ALLIANCE FOR CLEAN TECHNOLOGY INNOVATION

Submission in response to the Productivity Commission's Issues Paper and Inquiry into compulsory licensing of patents (August 2012)

September 28, 2012

INTRODUCTION

The Alliance for Clean Technology Innovation (ACTI) is a coalition of world leaders in advanced manufacturing, clean energy and lower carbon emission products and services. As private companies, we have invested billions of dollars in innovation and long-term sustainable and more energy-efficient technologies and solutions. We believe that innovation-driven manufacturing industries, as well as resource efficiency, green growth and sustainable development policies, if structured wisely, can offer win-win opportunities to improve the economic growth and environmental prospects of countries around the world. Many of our members, moreover, are active and have made substantial investments in a range of other technology and innovative sectors as well, including medical devices and diagnostics technology, information technology, and transportation, energy, and consumer products.

ACTI is a broad coalition uniting some of the world's leading advanced industrial and technology companies. Our members include General Electric, Philips, Siemens, 3M, Air Liquide, Dupont, ExxonMobil, and Vestas. Several of these companies, as you know, are very active in Australia – as employers, and by investing in and serving the needs of our Australian suppliers, business partners, and consumers.

We welcome the opportunity to comment on the Productivity Commission's August 2012 Issues Paper and Inquiry into compulsory licensing of patents, and the Commission's careful review of this issue, in light of global patent and IPR rules, and the broader policy and legal debate against which these issues must be viewed.

Without going into the specific detail of each of the questions raised in the Issues Paper, we believe it is important that, as the Commission reviews Australia's compulsory licensing provisions and their actual operation, in law and in fact, it keep in mind the key points outlined below. Each of these suggests clearly that compulsory licensing is a tool that should be used in exceptional cases only, on a very narrow case-by-case basis, and with extreme caution. Any

widening or "rebalancing" of existing patent and compulsory licensing provisions carries a high risk of undermining critical incentives for Australian industry to innovate, and the stability and predictability needed for companies and economies to thrive and to invest in further technological developments, manufacturing, jobs and growth in Australia and beyond.

Any amendments, changes or clarifications, of Australia's patent and compulsory licensing regime should also be seen in the context of a number of important global developments. Worldwide, we are seeing concerted efforts by a number of countries, as well as several well-funded international NGOs, to discredit Intellectual Property Rights (IPR) and erode existing levels of IPR protection, as reflected in the WTO TRIPS Agreement and elsewhere. Efforts to weaken or otherwise "rebalance" IPR are taking place in a range of international fora (UNFCCC climate negotiations, World Health Organization, WTO, etc.) where IP detractors are trying to get language adopted that references and allows for certain IP "flexibilities". They are also occurring domestically, in countries such as India, China, Brazil, and elsewhere, and through various forms of compulsory licensing, IPR and technology misappropriation, and otherwise. Any amendments, changes or clarifications of Australia's patent laws, or any other Australian government actions or initiatives should be carefully considered against this background. Any actions that suggest a widening or broader availability of compulsory licensing provisions, or that encourages their use, will be seized upon by IPR detractors globally and, as such, will harm Australian trade and industry interests, as well as its economy, domestically and abroad, and will effectively undermine the TRIPS Agreement and other globally agreed and carefully balanced IPR regimes.

I. PUBLIC POLICY AND THE IMPORTANCE OF PATENT AND IPR PROTECTION

Australia today faces a range of global, regional and domestic public policy threats. Climate change, the risk of natural disasters, public health, and national, regional, and global security issues are just a few that come to mind. Addressing these and others requires continued investment in technology, innovation and the dissemination, commercialization and use of new and innovative technology, in Australia and abroad. The sheer volume of investment needed to achieve global climate change objectives, for example, and to enhance resource and energy efficiency, is massive. Estimates vary but hundreds of billions, if not trillions of dollars, must be spent. For Australia, moreover, it will be critical to maintain and expand its place in the world and in the Asia-Pacific region, as a technology and innovation leader, so as to continue creating and maintaining high-value add jobs and industrial development and growth. This is true in the energy and natural resources sectors, but also more broadly and for advanced manufacturing and industrial sectors as well.

