



LABOR MARKET INTELLIGENCE REPORT

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LABOR MARKET INTELLIGENCE REPORT

BEYOND BLUEPRINTS:

BUILDING BETTER FUTURES THROUGH

THE BUILD BETTER MORE PROGRAM

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I. Executive Summary

The Philippine construction industry is a key driver of economic growth, contributing approximately 7% to the GDP in 2022 despite challenges posed by the COVID-19 pandemic. Moving forward, the industry shows promising growth prospects fueled by increasing demand for commercial spaces and ongoing public infrastructure projects. Challenges such as inflation and labor shortages remain, but efforts to address these include enhancing local supply chains and adopting technology.

The industry encompasses various sectors including commercial, industrial, infrastructure, energy, utilities, institutional, and residential construction. Government initiatives such as the Build Better More (BBM) program aim to stimulate growth, create jobs, and transform the economy through significant infrastructure investments.

To meet future demands, there is a critical focus on enhancing vocational training programs (TVET). This involves updating and prioritizing skills aligned with industry needs, particularly those highlighted by BBM infrastructure projects. Strategies include expanding TVET program capacity, promoting enrollment through various channels, and ensuring gender equality in program access and participation.

Collaboration among government agencies (TESDA, DPWH, DOLE) and industry stakeholders is essential for effective program implementation, resource sharing, and monitoring of outcomes. These efforts are aimed at building a skilled workforce capable of supporting the Philippine construction sector's sustainable growth and competitiveness.

These recommendations and initiatives are crucial for aligning workforce development with the evolving demands of the construction industry under the BBM program and beyond.

II. Background

The construction industry in the Philippines remains a vital engine of economic growth, contributing significantly to the nation's Gross Domestic Product (GDP). In 2022, despite challenges from the COVID-19 pandemic such as project delays and cancellations due to supply chain disruptions and employment issues, the construction sector in the Philippines contributed approximately 7% to the GDP. As the country moves towards recovery, the industry shows promise for growth, driven by increasing demand for office and commercial spaces and ongoing public infrastructure projects under the "Build Better More" initiative. However, persistent obstacles like inflation, high-interest rates, and labor shortages necessitate a focus on local supply chains and technological advancements to sustain momentum. Despite these challenges, industry leaders remain optimistic, anticipating a rise in both the number and value of projects in the near future. Notably, the government's commitment to infrastructure development is expected to stimulate employment and benefit local industries such as steel, cement, and glass, further supporting the sector's recovery and expansion.

According to the GlobalData report on the Philippines Construction Market Size, Trend Analysis by Sector, Competitive Landscape and Forecast to 2028, the primary sectors within the Philippine construction market encompass commercial, industrial, infrastructure, energy and utilities, institutional, and residential construction.

Commercial construction involves various project types such as leisure and hospitality buildings, office buildings, outdoor leisure facilities, retail buildings, and other commercial structures. Growth in tourism, coupled with substantial investments in retail and office spaces, is expected to propel this sector during the forecast period.

Industrial construction includes chemical and pharmaceutical plants, manufacturing facilities, metal and material processing plants, and waste processing plants. Increased manufacturing output and demand for automobiles are anticipated to drive growth in this sector.

Infrastructure construction comprises projects like rail and road infrastructure, as well as other public infrastructure initiatives. Government investments in roads, railways, and airports will bolster the output of this sector in the coming years.

Energy and utilities construction involves projects related to electricity and power, oil and gas, telecommunications, sewage, and water infrastructure. The government's focus on renewable energy development, aligned with the National Renewable Energy Program (2020-2040), will drive growth in this sector from 2025 to 2028.

Institutional construction encompasses educational buildings, healthcare facilities, institutional buildings, research facilities, and religious buildings. Government investments in education and healthcare infrastructure development will contribute to the growth of this sector.

Residential construction includes single-family and multi-family housing projects. Initiatives like the Pambansang Pabahay para sa Pilipino Housing Program will support the residential sector's output throughout the forecast period.

