



ISSUE NO. 14 - OCTOBER 2024

The new era of industrial policy in Asia-Pacific: from SDG assessment to policy solutions

Ashraf Mishrif

Sultan Qaboos University

Rajah Rasiah

University of Malaya

Carolina Donnelly & Nobuya Haraguchi

UNIDO

Abstract

The Asia-Pacific region has demonstrated considerable progress toward achieving the Sustainable Development Goals (SDGs), particularly in areas such as access to energy and industrial production. However, challenges remain in the adoption of clean energy, employment, and innovation, which hinder the region's path toward fully realizing its SDG targets. The dynamic and diverse landscape of Asia-Pacific requires tailored approaches to bridge these gaps, with modern industrial policies playing a key role in driving progress. This policy brief highlights how Asia-Pacific countries can leverage opportunities in green energy, digitalization, regional integration, and demographic changes to accelerate progress toward achieving SDG 7, 8, and 9. It emphasizes the importance of targeted investments in renewable energy technology, digital infrastructure, and skill development to overcome current challenges and unlock sustainable industrial growth. Drawing on specific case studies from the region, the brief underscores the importance of strategic industrial policy interventions, stakeholder collaboration, and a flexible, adaptive approach to global and regional shifts. By addressing these critical areas, Asia-Pacific can solidify its role as a global industrial leader while fostering inclusive and sustainable economic growth for the future.

Key Messages

1. Asia-Pacific shows significant progress towards achieving SDGs targets in access to energy and industry but faces challenges in the adoption of clean energy, employment, and innovation.
2. The region's diverse landscape requires tailored approaches to bridge these gaps and accelerate progress towards achieving SDG 7, 8, and 9.
3. Targeted investments in green technologies, digital infrastructure, and skill development are key to overcoming challenges and tapping into opportunities for sustainable growth.

How far is Asia-Pacific from achieving industry-related SDGs?

Recent research reveals that industrial development is fundamental to achieving the 2030 Agenda for Sustainable Development, particularly through its impacts on green manufacturing, job creation, and innovation (SDGs 7, 8, and 9).² UNIDO's recently published Industrial Development Report 2024 assesses progress towards these SDGs in 177 developing countries and four developing regions. **The assessment reveals a diverse landscape of progress in the Asia-Pacific region,³ with both notable achievements and some challenges across key areas** (see Figure 1).⁴

For SDG 7, the regional performance signals significant advancements in energy access and efficiency. Countries in Asia-Pacific have achieved an impressive 98 per cent of the energy access target, surpassing the developing world's average. Energy efficiency remains high, with 73 per cent of the SDG target met, reflecting robust energy infrastructure. However, the adoption of clean energy in the region lags behind, with less than 50 per cent of the SDG target achieved. This highlights a **gap that requires focused investment in renewable energy resources to accelerate progress.**