The private sector is a critical partner. Leveraging private sector investment can increase technology development, dissemination and use, reduce the overall cost of doing so and, critically, the overall investments that governments need to make. In energy sectors, for example, nearly $25 billion (USD) was spent on technology R&D in 2009 alone; sixty percent was

privately financed.[1] Among OECD countries, private companies account for almost two-thirds of R&D investment.[2]

Patents, trade secrets, and other forms of IPR are critical. Patents allow innovators to capture the value of R&D activity, stimulating investment in innovation that might not otherwise occur. They provide companies such as ours a means to distinguish our products from those of our competitors and offer the commercial and economic incentives and assurances for firms and innovators to share technology, know-how and the ability to use it, through trade, foreign direct investment, Joint Ventures, commercial cooperation, and a range of other, market- and commercially-based actions.[3]

Intellectual Property protection also enables the development of local supply chains, globally integrated innovation networks, and the sharing and transferring of good business practices and technological know-how, each of which IPR helps to stimulate and secure. By requiring, and incentivizing the publication of key research results and technological data through the patent system, IP is also an important enabler of further innovation and the development of new, derived products and technologies.[4]

Research supports this view of patents in particular, and IPR in general, and it confirms the substantial benefits that patent and IPR protection brings. A study by the UNFCCC – for example – identifies ten dimensions of enabling the internal diffusion of environmentally sound technologies and the transfer of such technologies to industry and consumers. The list includes adequate "national systems of innovation" (e.g., technology development boards, research institutes, cooperation between domestic firms); "human and institutional capacity" (e.g., technical training and education, awareness raising, and demonstration projects); a "macro-economic policy framework" and "sustainable markets" (e.g., energy sector reforms, liberalization policies, preferential government procurement and subsidies to suppliers); and a variety of legal-institutional requirements such as transparency, regulation ***and strengthened Intellectual Property laws***.[5] Other studies have confirmed clearly that IPR protection encourages and enables technology innovation and provides important incentives for innovators

[1] UNEP, SEFI and New Energy Finance, "Global trends in Sustainable Energy Investment 2010," p. 25 based on Figure 20.
[2] Based on 2010 figures. OECD, Main Science and Technology Indicators, 2010/2", 2011, p. 18.
[3] As to the positive role of IPR, see, e.g., UNFCCC, "Enabling Environments for Technology Transfer", 4 June 2003; Richard Newell, "International Climate Technology Strategies," Discussion Paper 08-12, Harvard Project on International Climate Agreements, October 2008, p. 25; Branstetter, Fishman, Foley, "Do Stronger Intellectual Property Rights increase International Technology Transfer? Empirical Evidence from U.S. Firm-Level Panel Data", July 2005, pp. 4-25; Walter G. Park, Douglas C. Lippoldt, "Technology Transfer and the Economic Implications of the Strengthening of Intellectual Property Rights in Developing Countries", OECD Trade Policy Working paper No. 62, 25 January 2008, pp. 27-29.
[4] IP is also critical to the dissemination and sharing of clean technology around the world. The publication of clean technology patent applications, for example, acts as both notice of unperfected rights and a catalyst for deals, whether licensing, acquisition or other. Those entities interested in a particular technology domain are generally closely monitoring publication activity as it provides valuable data about who is doing what and how to achieve the next step in the technological evolution. As such, particularly in today's world of online patent databases, the publication of patent applications 'rationalizes' the flow of technology by ensuring it is directed towards entities that are best able to realize their commercial potential.
[5] UNFCCC, "Enabling Environments for Technology Transfer", 4 June 2003.

and investors to develop new solutions and continue the innovative product and technology cycle.[6]

Patent protection specifically and IPR generally are pre-requisites for investment in technology.[7] Many firms simply will not commit R&D funding without effective protection in place.[8] Robust IPR brings clarity and certainty to the market. Predictable and meaningful IPR protection encourages and enables firms to disseminate technology more quickly because it provides a means to recoup investments. It enables the introduction of technology to new markets, and partnering with the individuals and institutions that have the best ideas and access to resources.[9] By contrast, there is very little, if any, evidence of situations where patents actually acted as a barrier to innovation or the diffusion of new or existing technologies alike.

II. SOCIAL IMPACT AND SOCIETAL BENEFITS OF PATENTS AND OTHER FORMS OF IPR PROTECTION

The benefits from IPR protection go not only to innovators and industry. Patents and IPR benefit society at large and have a substantial positive social impact. They create and sustain high-value added, well-paying technology, engineering and innovation-focused jobs; keep a country's economy at the cutting edge of new products, services and developments; and, last but not least, enable high-value, technology driven businesses to bring in more government revenue, through taxes and their effect on the overall welfare of and wellbeing of the countries in which they operate and are present.

GE, for example, which is one of our member companies, employs over 5600 people in Australia and New Zealand combined. In August, it launched an AU$10 Million ecomagination challenge for "Low Carbon Solutions" in the region (see http://challenge.ecomagination.com/anz). GE also recently launched a new division called GE Mining, part of our Transportation business, based in Brisbane.

