Final

JOINT STATEMENT OF THE 17TH MEETING OF THE WORLD SEMICONDUCTOR COUNCIL (WSC)
23 MAY, 2013
LISBON, PORTUGAL

The world's leading semiconductor industry associations – consisting of the Semiconductor Industry Associations in China, Chinese Taipei, Europe, Japan, Korea and the United States – held the 17th meeting of the World Semiconductor Council (WSC) today. This meeting, held in Lisbon, Portugal, was conducted under the "Agreement Establishing a New World Semiconductor Council" approved at the third WSC meeting and signed on June 10, 1999, and amended on May 19, 2005.

The WSC meets annually to bring together industry leaders to address issues of global concern to the semiconductor industry. The WSC has the goal of promoting cooperative semiconductor industry activities, to expand international cooperation in the semiconductor sector in order to facilitate the healthy growth of the industry from a long-term, global perspective. It also supports expanding the global market for information technology products and services. Further, it promotes fair competition, technological advancement, and sound environmental, health and safety practices. The WSC encourages cooperation in such areas as environment, safety and health practices, protection of intellectual property rights, open trade, investment liberalization, and market development. All WSC activities are guided by a basis of fairness and a respect for market principles consistent with World Trade Organization (WTO) rules and WSC member association bylaws. The WSC reaffirmed that markets should be open and competitive. Antitrust counsel was present throughout the meeting.

The meeting was chaired by Richard Clemmer of NXP Semiconductors for the Semiconductor Industry Association in the Europe, who welcomed the delegates to Lisbon. Regional delegations attending the meeting were chaired by Tzu-Yin Chiu of Semiconductor Manufacturing International Corporation (SMIC), Nicky Lu of Etron, Shozo Saito of Toshiba Corporation, Jun-Young Jeon of Samsung Electronics, and Ajit Manocha of GLOBALFOUNDRIES.

During the meeting, the following reports were given and discussed, and actions on these were approved:

Free and Open Markets

(1) Multi-component ICs

WSC calls upon GAMS to continue to facilitate the growth of the semiconductor market by ensuring free and open markets by eliminating tariffs and non-tariffs barriers for all semiconductor products including new types of semiconductor products such as multi-components ICs (MCO).

In order to facilitate progress on this topic, WSC agreed on a common industry proposal for a definition of such Multi-component ICs at the GAMS Meeting in September 2012 as documented in the appendix of the GAMS chairman's summary.

All six WSC members support the MCO definition that has been agreed in September 2012.

WSC re-iterates that a short term duty free agreement on MCO-products based on the agreed definition is of the highest priority.

Five out of six GAMS members agreed to the above mentioned MCO definition in 2012 and submitted this definition as a collective contribution in the context of the currently ongoing review of the ITA, which is aimed to be concluded by end of 2013.

WSC appreciates current efforts of the governments to accomplish an ITA expansion agreement which includes MCO by end of 2013 and stands ready to support governments in an ITA to be concluded by the above mentioned deadlines. In the framework of this support meetings have been scheduled by members of WSC with the ITA negotiating parties in Geneva and presentations have been given by industry.

Any agreement eliminating tariffs on MCOs should also provide for an annual review mechanism to keep the duty-free treatment of MCO's current in terms of coverage of commercially available MCOs.

In its 2012 Statement, the WSC requested with regard to the 2017 Review of the Harmonized System, the inclusion of semiconductor sensors, actuators, resonators and oscillators - as defined in Annex 2 of the 2012 joint Statement - in the general category of discrete semiconductors - HS 8541 - of the Harmonized system, and the inclusion of Multi-component ICs in HS heading 8542 for Integrated Circuits.

Also in the view of inclusion into an ITA-expansion agreement WSC respectfully reiterates its request to GAMS to consider taking the necessary steps for MCO inclusion

into the HS2017.

WSC received information that the Government of the US is considering to file the MCO definition for inclusion into HS2017. WSC respectfully asks the other GAMS members to support such an initiative.

(2) Multichip ICs (MCP) agreement

It is expected that MCP will be covered in the ITA expansion.

WSC welcomes current activities and efforts of Governments with regard to inclusion of MCP into the ITA expansion.

The WSC recommends that the GAMS, besides its efforts to expand the ITA, continue to work to expand the current geographic scope of the 2006 MCP agreement. The WSC appreciates the possibility that certain non-GAMS members may join the agreement. Against this background, WSC considers it of particular importance that all current GAMS members join the agreement. The WSC calls upon all GAMS members to consider pragmatic approaches to facilitate this objective.

(3) Encryption Licensing & Certification procedures

The WSC Encryption Principles that the WSC has developed since 2009 (see annex I) and to which GAMS members have committed make it clear that:

- in order to avoid negative impact on the industry's competitiveness, it is important to prevent unnecessary restrictions to trade
- thus, commercial products with cryptographic capabilities which are or will be widely available and deployed in the respective domestic markets, should as a general matter not be regulated.

The WSC welcomes the GAMS commitment to help ensure open global markets that are free from unnecessary regulation and discrimination by encouraging the adoption of international voluntary standards and norms including algorithms, as essential to avoid fracturing the global digital infrastructure and creating unnecessary obstacles to trade.

In the limited circumstances where regulations may be necessary, the WSC welcomes the GAMS agreement to advocate for accessibility, transparency and non-discrimination in any regulatory requirements (including those applied by certification bodies) either in force or being developed, concerning encryption in semiconductors used in domestic commercial markets, including the conformity assessment procedures used to demonstrate compliance with those requirements.

With regard to the GAMS request to provide periodic information on regulatory updates and trade issues:

a. WSC notes that very few countries have regulations on the import and use of encryption. The global trend is toward further de-regulation for mass marketed or widely available IT items in recognition of their widespread use and of the fact that there is very limited value in regulating the commercial market.

b. WSC is nevertheless concerned about various issues, in some regions, related to import and use regulations and licensing & certification requirements and administrative procedures for semiconductors with cryptographic capabilities, including, among others:

    - Lack of stakeholders consultation on ongoing reviews of regulations on encryption
    - Difficulties in obtaining the needed algorithms and licenses necessary for import, production or sale of commercial products or applications with cryptographic capabilities
    - Unjustified difficulties in meeting license requirements
    - High administrative burden, unpredictable process and procedures and cost of certification
    - Concerns with certifications where only domestic companies can apply to be certified or meet the requirements, or could be favored
    - Concerns with encryption standards being turned into technology mandates

The WSC agreed to get further feedback from WSC members in order to clarify as many of above concerns as possible through agreed actions and report back.

Such practices, if confirmed through further investigation, seem to contradict the WSC principles & best practices on encryption, related GAMS commitments, and relevant WTO principles.

Specifically, with regard to the situation in some regions, the WSC is concerned that the lack of transparency on licensing and certification procedures; the lack of access to relevant algorithms; the limited consultation with international stakeholders and absence of timely information on new or revised relevant regulations, as well as previously described issues constitute unnecessary obstacles to trade.