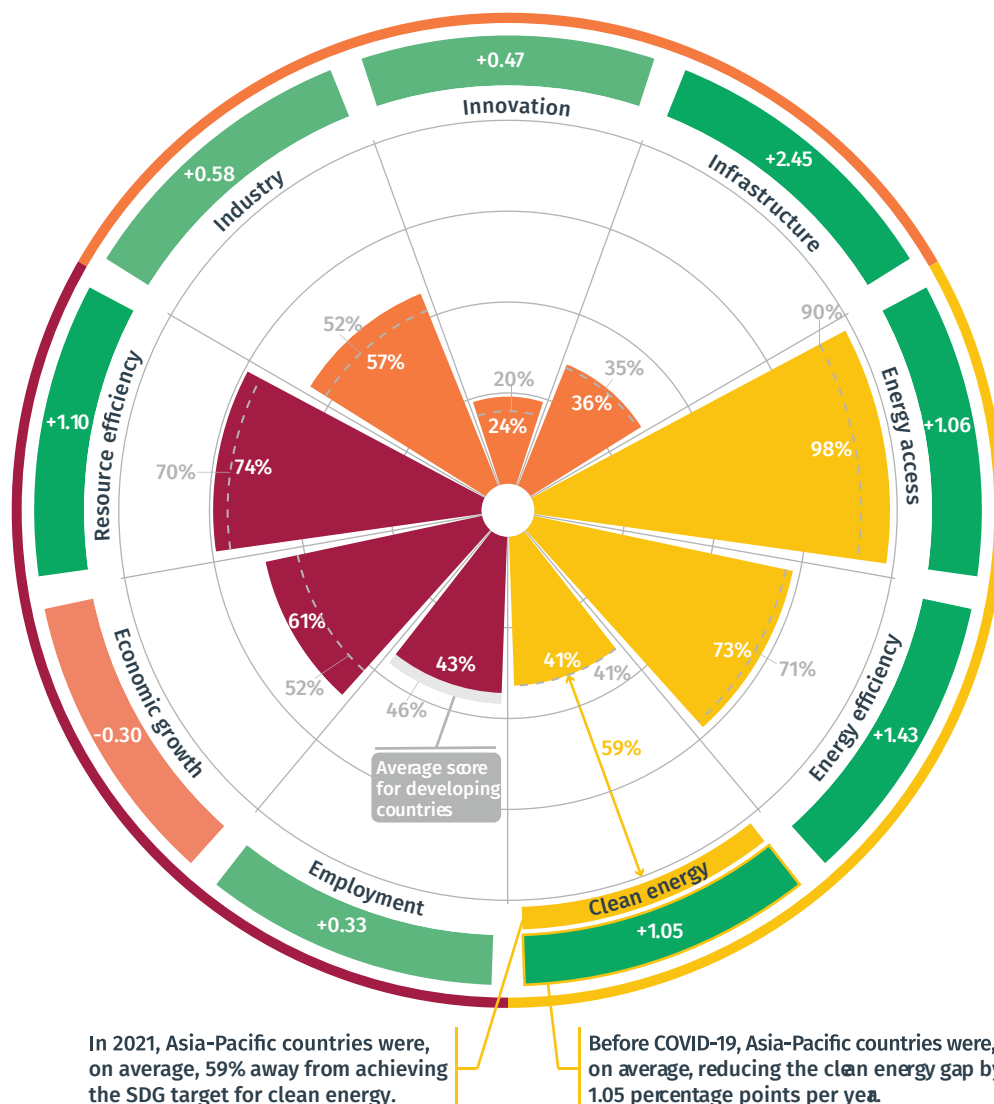
SDG 8 presents a mixed picture. **Economic growth in the region has been robust,** reflecting the region as a rising global economic power.

Asia-Pacific achieved 61 per cent of the SDG target and surpassed the developing world average by 9 points. **However, employment remains a concern in the region,** which has only met 43 per cent of the SDG target and is below the average score of 46 per cent in developing countries. The region shows that slow progress in job creation in countries with rapidly growing populations can be very problematic. Strategic interventions will be crucial to close this gap and create opportunities for decent work.

Progress made in SDG 9 reflects the region's industrial strengths and challenges. Asia-Pacific's industrial performance achieved 57 per cent of the SDG target and presents the region as a powerhouse in global industrial production. Progress in infrastructure development over the past decade has been notable: before COVID-19, countries in Asia-Pacific were, on average, reducing the infrastructure gap by 2.45 percentage points per year. Infrastructure expansion in the region is fuelled by investments in the sector and a regional focus on using infrastructure development as a catalyst for investment and industrial growth.

However, **despite the region's industrial prowess, innovation performance is far from the target.⁵** Asia-Pacific is falling behind in fostering innovation

Figure 1. Distance to SDG targets: Asia-Pacific in 2021



Note: The values represent the average level of SDG target achievement for each dimension in 2021, aggregated at the regional level using population weights. The grey areas represent the performance of all developing countries. The shaded rectangles on the outer side of the figure reflect the average annual convergence speed towards the target in the decade before the COVID-19 pandemic. This is calculated by subtracting the index values in 2019 from those in 2009, and then dividing the result by ten years.