A. Industry Situationer

According to the GlobalData report on the Philippines Construction Market Size, Trend Analysis by Sector, Competitive Landscape, and Forecast to 2028, the construction market in the Philippines reached \$65.2 billion in 2023. Projected to grow at a compound annual growth rate (CAGR) exceeding 7% from 2025 to 2028, the market expansion will be bolstered by the government's focus on infrastructure and energy development in 2024. Investments in transportation, energy infrastructure, affordable housing, and social infrastructure are expected to drive growth throughout the forecast period.

A 2023 report from UK-based think tank Oxford Economics and Aon Global Construction and Infrastructure highlights the Philippines as poised to become one of the fastest-growing construction markets globally over the next 15 years. This growth trend is anticipated across the Association of Southeast Asian Nations (ASEAN) economies, including Vietnam, Malaysia, and Indonesia, alongside India and Bangladesh. These countries are projected to collectively grow their construction markets by \$800 billion, surpassing expected growth in

the US market. Factors contributing to this growth include rising populations, rapid urbanization, and favorable average earnings per capita. Specifically, the Philippines is forecasted to lead with an annual growth rate exceeding six percent, underpinned by strong fundamentals such as a steadily expanding working-age population.

Central to this construction boom is the Philippine government's strategic push for public-private partnerships (PPPs) in infrastructure development. This initiative is designed to enhance long-term investor confidence, stimulating investment and construction activities. Civil infrastructure, in particular, is anticipated to be the fastest-growing sector, driven by substantial government support.

Amidst this promising outlook, the 2021 Annual Survey of Philippine Business and Industry (ASPBI) provides a detailed snapshot of the construction sector's current state. The survey revealed that a total of 2,293 establishments in the formal sector were engaged in construction, marking a 5.8 percent increase from 2020 (Table 1). Among these, the construction of buildings industry group dominated, accounting for 45.4 percent of establishments, followed by electrical, plumbing, and other construction installation activities, and construction of roads and railways (Figure 1).

Table 1. Comparative Summary Statistics for Construction Section Philippines, 2020 and 2021

Particulars	2020^f	2021^f	Growth Rate (%)
Total Number of Establishments	2,167	2,293	5.8
Total Employment	304,236	270,311	(11.2)
Average Number of Workers per Establishment	140	118	(15.7)
Total Compensation (in thousand pesos)	65,576,996	61,900,110	(5.6)
Average Annual Compensation per Paid Employee (in pesos)	215,830	229,779	6.5
Total Revenue (in thousand pesos)	488,936,327	559,181,788	14.4
Total Expense (in thousand pesos)	494,765,154	488,392,001	(1.3)
Revenue per Expense Ratio	0.99	1.14	15.2