The WSC respectfully requests GAMS:

1. To ensure that, whenever laws, regulations or administrative procedures on the importation or use of commercial encryption are created or revised by any Governments/Authorities or Certification Bodies;

a. **The principles of transparency, accessibility, and timely information on related regulatory developments and requirements, including on procedures to access relevant algorithms, including in countries not participating in GAMS, are consistently applied**

b. **Timely and meaningful open consultations with international stakeholders are conducted and detailed written Government/Authority feedback on all meaningful comments submitted by stakeholders during such a consultation process**

2. To promote continued high level government cooperation on issues related to commercial encryption, aimed at removing unnecessary obstacles to trade and at ensuring that markets for encryption products are open and free from discrimination, in accordance with GAMS commitments.

In order to facilitate the above, WSC recommends that GAMS implement a structured dialogue to discuss any specific concerns raised by WSC, also for example by organizing before the 2014 GAMS meeting one or more *ad hoc* high level meetings involving both trade officials and information security Government experts.

The WSC requests the governments and authorities participating in GAMS to continue their efforts to ensure that all GAMS and WTO members observe the WSC principles and those set forth herein.

The WSC will continue the investigation, including potentially the analysis of relevant data on administrative and regulatory practices and evolutions on commercial certification rules and encryption in domestic markets.

GAMS' efforts to increase accessibility, transparency, non-discriminatory and open procedures and rules will help our industry to ensure compliance with the WSC Principles going forward and will help to keep markets opened, allowing innovation and digital economy to flourish.

(4) Trade and Innovation Policy

In 2006 the WSC re-confirmed, as a founding principle *"the importance of ensuring that markets be open and free from discrimination, and that the competitiveness of companies and their products be the principal determinant of industrial success and international trade. Governments and authorities should, therefore, ensure full intellectual property protection, full transparency of government policies and regulations, non-discrimination for foreign products in all markets, a tariff- and barrier-free global environment for semiconductor products, an end to investment or other regulatory restrictions tied to technology transfer requirements, and removal of unreasonable burdens on world commerce*."

From the digital world to the green economy, semiconductors act as the building blocks of products and services, which provide key innovative solutions in the home, in the office and

in society in general. Encouraging innovation - the process by which individuals and businesses generate and commercialize new ideas - is critical to the current and future prosperity of international economies.

Representing a global and highly innovative industry with high and increasing R&D/Sales ratio, the WSC strongly supports a further elaboration on 2006 WSC Statement, with the aim to ensure not only open markets and global trade, but an innovative ecosystem as well. In line with efforts by various international organizations to promote innovation policy principles to guide governments on how to help industry generate greater innovation without distorting trade and impeding market access, **the WSC respectfully requests GAMS to agree and endorse the WSC Innovation Policy Principles, found in Annex (ll)**

(5) Worldwide Customs & Trade Facilitation

The WSC affirms the key importance of trade facilitation in achieving free and open markets, reducing barriers to trade, lowering costs, improving business conditions, enhancing IT, and promoting global alignment, to the benefit of governments, industry, and consumers alike. **The WSC encourages governments and authorities to support the conclusion of a Trade Facilitation Agreement in the World Trade Organization this year, and urges negotiators to seek an outcome that embodies the WSC Trade Facilitation Principles found in Annex (lll). Likewise, the WSC urges governments and authorities to support and adopt national, regional, and multilateral trade facilitation procedures and related customs regulations that implement the WSC Trade Facilitation Principles.**

The WSC congratulates the World Customs Organization on the 25th anniversary of the WCO Harmonized System Convention, a system that has reduced importers and exporters' administrative costs and compliance risks. The WSC believes that further harmonization of HS subheadings in the semiconductor industry beyond the current agreed levels of detail, as well as harmonization in interpreting the HS system for semiconductor products that are classified differently by various customs authorities, would yield additional benefits to our industry and facilitate trade by reducing administrative burden and compliance risks. The WSC will study semiconductor relevant HS subheadings for usefulness and relevance, and cases of different classifications of identical products, and explore the merits of harmonization and simplification.

Information Technology Agreement (ITA)

Access to affordable ICT products, including semiconductors, promotes economic development by increasing productivity across all ICT dependent industries and providing the infrastructure needed to compete in the digital age. The elimination of tariffs on a wide range of ICT products through the WTO Information Technology Agreement (ITA) has made those products more affordable and significantly increased their demand and diffusion, benefitting consumers, businesses, and the ICT industry, including semiconductor manufacturers which provide key components for the global digital infrastructure.

The WSC welcomes the recent initiative by many ITA signatories to take into account the major technology developments since 1996 and expand the ITA, due to the fact that semiconductors act as the building blocks of products and services, and will continue to provide key innovative solutions and play an important enabling role. In particular, WSC urges the ITA signatories to include new types of advanced and innovative semiconductors like MCPs and MCOs.

The WSC also requests that all GAMS members work closely with each other and other ITA signatories to ensure a successful conclusion of the expansion of the ITA by the WTO Ministerial Conference in December 2013. Progress on a commercially significant ITA is needed to establish further trust and confidence in the WTO and the world trading system.

Export and/or Import Regulatory Restrictions

The WSC will continue the meetings of its export/import regulatory restrictions task force, and encourages cooperation with other relevant trade associations including attending relevant seminars, and continue to facilitate assistance to resolve industry's concerns on export/import issues such as administrative licensing requirements and procedures, and improving administrative efficiency.

Analysis of Semiconductor Market Data

The WSC reviewed a semiconductor market report covering market scale, market growth and other key industry trends. The report found that in 2012 the semiconductor market reached a value of 292 Billion US$ after a record high of $300 billion in 2011. The semiconductor industry is changing as communication and automotive gain share of the market, whereas computer and consumer are losing and the industrial segment is more or less unchanged. The WSC also took note of the report's identification of automotive semiconductors as a segment

showing good and reliable long-term growth.

Cooperative Approaches in Protecting the Global Environment

The WSC is firmly committed to sound and positive environmental policies and practices. The members of the WSC are proactively working together to make further progress in this area.