Source: UNIDO Industrial Development Report 2024, Figure 6.1, page 114.

and research and development (R&D) activities, which must be addressed to enable the industrial sector to flourish and ensure long-term sustainable industrial growth.

Overall, progress in achieving SDGs 7, 8, and 9 in Asia-Pacific has been mixed, reflecting the region's dynamic and diverse landscape. **High performance**

in areas such as energy access and industrial production contrasts with persistent gaps in the adoption of clean energy, job creation, and innovation. Addressing these challenges will require targeted policies and investments, especially in fostering industrial innovation and expanding clean energy production, to ensure the region's continued growth and sustainable development.

Industrial policy landscape

Developing Asia has consistently embraced industrial policy as a cornerstone for growth and development, with historical success stories in countries like Japan and the Republic of Korea. Additionally, the region's long-standing commitment to industrial policy has helped many developing Asian countries in their economic upgrading and industrialization, and has elevated them to developed country status in just one generation. This evolving approach reflects industrial policy's pivotal role in fostering industries critical for national development.

More recently, a new wave of industrial policies has emerged across Asia-Pacific, with China leading the way. Countries are adopting strategic industrial policies that facilitate the transition from a traditional sector, such as textiles and garments, to industries that leverage advanced technologies to enhance production efficiency and economic integration. For instance, countries like Bangladesh, India, and Pakistan have successfully adjusted their industrial policies to achieve smooth transitions in key sectors (such as the ready-made garment industry) in anticipation of a structural economic transformation tied to their development status.⁶

Recent global shocks and geopolitical tensions have also catalysed the new wave of industrial policy in the region. The COVID-19 pandemic and recent armed conflicts have revealed vulnerabilities in global supply chains and the limitations of free-market fundamentals in addressing global economic challenges. As a result, countries in the Asia-Pacific region have shifted the focus of their industrial policies towards mitigating the adverse effects of global disruptions while steering towards long-term sustainable development.⁷

A prominent feature of modern industrial strategies is the strategic emphasis on digital transformation and clean energy transition. Countries are using a wide range of policy instruments for this,

such as financial incentives, public investment in R&D, foreign direct investment (FDI) attraction, public procurement, and the establishment of Special Economic Zones (SEZs) and industrial parks. These instruments are tailored to support the region's priorities, including digitalization, adoption of clean energy, and industrial upgrading.

Four major country groups are identified in Asia-Pacific based on their industrial policy landscape.⁸ Sub-regional and country-specific priorities reflect diverse economic, social, and geopolitical contexts, highlighting the need for tailoring industrial policy to suit each sub-regional strength and need. Assessing the unique industrial strategies, objectives, and challenges requires understanding each sub-region's policy environment to harness their full potential for sustainable industrial development.

East and South-eastern Asian countries focus mainly on export-oriented industrial upgrading to deepen the integration of advanced technologies in manufacturing processes, thereby increasing the sophistication and value of domestically produced goods. For instance, strategic incentives and grants have helped China achieve industrial progress in several technology sectors, including electronics, electric vehicles (EVs), solar panels, textiles and clothing, and smart cities. Additionally, selective FDI and export-led growth strategies are implemented by Indonesia, Malaysia, Thailand, the Philippines, Cambodia, Lao P.D.R, and Viet Nam to attract investments in targeted sectors (such as in renewable energy, EVs and digital technologies) that add value and create jobs.⁹

In **Central and South Asia**, countries seek to leverage their latecomer status to spur industrialization through industrial upgrading (in South Asia) and mineral processing (in Central Asia). South Asian countries are promoting technology development to accelerate industrial upgrading

and create jobs. However, they struggle to create comprehensive industrial ecosystems that integrate various stages of production processes, which hampers these countries' ability to sustain long-term industrial development.¹⁰ Central Asian countries are prioritizing the digitization of mining and mineral processing, and customs procedures to ease trade and enable their effective participation in global value chains.¹¹