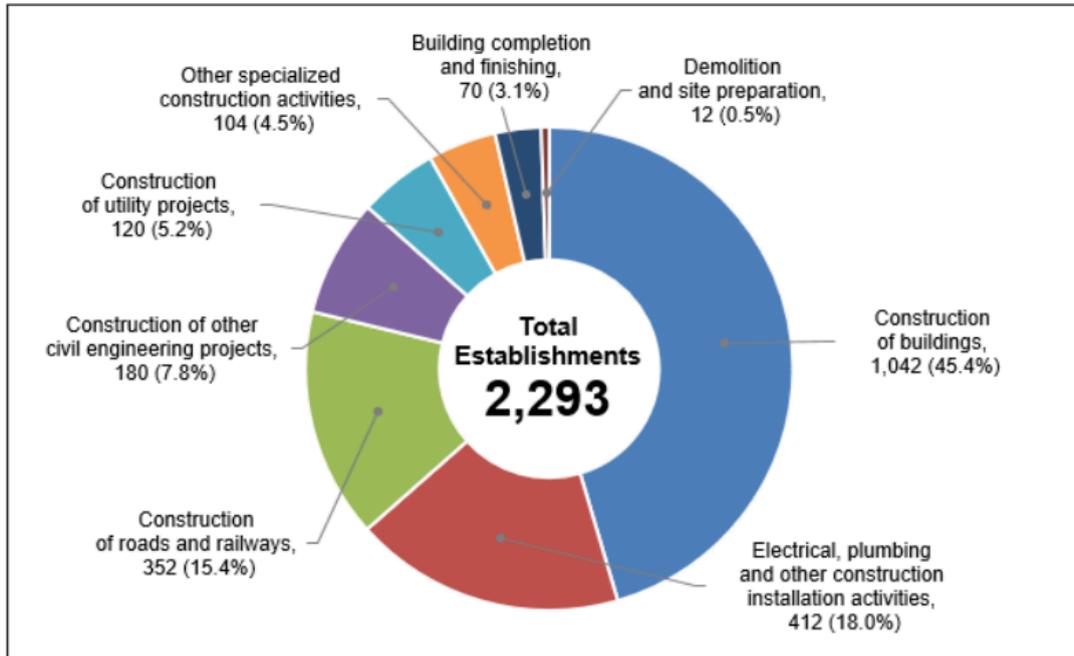
f – final

() – negative value

Notes: Growth rates are computed from actual value and may yield different results when computed manually.

Sources: Philippine Statistics Authority, 2020 and 2021 ASPBI (Final Results)

Figure 1. Distribution of Establishments Under Construction Section by Industry Group: Philippines, 2021

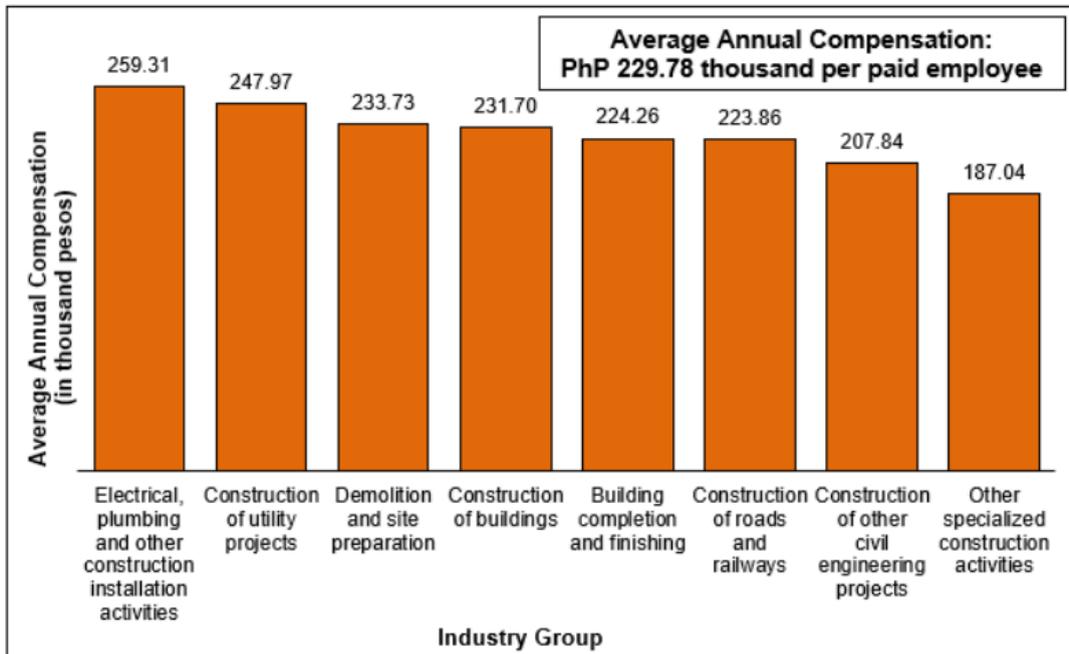


Note: Details may not add up to total due to rounding.
 Source: Philippine Statistics Authority, 2021 ASPBI (Final Results)

Regionally, the National Capital Region (NCR) reported the highest number of construction establishments, followed by CALABARZON and Central Visayas. In terms of employment, the construction sector employed a total of 270,311 workers in 2021, with the construction of buildings industry group also leading in workforce numbers.

Despite a decrease in average employment per establishment, the sector's total compensation increased, with electrical, plumbing, and other construction installation activities paying the highest average annual compensation of PhP 259.31 thousand per paid employee (Figure 2). Regionally, Western Visayas offered the highest average pay.

