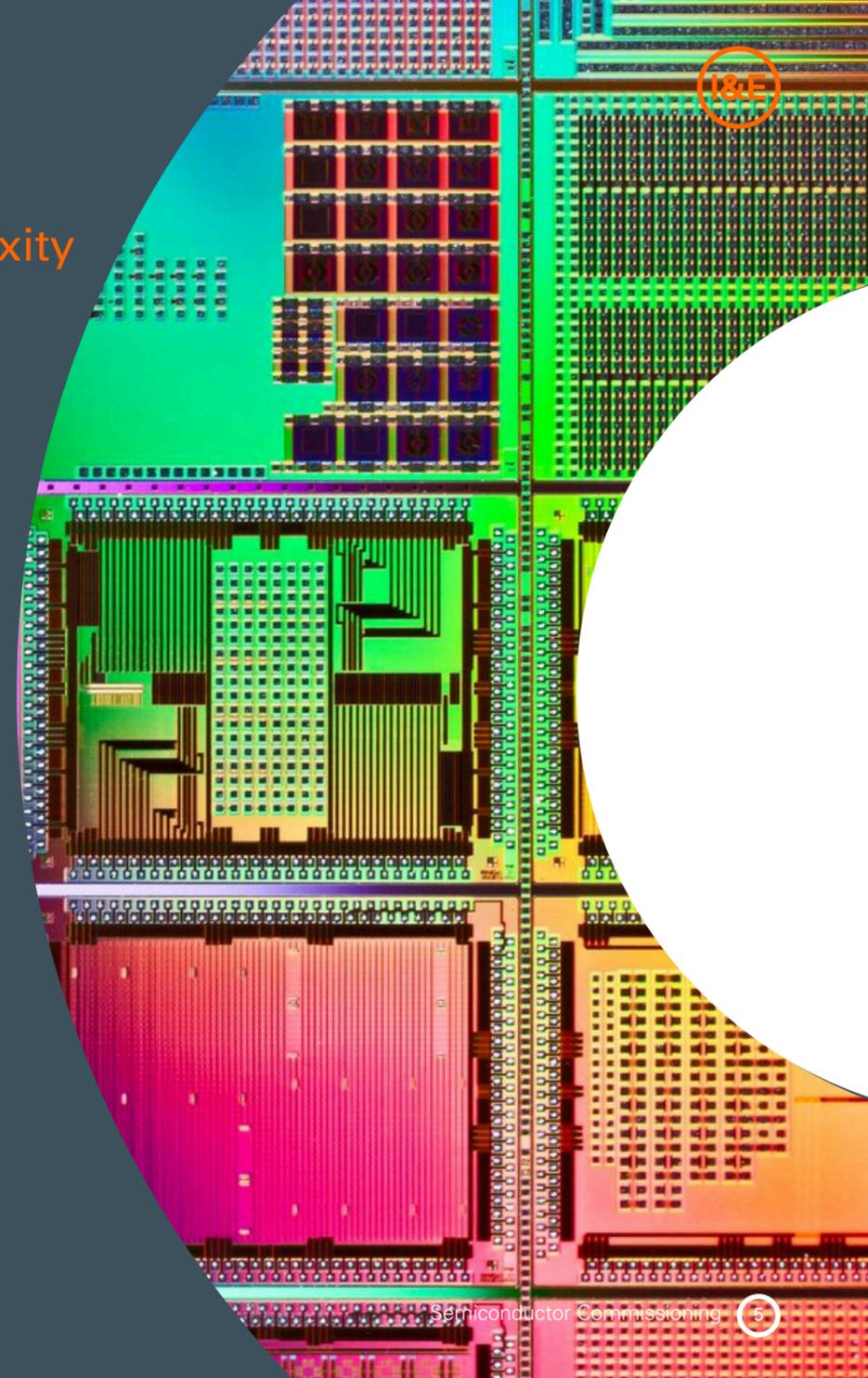
SSM BACKBONE: REAL TIME DEPENDENCY MANAGEMENT AND COMMISSIONING TRACEABILITY

Semiconductor manufacturing complexity demands integrated commissioning

- Modern semiconductor facilities depend on tightly integrated utilities and process support systems including UPW, specialty gases, chemical distribution, HVAC cleanroom environments and advanced automation systems.
- Fragmented commissioning approaches increase contamination risk, delay production ramp up and create long term operational instability.
- SGS addresses this challenge through an integrated commissioning model that aligns design intent, construction delivery and operational readiness into one coordinated execution framework.
- This approach enables faster semiconductor facilities ramp up, improved yield protection and stronger operational reliability from day one.