In Western Asia, economic emphasis is directed on diversifying away from oil-based economies and instead focusing on renewable energy projects, health industries and high-tech manufacturing that foster sustainable economic development. With Saudi Arabia and the United Arab Emirates leading the way, these countries' green energy projects aim to open new avenues for industrial diversification and contribute to environmental sustainability. Developing world-class infrastructure, such as airports, seaports, and industrial parks, is designed to create an enabling environment for domestic

and international businesses to thrive.¹² While the Gulf Cooperation Council (GCC) countries focus on economic diversification by investing in capital-intensive industries, the Levant region emphasizes building sound industrial infrastructure, which exhibits distinct industrial policy approaches and reflects their unique economic characteristics and development goals.¹³

The Pacific Islands focus primarily on sustainable resource management due to their vulnerability to climate change, geographical isolation, limited natural resources, and small domestic markets.¹⁴ Overcoming these constraints requires innovative approaches to industrial development, sustainable practices, and regional cooperation. Digitizing fisheries through e-reporting and e-monitoring improves stock assessments and combats illegal, unreported, and unregulated fishing, making the fishing industry grow and ultimately contributing to GDP and employment growth.

Opportunities and actions

Megatrends such as climate change and the energy transition, digitalization, the reconfiguration of global value chains and demographic changes, are creating new challenges for developing countries, but also offer significant opportunities for industrial development. New industrial policy forms are needed to turn these challenges into opportunities. These policies must harness the potential of emerging sectors while addressing the region's specific challenges in areas such as innovation, the adoption of clean energy, and job creation.



Energy transition

Asia-Pacific is well-positioned for the global energy transition due to its abundant and varied renewable energy resources and regional governments' focus on achieving carbon net zero goals. Harnessing solar, wind, and hydro energy opportunities requires investments in green technologies and renewable energy projects. In

East Asia, China's efforts to become a leader in the clean energy sector are exemplified by its National Energy Vehicle Industrial Development Plan, which has driven the country's rapid expansion of its EV sector and positioned the country on track to achieve its net zero carbon target by 2060.¹⁵ These investments reflect a broader strategic shift towards sustainable economic models, where clean energy industries are becoming a central driver of growth.

Other key initiatives, such as Saudi Arabia's NEOM Green Hydrogen Project, exemplify a successful transition from fossil fuels to sustainable energy. This project aims to produce green ammonia and will set the stage for large-scale clean energy production in the region. These initiatives demonstrate how Asia-Pacific countries are aligning their industrial policies with the global energy transition while capitalizing on their renewable energy potential.



Digitalization

Fourth Industrial Revolution (4IR) technologies are crucial in enhancing industrial competitiveness and productivity in the Asia-Pacific region. Countries like China, India and other Central and South-eastern Asian nations have developed strategies to accelerate the adoption of digital technologies across key sectors such as manufacturing, agriculture, mining, and services.¹⁶ However, **the widespread adoption of digital technologies requires skills and infrastructure.**¹⁷ Initiatives like India's SAMARTH Udyog Bharat 4.0 reflect how industrial policies are being adapted to embrace digitalization. The programme promotes the adoption of Industry 4.0 technologies in Indian manufacturing firms by acting as a catalyst for innovation, skill development and enhanced competitiveness.

Despite some progress, significant challenges remain, particularly in terms of infrastructure. Many countries in Central Asia, South Asia and the Pacific Islands lack the necessary digital infrastructure to capitalize on these technologies. Expanding broadband access and building the infrastructure necessary to support digital industries is critical for ensuring that countries are not left behind in the digital revolution.



Global rebalancing

The reconfiguration of global value chains, driven by geopolitical tensions and supply chain disruptions, presents important challenges and opportunities for the region. **As traditional industrial hubs in Europe and North America experience shifts in their production networks, countries in Asia-Pacific are positioning themselves to attract investments and capitalize on these changes.** China, South-eastern Asia, and South Asia are implementing strategic policies to attract FDI and enhance regional competitiveness.