III. THE LIMITED UTILITY OF COMPULSORY LICENSING AS A PUBLIC POLICY TOOL

It is also important to consider the object of the Commission's study in light of the actual (lack of) effectiveness of compulsory licensing or other forms of IPR weakening in achieving their purported public policy goals. Compulsory licensing, if anything, is a very crude and imprecise tool. Most of today's technologies are complex, multifaceted, and rely on numerous patents and other forms of technical knowhow and ability. Often, just to install a technology, or to operate it,

[6] See, in general, Daniel K.N. Johnson, Kristina M. Lybecker, "Innovating for an Uncertain Market: A Literature Review of the Constraints on Environmental Innovation", Colorado College Working Paper 2009-06, July 2009.
[7] Johnson DKN, Lybecker KM. "Innovating for an Uncertain Market: A literature review of the constraints on environmental innovation" Colorado College Working Paper 2009-06. July 2009. (Johnson 2009), pg. 15, 21
[8] UNEP/EPO/ICTSD. "Patents and Clean Energy bridging the gap between evidence and policy, Final Report." 2010. (UNEP/EPO/ICTSD),pg. 58; Johnson DKN, Lybecker KM. "Innovating for an Uncertain Market: A literature review of the constraints on environmental innovation" Colorado College Working Paper 2009-06. July 2009. (Johnson 2009), pg. 12
[9] World Bank."Global Economic Prospects: Technology Diffusion in the Developing World" 2008., pg. 121; *See also* Copenhagen Economics. "Are IPR a Barrier to the Transfer of Climate Change Technology?" 19 January 2009. (Copenhagen Economics), pg. 29; See generally Johnson 2009; Atun R, Harvey I, Wild J. "Innovation, Patents and Economic Growth" Imperial College Discussion Paper 5, 2006. pg. 3

will require complex technical ability and knowledge. One implication of this is that the cost of a technology, and its availability for use, is not just a function of a single, or even a handful of patents. The fact that a particular technology is patented, in other words, is unlikely to be the cause of any lack of availability, refusal to supply, or a failure to "work" the patent in Australia in some other way.

A compulsory license in general, even if it gives access to a particular patent, may not provide access to the technology as a whole, let alone the ability to install it, operate it, derive its full benefits, and do so in a reliable and sustainable way. To achieve that, other market-based and fully commercial mechanisms are much more appropriate and substantially more effective. Licensing and commercial partnerships; domestic and foreign direct investment in technologies, innovation and their broader dissemination, deployment and use; government and other public and public-private investments in technology-related infrastructure, enabling environments, effective regulatory and legal environments (that are predictable, stable and encourage innovation and technology use); and education, of the general public, consumers, users and technology developers, engineers and suppliers are some of the key examples to this effect.

IV. THE GLOBAL THREAT AGAINST PATENTS AND IPR PROTECTION

It is important not to lose out of sight Australia's role in the world, and the global backdrop against which the current Inquiry and review occurs. Australia, like most countries in the world, is of course bound by a number of very specific bilateral and multilateral international agreements. Intellectual Property Rights in general, as well as patents and compulsory licensing, are exhaustively regulated in the WTO Agreement on Trade-Related Intellectual Property Rights (TRIPS), as well as a range of other existing international IPR agreements which impose a carefully negotiated and well-balanced IPR regime. Their provisions, on compulsory licensing and the rights of patent and IPR holders, must be fully observed, as recognized in the Commission's Issues Paper.

In the context of global negotiations, however, concerning climate change and clean or "green" technologies and products (at the UNFCCC, and the WTO), on public health (at the WHO), and on IPR in general (at WIPO, the WTO, and elsewhere), a limited number of countries and well-funded NGOs, demands that IPR in general be weakened or "rebalanced" because of an alleged "barrier" it represents to technology dissemination and diffusion. As discussed above, however, nothing is in fact farther from the truth and the positions taken by the small group of countries involved can be understood only as direct extensions of their own domestic and international industrial policies and the industrial policy and trade objectives that they have decided to pursue (indigenous innovation, building certain strategic industry sectors, etc.). It is important for the Commission to recognise this and to take fully into account the implications of this broader global context for its Inquiry and further review of the issue.

