SEMI® INTERNATIONAL STANDARDS

Overview of the SEMI International Standards Program

July 12, 2011
v8

Outline

- SEMI - the Global Association

- Value of Standards

- SEMI International Standards Program

- How to participate

About SEMI

- Global industry association
- Over 1800 member companies
- Established in 1970 to serve the semiconductor supply chain

- Today serves members involved in:
  - Semiconductor
  - Photovoltaic
  - LED/Solid-State Lighting
  - Flat Panel Display
  - MEMS
  - and other Emerging Markets

Global Impact & Influence

- Offices in Silicon Valley, Washington D.C., Belgium, China, France, Germany, India, Japan, Korea, Russia, Singapore, and Taiwan

- IDM/Foundry/OSAT relationships worldwide

- Strategic relationships with semiconductor, solar, and other industry associations

- Strategic relationships with special interest organizations

- Public policy efforts in all regions

Member Services

- Expositions
  - SEMICON
  - SOLARCON / PVJapan
- Executive Conferences
- Technical Programs
- Industry Standards
- Environment, Health & Safety
- Industry Research & Statistics
- Customer / Industry Network
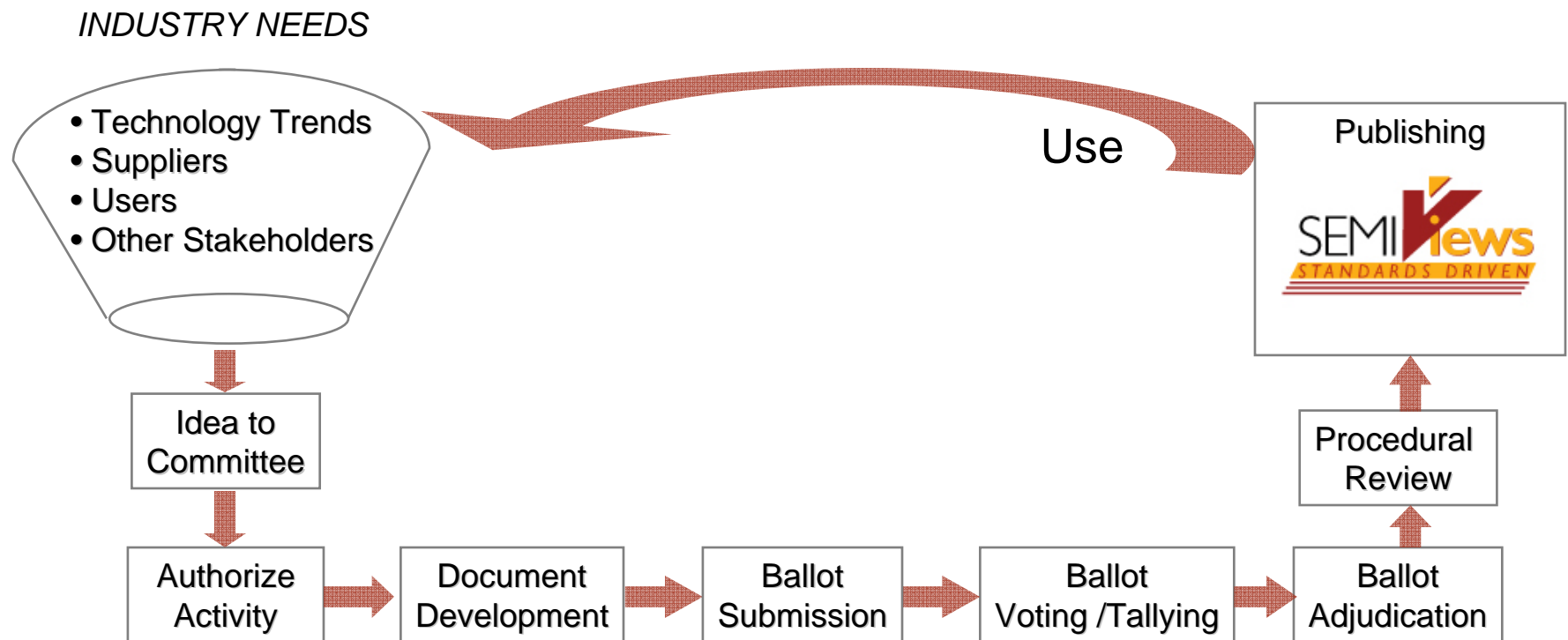- Advocacy
- Special Interest Groups