South-eastern Asian nations such as Viet Nam and Malaysia have already begun to benefit from the regionalization of global value chains. These countries are emerging as attractive destinations for relocating manufacturing activities from more expensive or geopolitically unstable regions. The use of industrial parks and SEZs, such as the Bahrain International Investment Park, demonstrates how strategically developed SEZs can become catalysts for industrial diversification and economic modernization.

Regional integration



Strengthening regional cooperation and trade agreements is crucial for economic stability and regional growth. **Regional industrial policies can support small and medium enterprise growth, innovation, and industrial diversification.** Examples like the Gulf Organization for Industrial Consulting (GOIC) illustrate the benefits of regional policy coordination.¹⁸ GOIC's efforts are fostering the development of high-tech industries, such as renewable energy and health, to reduce the GCC's reliance on the oil sector.

In the Pacific Islands, regional cooperation in sustainable fisheries management can help address challenges such as illegal, unreported, and unregulated fishing, which threatens the sustainability of the fishing sector. The Parties to the Nauru Agreement and the Vessel Day Scheme have helped strengthen cooperation among the Pacific Islands. This cooperation has enabled countries to manage their fisheries better, generate revenue to finance their national budgets, ensure food security and create employment opportunities in one of their most important industries.¹⁹ These initiatives exemplify how collective action can promote sustainable resource management and contribute to economic development.



Demographic transition

Asia's young and growing population presents a significant opportunity for economic development. On the one hand, countries like India, Pakistan, and Bangladesh are experiencing a demographic dividend, with large young populations that can drive economic growth if effectively integrated into the labour market. On the other hand, many East Asian countries, such as Japan and South Korea, face ageing populations, which require policies focused on enhancing productivity and providing opportunities for older workers.

Harnessing the potential of young populations requires addressing gaps in skills and fostering an entrepreneurial culture. Effective policies integrating education and vocational training

with industrial strategies can harness this demographic potential. Bangladesh's ready-made garment sector is a prime example of how targeted industrial policies can create jobs for young workers while fostering industrial growth. The ready-made garment sector has not only employed millions of people but also contributed significantly to the country's economic development.

At the same time, policy interventions are needed to address the needs of ageing populations. **Countries with ageing populations are looking for ways to enhance productivity and ensure the inclusion of older workers in the labour market.** Policies that focus on skill development and lifelong learning will be critical for maintaining economic competitiveness in these countries as they adapt to demographic changes.

Lessons learned

The experiences across Asia-Pacific present common challenges to overcome and demonstrate how industrial policy can be put to work for the achievement of the SDGs. Five important take-aways are:

1. Embracing strategic industrial policies that are **tailored to national and regional strengths** is crucial for sustainable growth. Policies should also leverage global megatrends to catalyse rapid industrialization and economic growth.
2. The success of industrial policies depends on their **flexibility and adaptability** in response to global changes, such as shifts in production networks and the reconfiguration of global value chains towards greater regionalization.
3. **Balancing global integration with local development** needs is important to foster sustainable development and regional cooperation.

4. Investing in **education and skill development** builds a resilient industrial sector. Countries need to focus and invest in human capital development and foster a culture of innovation and entrepreneurship to build a resilient and dynamic industrial sector.

5. Integrating industrial policy with **innovation strategies** enhances competitiveness and economic diversification. Governments play a pivotal role in nurturing sectors that successfully leverage advanced technologies, which is critical for a diversified economy, competitiveness, and transitioning towards cleaner energy sources.

In conclusion, Asia-Pacific can accelerate its progress towards industrial development and the achievement of the SDGs by addressing critical challenges in innovation and employment, and by leveraging opportunities in energy transition, digitalization, regional integration, and demographic changes.