(1) PFC (Perfluorocompound) Emissions

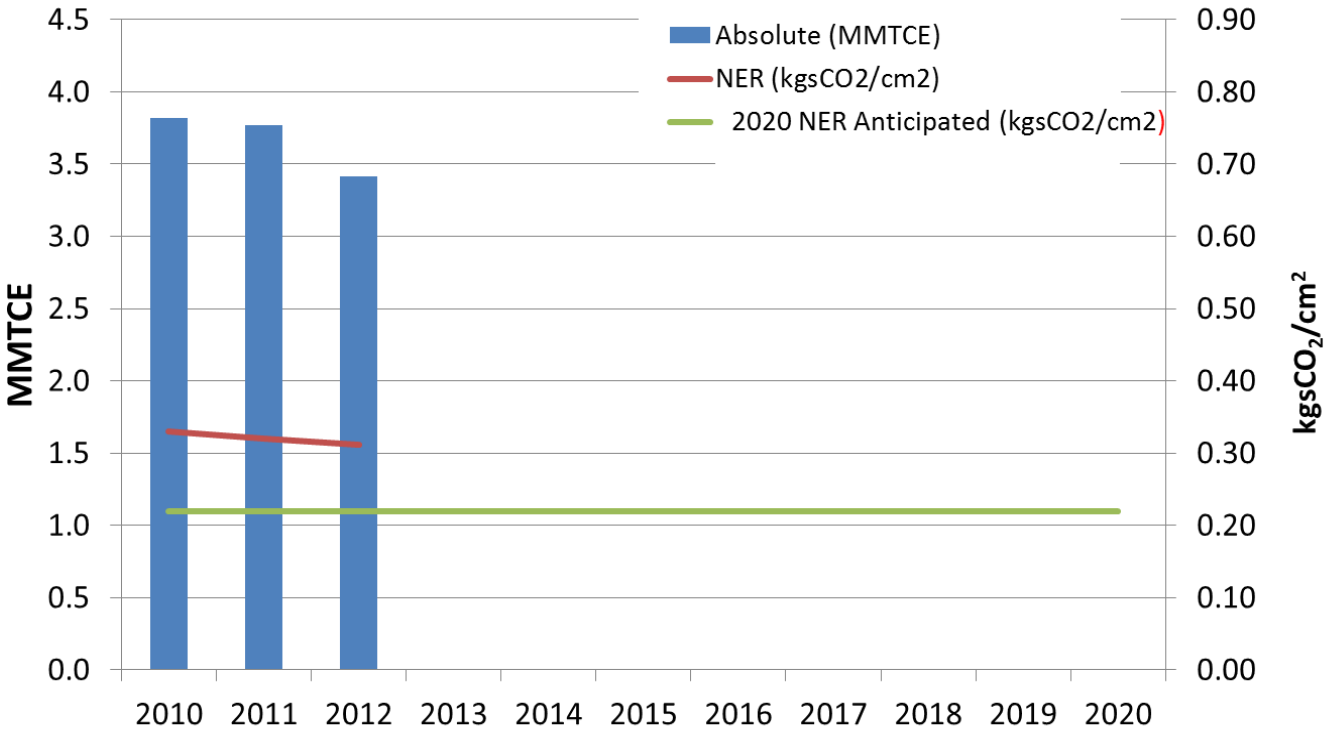
The global semiconductor industry is a very minor contributor to overall emissions of greenhouse gases, and the industry is continuously working to further reduce our contribution to emissions of GHGs. One important part of our GHG emission reduction efforts is our voluntary reduction of PFC gas emissions. In 1999, the WSC (consisting at that time of each of the original regional semiconductor associations in the U.S., the European Union, Japan, Korea, and Chinese Taipei) agreed to reduce PFC emissions by at least 10% below individual baselines for each regional semiconductor association by the end of 2010. The WSC has previously announced that, the industry had far surpassed this goal. Over the 10-year period, the WSC has achieved a 32%. As of the end of 2012, the WSC had achieved a 39% reduction compared to the original baseline. In 2011, the WSC also announced a new voluntary PFC agreement for the next 10 years. The elements of the 2020 goal include the following:

- The implementation of best practices for new semiconductor fabs. The industry expects that the implementation of best practices will result in a Normalized Emission Rate (NER) in 2020 of 0.22 $kgCO_2e/cm^2$, which is equivalent to a 30% NER reduction from 2010 aggregated baseline. Best practices will be continuously reviewed and updated by the WSC.
- The addition of "Rest of World" fabs (fabs located outside the WSC regions that are operated by a company from a WSC association) in reporting of emissions and the implementation of best practices for new fabs.
- A NER based measurement in kilograms of carbon equivalents per area of silicon wafers processed ($kgCO_2e/cm^2$) that will be a single WSC goal at the global level.

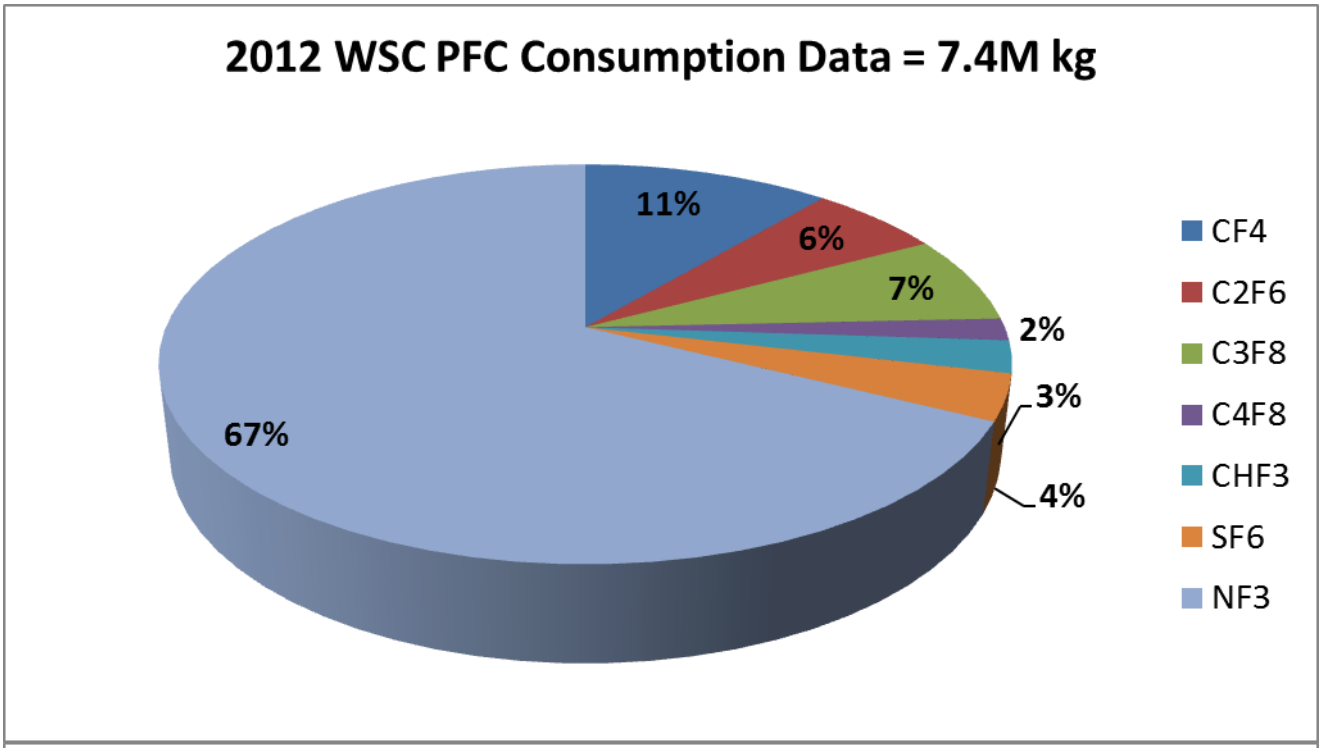
The WSC agreed to report its progress on this new voluntary agreement on an annual basis. This external reporting will provide aggregated results of the absolute PFC consumption and emissions alongside each other and NER trends. These figures represent combined emissions for the six WSC regional associations, in their own regions and in the "Rest of World" fabs described above. In addition, to add more transparency, the WSC has made its Best Practices for PFC Reduction document available on the WSC website in the past year. The WSC will