Highly interconnected systems require precise sequencing and coordinated delivery.”





Integrated digital commissioning is the fastest path from construction to reliable operations."

SGS integrated digital commissioning approach

Our commissioning framework is designed to protect yield, accelerate production readiness and ensure long term operational stability.

EARLY ENGAGEMENT

- SGS engages at the early design and planning stages to support sequencing of critical utilities and process support systems.
- This proactive approach enables tool installation readiness, reduces late stage rework and improves coordination between construction, vendors and facilities teams.
- Early engagement ensures that commissioning strategy aligns directly with client objectives.

DIGITAL COMMISSIONING

- SGS uses the System Start up Matrix (SSM) methodology as the digital backbone of semiconductor commissioning.
- SSM connects equipment, utilities, system dependencies and commissioning milestones into one live execution platform.
- This digital approach enables real time progress visibility, dependency control and structured traceability for regulatory and audit requirements.

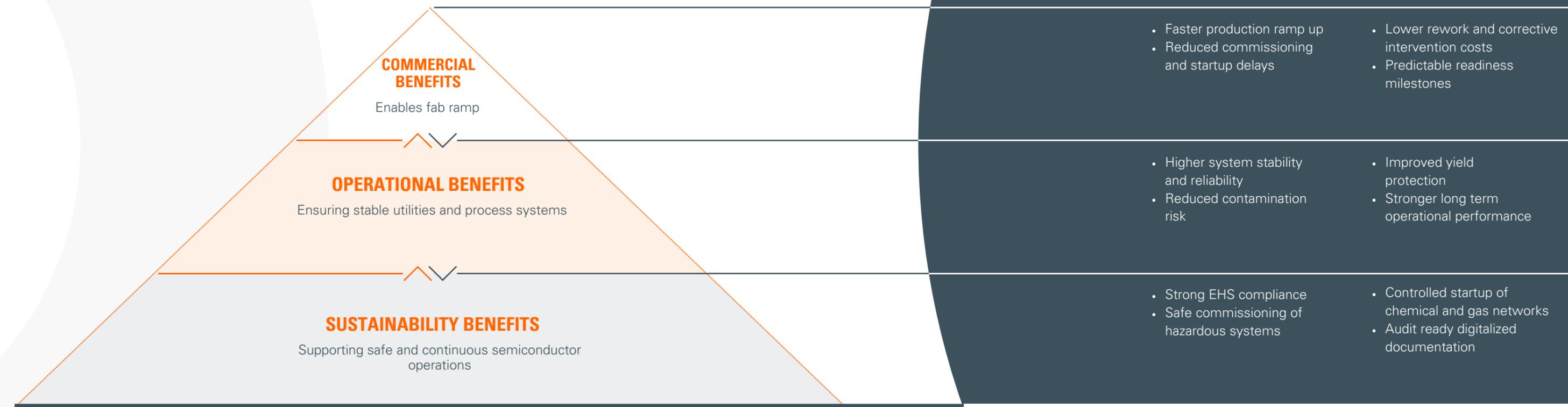
INTEGRATED PROJECT

- SGS integrates commissioning with construction interfaces, quality processes and vendor coordination.
- This unified delivery model reduces interface risks, improves milestone alignment and enables faster resolution of technical dependencies.
- Clients benefit from clearer accountability and smoother handover between project phases.