Endnotes

1. This brief summarizes the main findings and messages of UNIDO (2024) "[Industrial Development Report 2024. Turning Challenges into Sustainable Solutions: The New Era of Industrial Policy](#)", Chapter 6. It is important to note that this brief focuses on the long-term developments and perspectives in the region and does not consider the impact of recent geopolitical conflicts such as the war in Middle East.
2. See [UNIDO \(2024\)](#), Chapter 2.
3. The analysis of this report focuses on the developing economies of Asia-Pacific, defined as those not classified by UNIDO as high-income industrial economies. The latest classification is available in [UNIDO \(2022\)](#).
4. It is important to note that there are sub-regional differences in the SDG indicators presented in this policy brief. To explore the sub-regional data on SDG progress for Asia-Pacific, see Figure 6.2. page 115 of [UNIDO \(2024\)](#).
5. The target for innovation is given by the best performer country in the corresponding SDG indicators during the period of analysis. See [UNIDO \(2024\)](#), Annex A for the details.
6. See [UNIDO \(2024\)](#), Section 6.3 for more information on policy cases.
7. See Mishrif, A. (2024). "[COVID-19 Effects on the Global Economy: An Overview](#)", in Mishrif, A. (eds) Economic Effects of the Pandemic. The Political Economy of the Middle East. Palgrave Macmillan, Singapore.
8. East Asia includes China, D.P.R. of Korea, Hong Kong SAR, China, Macao SAR, China and Mongolia. South-eastern Asia includes Cambodia, Indonesia, Lao P.D.R, Malaysia, Myanmar, Philippines, Thailand, Timor-Leste and Viet Nam. Central Asia includes Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. Southern Asia includes Afghanistan, Bangladesh, Bhutan, India, Iran (I.R of), Maldives, Nepal, Pakistan and Sri Lanka. Western Asia includes Bahrain, Cyprus, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Turkey, United Arab Emirates and Yemen. The Pacific Islands include Cook Islands, Fiji, French Polynesia, Kiribati, Marshall Islands, Micronesia (F.S of), Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
9. See Vetterotti, A and Forster, M. (2023) "[Vietnam export rebound: Is this the beginning of a new growth cycle?](#)" Vietnam briefing; and Sothea, K. (2023) "Cambodia to tap FDI next for economic growth." Khmer Times.
10. See Nazia N. & Rasiah, R. (forthcoming) "Industrial Upgrading in the Textiles and Clothing Industry: Pakistan and Late Industrialization", Oxford: Oxford University Press.
11. See United Nations Economic and Social Commission for Asia and the Pacific. (2021) "[Digital and sustainable trade facilitation in Central Asia Regional Economic Cooperation](#)". Bangkok: United Nations Economic and Social Commission for Asia and the Pacific.
12. See Mishrif, A., Antimiani, A., and Khan, A. (2024) "[Examining the contribution of logistics and supply chain in boosting Oman's trade network](#)". Economies 12 (3), 70.
13. See Mishrif, A. (2024) "The industrial policy landscape of Western Asia". Background report prepared for the UNIDO Industrial Development Report 2024. Vienna: United Nations Industrial Development Organization.
14. See Rasiah, R. (2024) "The industrial policy landscape of Asia and the Pacific Islands." Background report prepared for the UNIDO Industrial Development Report 2024. Vienna: United Nations Industrial Development Organization.
15. See Rasiah (2024).
16. See Rasiah, R. Anter, V. & Annizah, N.I. (2025) "Sustainable Agriculture and Food Security: Towards Strengthening Climate Change and Digitalization". Under Review with Springer Nature.
17. See Mishrif, A. and Khan, A. (2024) "[Non-industrial solar energy use, barriers and readiness: Case study of Oman](#)", Energies 17 (16), 3917.
18. See [UNIDO \(2024\)](#) and Mishrif (2024).
19. See Rasiah (2024).



The Policy Brief Series: Insights on Industrial Development is produced by UNIDO's Division of Industrial Policy Research and Statistics (IPS) and seeks to promote the Organization's normative function in the field of industrial development. The views expressed in the Briefs are those of the author(s) based on their research and expertise and do not necessarily reflect the views of UNIDO ([read more](#)). For more information, please contact N.HARAGUCHI@unido.org. This brief was produced building on the preparatory work for the UNIDO Industrial Development Report 2024.