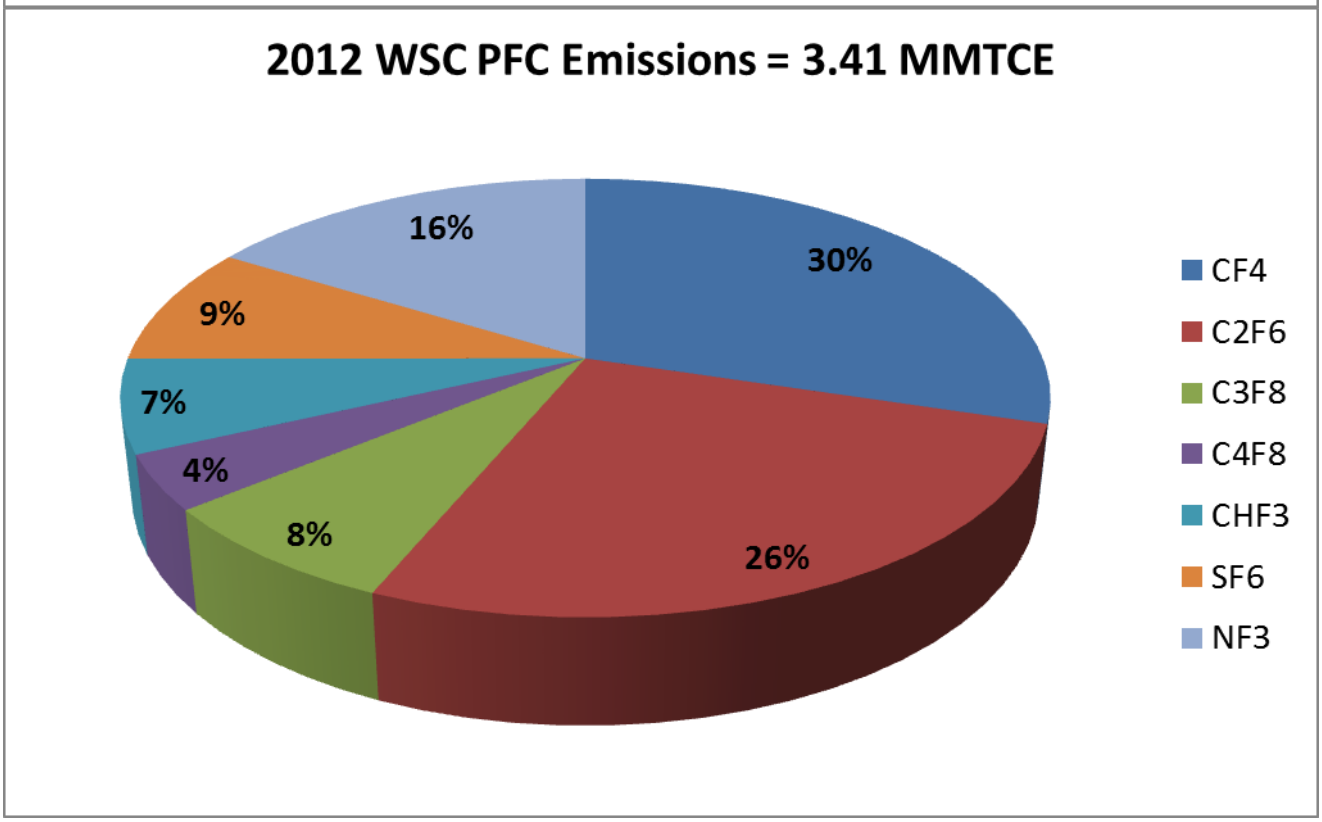
now also be reporting the individual gas breakdowns. The second year results are as follows: in 2012, combined WSC absolute emissions of PFCs decreased by 9.5% compared to 2011, from 3.77 (Million metric tonnes of carbon equivalent) MMTCE in 2011 to 3.41 MMTCE in 2012. The Normalized Emissions Rate (NER) decreased by 3%, from .32 kgCO2e/cm2 in 2011 to .31 kgCO2e/cm2 in 2012. Please see the graph below which compares these results to the 30% reduction in NER anticipated by 2020. In addition, to improve transparency, the WSC has posted its Best Practices for PFC Reduction on the WSC website at http://www.semiconductorcouncil.org/wsc/uploads/Final_WSC_Best_Practice_Guidance_26_Sept_2012.pdf

Results of WSC PFC Emission Trends



2012 WSC PFC Consumption and Emissions Data breakdown by Gas





The WSC is concerned that when GAMS members adopt regulatory approaches to greenhouse gases, governments and authorities should recognize the WSC's longstanding responsible efforts to manage and reduce greenhouse gas emissions, the small quantities of these gases used in the semiconductor manufacturing process, and the essential nature of these gases in the manufacturing process. These materials are critical to the sector producing semiconductor devices as there are no proven substitutes. The WSC recommends that GAMS members should consider carefully when adopting regulatory measures that these measures do not have a disproportionate impact on the semiconductor sector as against other industrial sectors where the use of substitutes for these gases is possible.

(2) Resource Conservation

The WSC will in the coming years focus more heavily on promoting the important contribution which the semiconductor devices make to the enablement of improved resource conservation in our world. Semiconductor devices enable more sustainable living, manufacturing, energy consumption and transportation in our global society. The global demand for resources will continue to grow into the 21st century and it is important that the role which semiconductors play to ensure that as global communities we conserve and manage our resources more efficiently is recognized.

The WSC members are continuing to focus on resource conservation activities in the production process. The normalized reduction (per cm^2 of silicon wafers processed) of electricity from 2001-2012 was 32%, water used in manufacturing was 47%, and waste generated was 37%, compared to 2001.The WSC continues to pursue environmental conservation programs in these areas and will continue to share examples of best practices.

The energy consumed in the semiconductor manufacturing process continues to be a key focus of the industry's environmental and sustainability practices worldwide. The industry's energy consumption is relatively small, however it is through the energy efficiency enabling functions of semiconductors as deployed in a wide-range of products that the energy benefits in reducing consumption throughout society are visible.

The WSC continues to focus on reducing greenhouse gas emissions and energy consumption in the manufacture of semiconductors and will work on the technical aspects with our suppliers to focus on cost-effective improvements to existing tool-equipment sets and establish active and meaningful optimization goals as part of new equipment design.