Any broadening of the scope for compulsory licensing, or any signal that Australia encourages requests or applications for compulsory licensing, at this stage, would send the exact wrong signal to Australia's trading and investment partners, industry, and the technology and advanced manufacturing sectors as a whole. This is not the time to weaken or put into question patents and other key advanced manufacturing IPR rights; but rather to support them and protect them with a

unified and closely coordinated voice, at the WTO, in the UNFCCC, at WIPO, the WHO, the OECD, and domestically, in Australia, and in the rest of the world.

V. PRACTICAL RECOMMENDATIONS IN RESPONSE TO THE COMMISSION'S ISSUES PAPER

All of the points outlined above lead to one and the same conclusion: compulsory licensing is and should remain a very targeted and narrow tool, to be used only in highly exceptional circumstances where doing so is necessary, and would actually result in a positive outcome (and not simply support a domestic industry or industrial policy objective). Any imposition or exercise of a compulsory license, moreover, must occur in full consistency with existing international IPR rules, as laid down in the TRIPS Agreement in particular. Thus, for example, it is only permissible if reasonable prior efforts were made to obtain authorization from the right holder on reasonable commercial terms and conditions (unless there is a case of national emergency or other circumstances of extreme urgency or in cases of public non-commercial use); the scope and duration must be limited to the legitimate purpose pursued; and the right holder must be paid adequate remuneration, taking into account the actual economic value of the authorization.[10]

More specifically, this signifies that very little if any change to Australia's existing patent and compulsory licensing regime is needed or warranted. It is very difficult, for example, to formulate a specific statement of objectives into the Patents Act (Issues Paper, p. 25), and if it is done, any such statement should be formulated in such a way as to fully support the narrow and case-by-case interpretation of compulsory licensing provisions that we laid out above. Providing further statutory guidance on compulsory licensing terms is of course always a possibility, although we note that the current text – as cited at p. 26 of the Issues Paper – appears to closely track the specific provisions provided for in the WTO TRIPS Agreement. Consolidation of the various types of non-voluntary patent access provided for under the Patent Act is, in our view, an option – although again, real care should be taken to ensure that any revisions or amendments do not result in a broadening or widening of the opportunities to compulsory license right holders' patents, at the expense of innovation, technology development and dissemination, and the Australian economy and industry as a whole.

In general, and this is relevant both to the Commission's specific questions pertaining to dispute resolution and awareness raising measures (Issues Paper, pp. 28-29), we believe that no further action or reform is needed and that, indeed, any such reform or active awareness raising measures could have negative and unwanted consequences that would go directly against Australia's overall public policy, economic and social interest. Indeed, and to reiterate, any broadening of the scope for compulsory licensing, or any signal that Australia encourages requests or applications for compulsory licensing (which is at least one possible way to read awareness raising measures and alterations in the applicable dispute resolution system), would send the exact wrong signal to Australia's trading and investment partners, industry, and the technology and advanced manufacturing sectors as a whole. This is not the time to weaken or

[10] These, of course, are only some of the very specific requirements Article 31 of the TRIPS Agreement imposes. All requirements must be met and all conditions laid out in the TRIPS Agreement and other international treaties by which Australia is bound must be met.

put into question patents and other key advanced manufacturing IPR rights; but rather to support them and protect them with a unified and closely coordinated voice.

CONCLUSION

As industry participants and active users of the Australian and worldwide patent and IPR systems, we welcome the Productivity Commission's careful review of patent and IPR issues in general and the issue of compulsory licensing in particular. The Commission's review is highly topical and involves important public policy, economic and commercial interests. All of the important interests, in our view, are aligned. Australia's patent and compulsory licensing regime strikes a careful balance between innovation, technology and the rights of patent and other IPR rights holders on the one hand, and those rare instances where the full exercise of a patent right (or the lack of it) is problematic on the other. There is no need to change or alter that balance in any way and to do so would play right into the hands of IPR detractors around the world who will seize upon it for their own industrial policy and commercial benefit alone.

We would like to extend our offer of ongoing support to the Commission's further work in this area. We thank the Commission again for this opportunity to express our views and participate in its Inquiry, and are of course available for any further discussion or debate.

* * *

About the Alliance for Clean Technology Innovation

The Alliance for Clean Technology Innovation (ACTI) is a coalition of world leaders in advanced manufacturing, clean energy and lower emission products and services. As private companies, we have invested billions of dollars in innovation and long-term sustainable and more energy-efficient technologies and solutions. ACTI members include 3M, AirLiquide, Dupont, ExxonMobil, General Electric, Philips, Siemens, and Vestas.

For more information about ACTI or any of the issues discussed in this paper, please contact Thaddeus Burns at General Electric (thaddeus.burns@ge.com) or Patricia Sherman at Siemens (patricia.sherman@siemens.com).