Who we are

- Established in 1973
- Experts from the microelectronic, display, photovoltaic, and related industries
- Exchange ideas and develop globally-accepted technical standards
- We are international
  - United States | Japan | Europe | Taiwan | Korea | China

- High-Profile SEMI Standards
  - Wafer Dimensions, Materials
  - Metrics (Factory efficiency/equipment reliability)
  - Equipment Interface
    - SEMI Equipment Communication Standards (SECS) / Generic Equipment Model (GEM)
    - Hardware/Automated Material Handling Systems (including 300 mm, 450 mm)
  - Environmental, Health and Safety
    - Safety for semiconductor (S2) and FPD (S26), Energy conservation (S23)
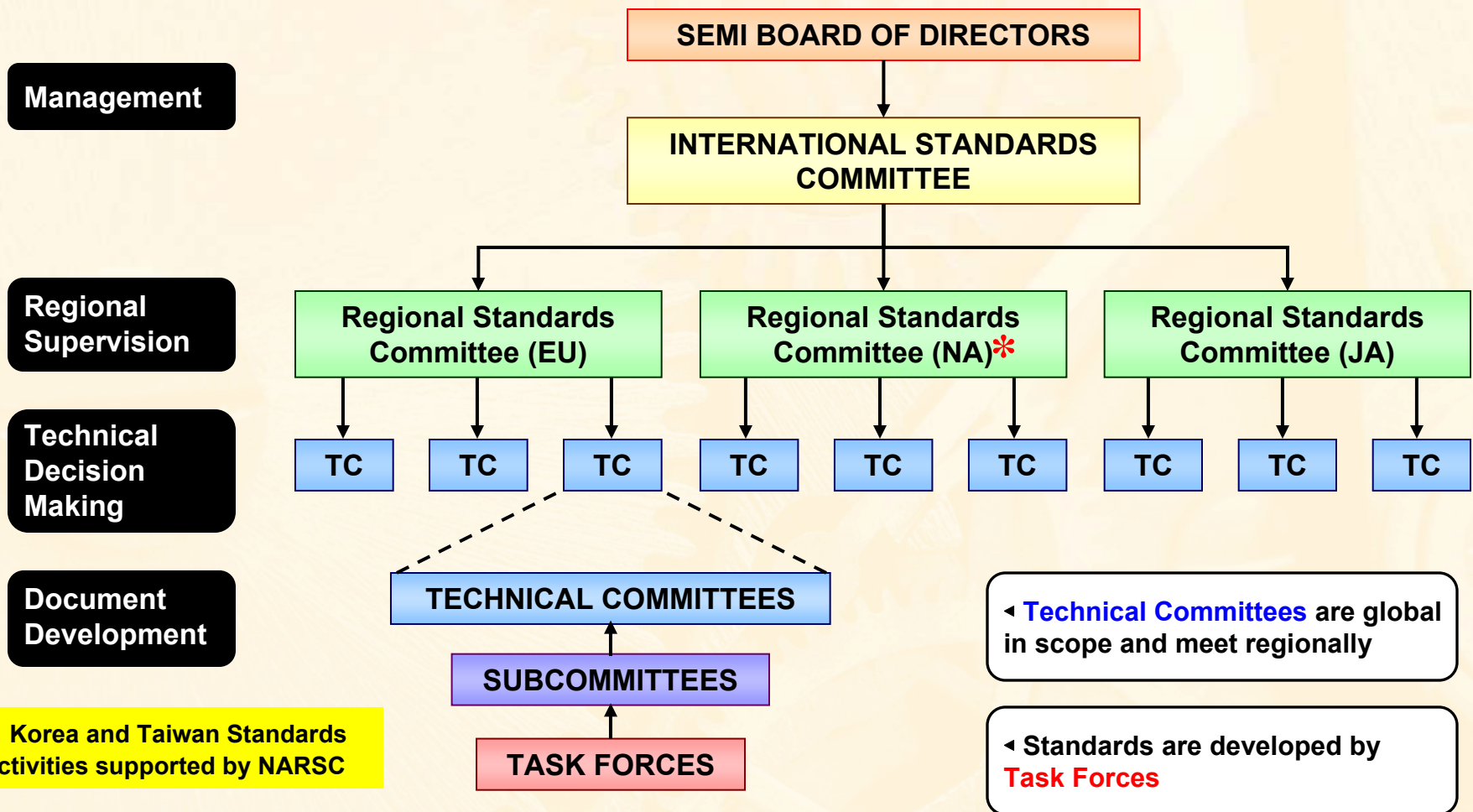 - Photovoltaic