(3) Chemical Management

The WSC recognizes the important role that materials innovation, advancements in the use of chemicals, and emerging technologies has in achieving further technological progress in the semiconductor industry in producing technologies that provide numerous societal and economic benefits. In addition, the industry is committed to achieving the environmentally sound and safe use of materials, chemicals, and new technologies. In achieving the proper balance between continued innovation and the protection of the environment and safety, the WSC is concerned that some emerging global regulations may cause unnecessary restrictions on the industry's ability to innovate, develop new and more efficient semiconductor technologies, and allow for the global distribution and use of finished semiconductors. We wish to work cooperatively with governments and other stakeholders to ensure that regulations continue to achieve our mutual goals of continued innovation and protection of human health and the environment.

The WSC is particularly concerned about the proposed regulation pending in California, the "Safer Consumer Products" proposal, which creates unnecessarily complex and burdensome product requirements which are not harmonized with existing international regulations and standards. This regulation, if finalized in its current form, would be unworkable to implement, fails to protect confidential business information and imposes barriers to global trade. The WSC recommends that governments/authorities voice these concerns to the State of California and request that the California regulatory authorities address the concerns raised by the semiconductor industry and the broader technology industry.

The WSC urges governments/authorities to proceed carefully in regulating materials, chemicals, and new technologies in the highly innovative semiconductor industry. Such regulations should acknowledge the long-established practices in the industry relating to risk management and the use of enclosed manufacturing systems. The WSC also recommends that governments ensure that the international regulatory landscape for semiconductor chemicals and materials is proportionate, scientifically based, globally harmonized and based on principles of environmental stewardship and economic feasibility.

Critical Materials

(1) Helium

The WSC is concerned about the global shortage in the supply of helium. Helium is a gas used in the manufacture of semiconductors, in scientific research, and in other advanced manufacturing processes. No substitutes are currently available in many critical applications.

The WSC urges governments/authorities to take action to avoid disruptions in the supply of helium for industrial and scientific users and to increase supplies of helium in the future.

(2) Conflict Minerals

WSC acknowledges public concerns and recent governmental actions to address conflict minerals and will continue to monitor these developments. In order to support global progress in addressing this challenge, the WSC has adopted a Conflict-Free Supply Chain Policy.

WSC Conflict-Free Supply Chain Policy

There are increased societal concerns with the mining of certain minerals from the Democratic Republic of the Congo (DRC) and surrounding countries[1]. The WSC shares the deep concern about sources of minerals from these conflict zones.

The WSC is committed to use conflict-free minerals in its products. To meet this objective, the WSC underlines the importance of a comprehensive due-diligence process aligned with other initiatives within the global industry to achieve a conflict-free supply chain. The WSC will promote the use of common tools, methods and standards among WSC member associations on this issue.

As governments and authorities consider additional legislation and regulation to address concerns associated with conflict minerals, the WSC recommends the GAMS to promote coordinated and harmonized approaches to compliance across geographies. To that end, where such regulations exist or are being developed, the GAMS should embrace global, industry-led initiatives to identify conflict-free smelters and promote common compliance tools, methods, and standards.

Effective Protection of Intellectual Property

(1) *Fighting the proliferation of semiconductor counterfeiting*

As noted in past WSC statements, the proliferation of counterfeit semiconductor products creates serious risks to public safety and health and to critical infrastructure. The WSC reiterates its commitment to intensify anti-counterfeiting work activities, with the aim of reducing and eliminating counterfeited semiconductors on the global market.

[1] "surrounding countries" as defined under the Dodd-Frank Wall Street Reform Act 2012 (Central Africa Republic, South Sudan, Zambia, Angola, The Republic of the Congo, Tanzania, Burundi, Rwanda, Uganda)

In furtherance of this commitment, the WSC has created an anti-counterfeiting task force to cooperate specifically on this issue. Appropriate industry level anti-counterfeiting activities include training and sharing relevant intelligence information with enforcement authorities, raising awareness, with concrete examples of risks created to health, public safety and critical infrastructure, and encouraging purchases from authorized sources rather than brokers with unknown sources of supply. Such enhanced anti-counterfeiting cooperation activities at the industry level alongside our governments and authorities efforts have had positive results and should be expanded.

The WSC strongly encourages GAMS members to continue to implement appropriate measures (including domestic, bilateral and multilateral countermeasures) to deal with counterfeit semiconductors. The WSC welcomes GAMS members' efforts to share information on these countermeasures with each other's customs agencies and to continue to report the results of these countermeasures and enforcement activities at the forthcoming 2013 GAMS meeting. The WSC also welcomes the GAMS members agreement at the Berlin 2012 GAMS meeting to work with their customs and law enforcement authorities agencies to intensify the implementation of IPR enforcement measures, including information sharing activities, aimed at combatting the trafficking of counterfeit semiconductors. The WSC looks forward to continued coordination with the GAMS in stopping counterfeits at the borders and vigorously prosecuting those that make and distribute counterfeits, and will continue to cooperate with GAMS customs and enforcement agencies in these efforts.

(2) Patent Quality

The WSC has long recognized that to maximize the beneficial effect that intellectual property protection has on stimulating and sustaining innovation, patent offices around the world should implement examination procedures that result in the granting of the highest quality patents possible consistent with the statutory requirements of patentability. This is of paramount importance to the WSC because the semiconductor sector is one of the most innovative and patent-intensive sectors in the global economy.

The WSC supports the centralized collection of standardized statistics regarding the processing of patents by patent offices globally, as well as the adoption of a common set of metrics to assess patent examination quality at the patent offices, and urges the GAMS to take note of and support this goal. The WSC believes that the centralized collection and dissemination of such data would enable more refined assessment of international patent examination practices and thereby facilitate improvements in global patent quality. The WSC also recognizes the leading role that the World Intellectual Property Organization (WIPO) serves in facilitating the collection of important IP data internationally, and in promoting patent quality and harmonization of best practices in the IP area. The WSC is cooperating with the WIPO on issues such as patent quality and in particular the collection of data relevant

to monitoring patent quality. **To this end, the WSC continues to communicate with WIPO on these efforts and initiatives to improve patent quality, and the WSC requests GAMS to take note of and support this initiative.**

The WSC requests the patent quality subgroup of Patent and Trademark Offices (PTOs) who participate in the Meeting of the International Authorities (MIA) to consider expanding its scope to include quality metrics for patent examination. **The WSC requests GAMS to take note of and support this initiative.**

(3) Utility Model Patents

In the semiconductor industry, businesses are operated globally with products that require substantial investments in R&D, but often have short life cycle. To protect such investments and promote further innovation, WSC calls for international harmonization of the utility model laws which would bring legal certainty and predictability to the right holders and product developers and manufacturers worldwide. International harmonization of the utility model systems that ensure an accelerated grant framework as well as legitimacy of the system in many countries and regions is desired. **Like the ongoing efforts to harmonize the patent laws, WSC recommends that the GAMS take the initiative to globally harmonize the utility model laws, concerning proper subject matter, registration procedure, legal enforcement and relationship between utility models and patents.**