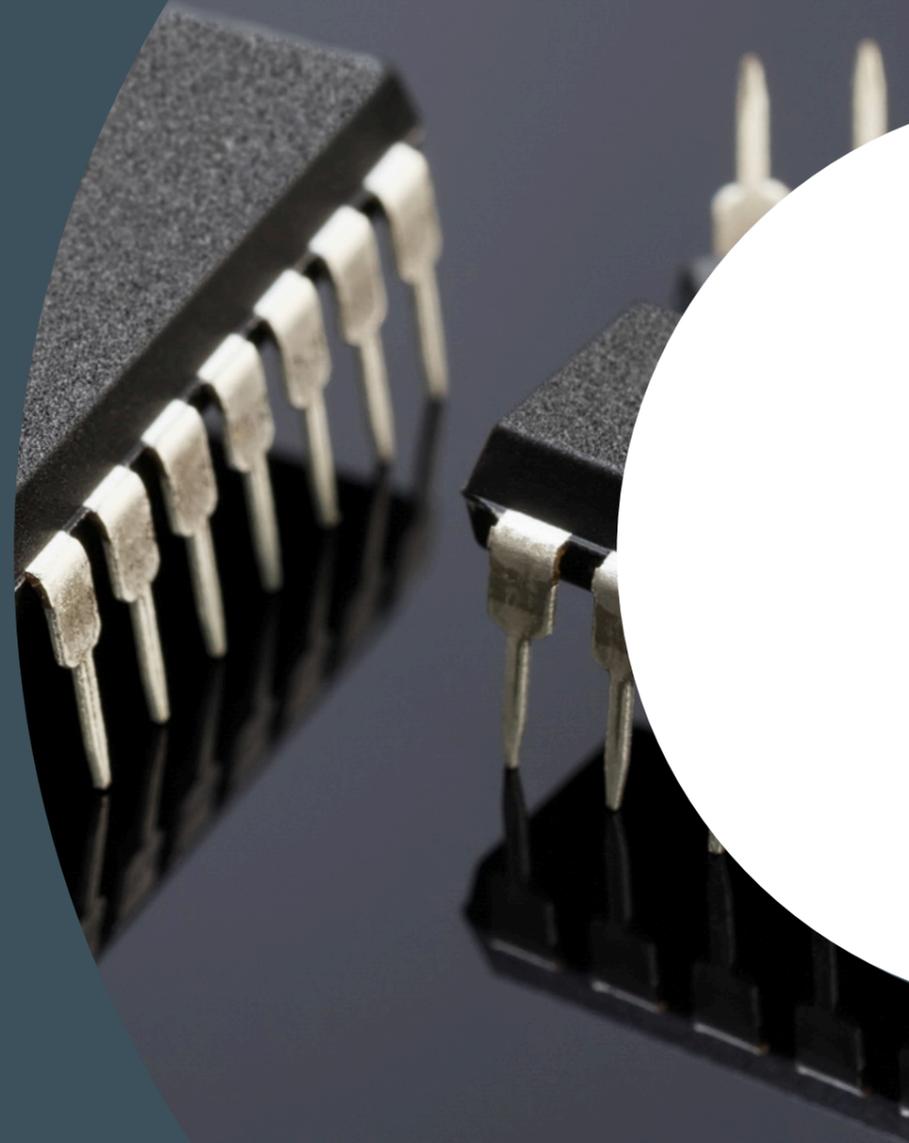
PRODUCTION READINESS

- SGS supports the transition from project delivery to live manufacturing operations.
- This includes system stabilisation, shakedown support, documentation handover and operational training preparation.
- The result is a controlled and reliable ramp up of semiconductor production.

Business impact that matters



“ Integrated commissioning transforms complex fab delivery into stable production performance.”





One integrated commissioning partner delivering consistency reliability and performance."

Why choose SGS for semiconductor commissioning

- Proven commissioning methodology for semiconductor facilities
- Deep expertise in critical utilities and process support systems
- Advanced digital commissioning and SSM capability
- Client centric approach grounded in real industry experience
- Global semiconductor footprint with local delivery capability
- Consistent global standards and competitive local execution

Ready to accelerate your semiconductor facility delivery?

Contact SGS to discuss your integrated semiconductor commissioning strategy.

CONTACT US

IE.CQV.INFO@SGS.COM