What's in it for me?

- Why Standards?
  - Improve communication within and across industries
  - Increase manufacturing efficiency, reduce costs
  - Accelerate product development
  - Enable faster commercialization and interoperability
  - Simplify installation and testing
  - Protect users and the environment
  - Increase market access and acceptance

- Benefits for Participating
  - Influence the final standard
  - Get a head start in complying with the standard
  - Network and build relationships
  - Enhance industry visibility

Document Development Path

INDUSTRY NEEDS

- Technology Trends
- Suppliers
- Users
- Other Stakeholders

Use

Publishing

SEMI Views
STANDARDS DRIVEN

Idea to Committee

Procedural Review

Authorize Activity → Document Development → Ballot Submission → Ballot Voting /Tallying → Ballot Adjudication

Organizational Structure

Management

SEMI BOARD OF DIRECTORS

INTERNATIONAL STANDARDS COMMITTEE

Regional Supervision

Regional Standards Committee (EU)

Regional Standards Committee (NA)✳

Regional Standards Committee (JA)

Technical Decision Making

TC   TC   TC   TC   TC   TC   TC   TC   TC

Document Development

TECHNICAL COMMITTEES

SUBCOMMITTEES

TASK FORCES

✳ **Korea and Taiwan Standards activities supported by NARSC**

◄ **Technical Committees** are global in scope and meet regionally

◄ **Standards are developed by Task Forces**

The SEMI Standards Program Today

- All aspects of an automated fab are addressed

- Over 3,600 volunteer experts
  (more than 700 companies represented)
  - 23 global technical committees
  - 200 task forces

- Currently over 800 SEMI Standards and Safety Guidelines available

SEMI Standards Membership

	General Program Membership	Technical Committee Membership
Complete & submit application	required	required
FEATURES & BENEFITS:		
Participate in SEMI Standards meetings	☑	☑
Vote on SEMI Standards Ballots	optional	required
Receive information & notifications on:		
■ General Standards program information	☑	☑
■ Letter ballots		☑
■ Upcoming TC meetings in the region		☑
■ Issuance of TC meeting minutes		☑
Be eligible to serve in leadership positions		☑

Get Involved!

- Get your company support

- Register today: www.semi.org/standardsmembership

- SEMI Standards Technical Committees

Assembly & Packaging
Automated Test Equipment
Compound Semiconductor Mat'ls
Environmental Health & Safety
Facilities
FPD Factory Automation
FPD Mask
FPD Materials & Components
FPD Metrology
Gases
High-Brightness LED
Information & Control

Liquid Chemicals
MEMS / NEMS
Metrics
Micropatterning
Photovoltaic
Photovoltaic Automation
Photovoltaic Materials
Physical Interfaces & Carriers
Silicon Wafer
Traceability
3DS-IC
  (three-dimensional stacked integrated circuits)

Thank you!