In support of the WSC goal of improving patent quality, the WSC believes there should be several changes to the utility model (UM) patents used in some jurisdictions. In some jurisdictions UM patents provide the same rights as utility or invention patents, but have a lower standard of patentability. This results in protection for inventions with a lower level of inventiveness. As a result, these patents have the effect of creating a potential harassment tool used against semiconductor and other innovative companies by (1) threatening to stop the shipment of products through injunctive relief, and (2) subjecting infringers of UMPs to damage awards at levels equal to those awarded for regular patents, having a higher level of inventiveness. Also, in some jurisdictions UM patents may be asserted before a validity determination, shifting the burden of proof and cost to the alleged infringer to prove invalidity. However, this latter problem does not exist in those jurisdictions that require a validity determination at the cost of the holder of the UM patent. **The WSC recommends that GAMS efforts to harmonize UM law should carefully consider these concerns. The WSC will provide more specific substantive and procedural recommendations in the future.**

(4) Trade Secrets

Trade secrets represent core business assets in the semiconductor industry. Trade secret protection affects the competitiveness of companies, and misappropriation can have a critical detrimental impact on future revenue and profit. Accordingly, strong trade secret protection promotes private investment and innovation, and weak protection has the opposite effect. Inadequate trade secret protection can also inhibit free trade. The WSC notes that the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) calls on members to provide for the protection of "undisclosed information" that is secret and has commercial value, and to protect such information from disclosure, acquisition or use in a manner contrary to "honest commercial practices."

The WSC believes that theft of trade secrets is a growing problem, and present protection through existing means – unfair competition law, employment law, and other branches of law – is often inadequate. There are difficulties in enforcing trade secrets especially as related to gathering evidence of theft. Unlike other areas of IP, key evidence of misappropriation is not always readily available, and the burden is on the rights holder to produce such evidence, particularly with respect to inevitable disclosure when an employee departs one entity to work for a competitor. There are also difficulties in enforcing trade secrets. Enforcement against the third-party inducer (the hiring entity of a departed employee) is often difficult and remedies against the ex-employee are often inadequate. Also, sanctions are often lenient and thus do not act as a deterrent. The cloud computing environment may make trade secret protection even more unpredictable.

The WSC believes that stronger global trade secret protection is an important objective. The WSC calls upon the GAMS to advocate for enhanced trade secret protections in trade agreements and domestic laws.

(5) Non-Practicing Entities (NPEs)

The WSC takes note of concerns over the increasing activity of Non-Practicing Entities (sometimes described as Patent Assertion Entities) and their impact on the semiconductor industry and other high technology industries. The WSC welcomes the recent inquiries on this subject being conducted by the U.S. Department of Justice and Federal Trade Commission, as well as the upcoming study to be released by the U.S. General Accountability Office, so that a more complete understanding of the nature and impact of NPEs/PAEs on innovation and protection of IP rights may be obtained. The WSC intends to evaluate carefully the results of these government investigations, along with the growing body of academic research on this issue and to determine what actions are appropriate by industry and governments/authorities to address abusive litigation behaviors by all patent owners, including NPEs/PAEs. To this end, the WSC has adopted a roadmap for future action.

Regional Stimulus

While the WSC supports appropriate stimulus measures by the respective governments and authorities, WSC confirms its views that government actions should be guided by market principles and avoid adoption of protectionist or discriminatory measures. WSC confirms that competitiveness of companies and their products, not the interventions of governments and authorities, should be the principal determinant of industrial success and international trade, and that assistance should be provided in a market-oriented fashion. Per the request of the GAMS, the WSC will continue to discuss and endeavor to achieve a better understanding of key concepts and questions in this area, in particular on notification and consultation procedures.

Approval of Joint Statement and Approval of Recommendations to Governments/Authorities

The results of today's meeting will be submitted by representatives of WSC members to their respective governments/authorities for consideration at the annual meeting of WSC representatives with the Governments/Authorities Meeting on Semiconductors (GAMS) to be held in September 2013 in Jeju, Korea.

Next Meeting

The next meeting of the WSC will be hosted by the Semiconductor Industry Association in Chinese Taipei, in Hsinchu, on the 22nd of May 2014.

Key Documents and WSC Website:

All key documents related to the WSC can be found on the WSC website, located at: http://www.semiconductorcouncil.org

Information on WSC member associations can be found on the following websites:

Semiconductor Industry Association in Europe:	*http://www.eeca.eu*
Semiconductor Industry Association in China:	*http://www.csia.net.cn*
Semiconductor Industry Association in Chinese Taipei:	*http://www.tsia.org.tw*
Semiconductor Industry Association in Japan:	*http://semicon.jeita.or.jp/en/*
Semiconductor Industry Association in Korea:	*http://www.ksia.or.kr*
Semiconductor Industry Association in the US:	*http://www.semiconductors.org*

Annex 1: WSC Encryption Principles

Lisbon, 23 May 2013

WSC Encryption Principles

Background

The World Semiconductor Council (WSC)[1] recognizes that it is important to ensure that markets will be open and free from any discrimination. The competitiveness of companies and their products should be the principal determinant of industrial success and international trade. Governments and authorities should, therefore, ensure full intellectual property protection, full transparency of government policies and regulations, non-discrimination for foreign products in all markets and removal of unreasonable burdens on world commerce.

Semiconductors are overwhelmingly used as building blocks for computers, mobile phones, handheld devices and many other widely available commercial information and communications technology (ICT) products and systems. The functionality of semiconductors constantly evolves in order to meet consumer demands, which have increasingly called for product features such as encryption that better protect security and privacy in and across a variety of ICT products and systems. The use of encryption thus is not limited to government and military applications but has become widespread, given its ability to help safeguard the integrity and confidentiality of information. As a result, the great majority of applications of encryption involve every day commercial products which are commonly used and traded in the global marketplace.

Indeed, nearly all ICT products contain encryption to prevent data loss, ensure security and integrity of data (e.g. personal data or in communication) and allow for valuable commercial applications such as mobile payments, e-health, e-passports. Although encryption is a secondary feature for widely available ICT products such as garage door openers, mobile phones, ATM machines, internet browsers, DVD players and other common products, consumers demand it in their technological devices to ensure their communications are secure and private. Encryption is now part of the foundation of the internet and e-commerce developments. In many of these applications encryption functionality (besides other functions) is provided by semiconductors.

Regulations that directly or indirectly favor specific technologies, limit market access or lead to forced transfer of intellectual property stifle domestic innovation and, in the case of encryption, prevent access to the strongest available security technologies in the market place, resulting in less secure products. Both global collaboration and open markets for commercial encryption technologies should therefore be strongly encouraged as they inherently promote more secure and innovative ICT products.

[1] The WSC represents global leaders in the manufacturing and design of semiconductors and is comprised of the Semiconductor Industry Associations in China, Chinese Taipei, Europe, Japan, Korea, the United States.

Very few countries have regulations governing the importation and use of encryption. The global trend is toward further de-regulation for mass marketed or widely available IT items in recognition of their widespread use and very limited value in regulating the commercial market.

Encryption Principles

Encryption regulations shall not be used for the purposes of limiting market access for foreign products. To prevent unnecessary restrictions on trade, products with cryptographic capabilities that are, or will be, widely available and deployed -- whether as a result of sales through normal or common retail channels, OEM sales or other means of distribution -- should not be regulated as a general matter except in narrow and justifiable circumstances (e.g., resulting out of international conventions such as export controls to prevent proliferation of munitions and weapons of mass destruction to targeted countries or targeted end users). The WSC Principles make it clear that generally there should be no regulation of cryptographic capabilities in widely available products used in the domestic commercial market because mandating or favoring specific encryption technologies will reduce, not increase, security and also raise product costs.

To the extent that encryption regulation is necessary, the WSC recommends the following practices:

- Regulations should not directly or indirectly favor specific technologies, limit market access or lead to forced transfer of intellectual property to avoid stifling domestic innovation and, in the case of encryption, preventing access to the strongest available security technologies in the market place, resulting in less secure products.
- The WSC opposes technology mandates, including any that involve encryption use in domestic commercial markets, because (i) the significant impact they can have on society and our industry; and (ii) such mandates often become outdated as technologies quickly evolve, and thus they create significant interoperability issues.
- Any regulatory requirements must be applied on a non-discriminatory basis and in a manner no less favorable than that granted to domestic producers (consistent with Articles I and III of GATT 1994), and respect intellectual property rights (consistent with Articles 28 and 31 of TRIPS 1994).
- Global collaboration and open markets for commercial encryption technologies should be strongly encouraged as both inherently promote more secure and innovative ICT products.
- Regulatory procedures related to the notification, evaluation, approval, or licensing of goods containing encryption technology, and the process for exempting goods, should be transparent, predictable and consistent with international norms and practices. They should not impose unreasonable or burdensome requirements on such goods. JSTC shall discuss international norms and practices.

The WSC believes that adhering to these practices will allow innovation and the digital economy to flourish, and ensure that the strongest available security technologies will prevail and be available in all the market places to the benefits of all users of commercial products.

Clarifications

In regard to the use of international standards, norms and practices as required by one of the WSC Encryption Principles, the WSC provides the following clarification and statement:

- Definition of International

  The term international as a word means involvement of, interaction between or encompassing more than one nation, or generally reaching beyond national boundaries. For example, international law, which is applied by more than one country over the world, and international language which is a language spoken by residents of more than one country.

- International Standards

  International standards are standards developed by international standards organizations, which are open to all Members of the World Trade Organization or to most countries of the world. Notable examples of international standards bodies are the International Organization for Standardization (ISO) or the International Electrotechnical Commission (IEC). WSC supports and calls upon government authorities to follow the principles and procedures which have been decided by the WTO Technical Barriers to Trade Committee,[2] when international standards are elaborated by its members.

Examples of security related international standards, norms and practices are:

- Common Criteria (international standard). The Common Criteria for Information Technology Security Evaluation (abbreviated as Common Criteria or CC) is an international standard (ISO/IEC 15408) for computer security certification.

- All testing laboratories must comply with ISO 17025, and certification bodies will normally be approved against either ISO/IEC Guide 65 or BS EN 45011.

- Mutual Recognition Agreement (Plurilateral agreement). As well as the Common Criteria standard, there is also a sub-treaty level Common Criteria MRA (Mutual Recognition Agreement), whereby each party thereto recognizes evaluations against the Common Criteria standard done by other parties. Originally signed in 1998 by Canada, France, Germany, the United Kingdom and the United States, Australia and New Zealand joined 1999, followed by Finland, Greece, Israel, Italy, the Netherlands, Norway and Spain in 2000. The Agreement has since been renamed Common Criteria Recognition Arrangement (CCRA) and membership continues to expand.

The WSC Encryption Principles strongly encourage the use of global or international standards, including normative algorithms, as essential to avoid fracturing the global digital infrastructure and creating unnecessary obstacles to trade. Because security functions are growing in global ICT products and applications, interoperability has become more critical and thus international security standards such as Common Criteria for Information Technology Security Evaluation will increase in importance.

[2] Source: Second Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade, Annex 4, G/TBT/g, WTO Committee on Technical Barriers to Trade (13th November 2000)

These security standards often define encryption functions for protection of information and data, as well as specify cryptographic algorithms that are developed or identified for the target application areas. Using standard cryptography as part of common protocols and specifying encryption algorithms to be used (along with making provisions for handling key management, etc.), enables an infrastructure to achieve global interoperability between security functions in products and systems. Whenever possible, the WSC will continue to support greater adoption of international security standards, rather than and instead of technology mandates.

General WSC Recommendations to Governments and Authorities

WSC encourages governments and authorities to advocate for transparency in any additional regulatory developments concerning the use of encryption in domestic commercial markets. Such transparency should include information on proposed testing and conformity assessments related to those regulatory developments. Testing and conformity assessments can create significant market barriers if they are not transparent, non-discriminatory, fully protective of intellectual property rights, based on international standards and done by qualified independent laboratories.

The availability of relevant information gives governments and authorities an option to weigh in on and shape the direction of potential regulatory measures and any implementing rules concerning encryption, which could impact trade in semiconductors and contradict WSC Principles, before those measures and rules are finalized. Indeed, as we noted in the WSC Principles, "The WSC requests the governments and authorities to continue their efforts to ensure that all WTO members observe the principles set forth above." Governments and authorities' efforts to increase transparency and help our industry ensure compliance with the WSC Principles going forward will help keep markets open and allow innovation and the digital economy to flourish.

Endorsement of WSC Encryption Principles by Governments and Authorities

The governments and authorities (GAMS) representing each of the six current WSC regions agreed to encourage all GAMS members and governments in general to observe the Encryption Principles that the WSC has developed since 2009 and to which GAMS members have committed at their annual government and authorities meeting on semiconductors in 2012. The GAMS acknowledged that the WSC Encryption Principles make it clear that in order to avoid negative impact on the industry's competitiveness, it is important to prevent unnecessary restrictions to trade, and that therefore, commercial products with cryptographic capabilities which are, or will be, widely available and deployed in the respective domestic markets should as a general matter not be regulated.

As recommended by the WSC, the GAMS also agreed to helping ensure open global markets that are free from discrimination by encouraging the adoption of international voluntary standards and norms, including algorithms, as essential to avoid fracturing the global digital infrastructure and creating unnecessary obstacles to trade. In the limited circumstances where regulation may be necessary, the GAMS regions agreed to advocate for transparency and non-discrimination in any regulatory requirements, either in force or being developed concerning encryption in semiconductors used in domestic commercial markets, including the conformity assessment procedures used to demonstrate compliance with those requirements.

Annex ll: WSC Innovation Policy Principles

Lisbon, 23rd May 2013

WSC Innovation Policy Principles

In 2006 the World Semiconductor Council (WSC)[1] re-confirmed, as a founding principle, "the importance of ensuring that markets be open and free from discrimination, and that the competitiveness of companies and their products be the principal determinant of industrial success and international trade. Governments and authorities should, therefore, ensure full intellectual property protection, full transparency of government policies and regulations, non-discrimination for foreign products in all markets, a tariff- and barrier-free global environment for semiconductor products, an end to investment or other regulatory restrictions tied to technology transfer requirements, and removal of unreasonable burdens on world commerce."

From the digital world to the green economy, semiconductors act as the building blocks of products and services, which provide key innovative solutions in the home, in the office and in society in general. Encouraging innovation - the process by which individuals and businesses generate and commercialize new ideas - is critical to the current and future prosperity of international economies.

Representing a global and highly innovative industry with high and increasing R&D/Sales ratio, the WSC strongly supports a further elaboration on 2006 WSC Statement, with the aim to ensure not only open markets and global trade, but an innovative ecosystem as well. In line with efforts by various international organizations to promote innovation policy principles to guide governments on how to help industry generate greater innovation without distorting trade and impeding market access, the WSC respectfully requests GAMS to agree and endorse following principles:

1. Develop and maintain an open economy that allows the flow of capital, people, ideas, goods, and services across borders in ways that ensure competition, enhance productivity, and foster growth;

2. Enable the development and adoption of new and innovative business models by maintaining regulatory systems, including licensing regimes, that support competitive markets;

3. Maintain regulatory systems that are transparent and non-discriminatory, provide due process, and include opportunities for early and meaningful stakeholder engagement, consistent with the WTO principles and international best practices;

4. Encourage the use and participation in the development of voluntary, market-led, global and international standards that promote innovation, competition, and create global markets for products and services;

[1] The WSC represents global leaders in the manufacturing and design of semiconductors and is comprised of the Semiconductor Industry Associations in China, Chinese Taipei, Europe, Japan, Korea, the United States.

5. Ensure that technical regulations and requirements serve legitimate public policy objectives (e.g., health, security, safety, and environment), and do not serve to stifle innovation, limit access to technologies, reduce competition, or create unnecessary trade barriers;

6. Provide effective protection and enforcement of intellectual property rights to create a climate in which innovators, including small and medium-sized businesses, are encouraged to invest in the research, development, and commercialization of leading-edge technologies and promote the dissemination of technologies and services throughout the economies;

7. Refrain from adopting or maintaining measures that make the location of the development or ownership of intellectual property a condition for eligibility for government procurement preferences, without prejudice to economies' positions in the WTO;

8. Ensure that the terms and conditions of transfer of technology, production processes, and other proprietary information are left to the agreement between individual enterprises, consistent with WTO rules;

9. Promote government procurement policies that are transparent, non-discriminatory, openly pro-competitive, and performance-based, consistent with WTO Principles on Government Procurement;

10. Implement information and communication technology policies, including those related to data privacy and security, in such a way as to minimize the trade-distorting impact of and promote greater global alignment in those policies;

11. Effectively and efficiently manage spectrum so as to enable innovative use of this resource, avoiding undue limitations on applications and technologies that utilize spectrum, other than as necessary to mitigate harmful interference; and

12. Encourage cooperation and interaction among researchers and laboratories, including through joint research and development, in order to accelerate innovations that can be applied to address the common economic challenges.

* Note: The 2013 WSC Statement on Trade and Innovation was adapted from the APEC Innovation Principles.

Annex lll: WSC Trade Facilitation Principles

Lisbon, 23 May 2013

WSC Trade Facilitation Principles

I. The World Semiconductor Council (WSC)[1] affirms the key importance of trade facilitation in achieving free and open markets, reducing barriers to trade, and improving business conditions that provide significant benefits to governments, industry, and consumers alike. Recognizing the trade facilitation work undertaken by other organizations, including the World Trade Organization (WTO), and with the aim to enhance trade facilitation initiatives worldwide, the WSC urges government authorities to ensure that such efforts embody the following principles:

a. Streamlined release of goods, including submission/processing of customs information prior to arrival at a port of entry; allowing release of goods prior to final disposition on duties/taxes/fees; permitting release without requiring temporary transfers to a warehouse or other facility; providing for release times that are as short as possible (e.g., 24 hour service); and confining the release process solely to matters of compliance with customs rules.

b. Deployment of automated (paperless) systems and procedures that expedite release of goods and processing of customs information, foster consistency with international IT standards, ensure system interoperability/compatibility, and embrace common harmonized worldwide data elements and related processes established by the WCO to be reused by worldwide customs authorities.

c. Development of a single window that enables traders to submit all customs or other information required by a country for the import, export or transit of goods.

d. Customs capacity that supports a trader's around-the-clock shipping and receiving operations every day of the year (e.g.,"24x7x365"), including ensuring efficient bonded zone and bond air procedures

e. Use of risk management procedures to enable customs authorities to focus import examination activities principally on high risk goods, while allowing simplified procedures for low risk goods.

f. Avoidance of formalities and documentation requirements for the import, export and transit of goods where: (1) the reasons for those requirements no longer exist or can be addressed in a less trade restrictive manner; and/or (2) the application of those requirements otherwise represents an unnecessary obstacle to trade. This includes formalities and document requirements related to non-preferential rules of origin and overall product marking/labeling requirements that present overly complex burdens or obstacles to trade.

[1] The WSC represents global leaders in the manufacturing and design of semiconductors and is comprised of the Semiconductor Industry Associations in China, Chinese Taipei, Europe, Japan, Korea, and the United States.

g. Availability of "management by account" programs that enable customs authorities to flexibly tailor administration of customs rules related to classification, value, admissibility, etc. to a trader's particular business practices.

h. Development of clear procedures and provisions to enhance transparency, non-discrimination and impartiality, including procedures to avoid conflicts of interest in the assessment and collection of penalties and duties. These procedures may include the establishment of an office, reporting to the Finance, Justice, or equivalent Ministry, to receive allegations from importers or exporters about conflicts of interest by Customs port officers, allowing anonymous whistleblowing when allowed by local law, and publicizing the office to importers and exporters."

i. Establishing reasonable compliance and enforcement practices, namely:

- Consistent interpretation and enforcement of customs laws and regulations to avoid unnecessary burdens and liabilities, including elimination of vague requirements.
- Implementation of compliance/enforcement practices which include penalty mitigation guidelines that comprehend an importer's record of compliance, the rigor of its internal compliance programs, and importer ability to make voluntary disclosure of customs-related problems.
- Enablement of enhanced trade facilitation measures for traders that become authorized operators. This means providing clear global benefits for trusted traders that result in faster supply chain processes and mutual recognition of related border procedures on a multilateral basis. Key to this objective are reduced inspection and documentary requirements, including establishing a single customs declaration for a given period.

II. The WSC supports national, regional and multilateral trade facilitation efforts that embrace these principles.

III. The WSC supports conclusion of a Trade Facilitation Agreement in the World Trade Organization this year, and urges negotiators to seek an outcome that embodies the above principles.