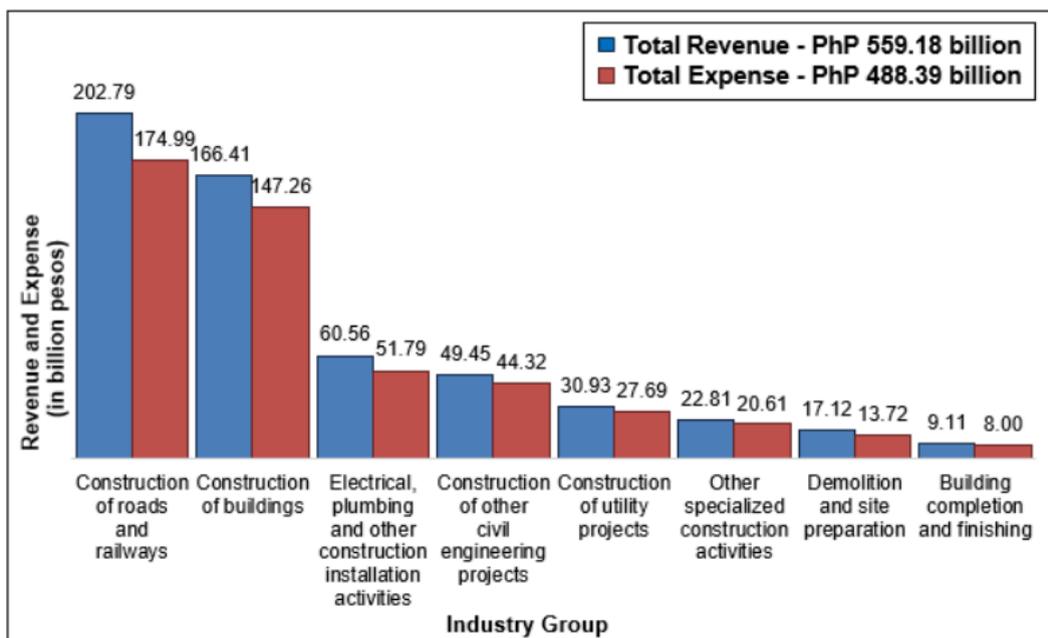
Figure 2. Average Annual Compensation of Paid Employees for Construction Section by Industry Group: Philippines, 2021



Source: Philippine Statistics Authority, 2021 ASPBI (Final Results)

Financially, the sector generated a total revenue of PhP 559.18 billion in 2021, with construction of roads and railways contributing the largest share (Figure 3). NCR led in both total revenue and expenses, underscoring its central role in the industry. Notably, the demolition and site preparation industry group recorded the highest revenue per expense ratio, highlighting its efficiency.

Figure 3. Total Revenue and Total Expense for Construction Section by Industry Group: Philippines, 2021



Note: Details may not add up to total due to rounding.
Source: Philippine Statistics Authority, 2021 ASPBI (Final Results)

Given the tight fiscal environment, NEDA Secretary Arsenio Balisacan has emphasized the importance of PPPs for infrastructure projects. In March, the NEDA Board, chaired by President Marcos, approved a list of infrastructure flagship projects worth P9 trillion, prioritized in the government's budget and set for expedited approval processes. Of these 194 projects (185 according to the latest update of the NEDA IFP dashboard), 45 will be financed through PPPs, underscoring the critical role of these partnerships in driving the Philippines' construction market forward.

In terms of employment, the Department of Labor and Employment's (DOLE) Job and Labor Market Forecast for 2023-2024 reported that employment in the construction sector grew by 1.4% from 2021 to 2022 and increased by 16.1% from 2022 to December 2023.

Table 2. Employed Persons in the Construction Industry in the, Philippines: 2021, 2022 and December 2023^P (In thousands except rates)

Industry	2021	2022	Dec. 2023	2021 vs. 2022		2022 vs. Dec. 2023	
				Increment	Growth Rate	Increment	Growth Rate
Construction	4,319	4,379	5,084	60	1.4	705	16.1

Source: Department of Labor and Employment, Job and Labor Market Forecast 2023-2024

The same report stated that the construction sector was included in the Key Employment Growth Sectors (KEGS) identified by the DOLE agenda. KEGS are major industry groups with the highest potential to generate employment and absorb a significant portion of the workforce in the coming years. According to consultations conducted by DOLE Regional Offices, the majority of regions identified construction, wholesale and retail trade, and agriculture as KEGS.

Furthermore, a detailed 10-year forecast by Oxford Economics and Cisco predicts a shift in the Philippine job landscape by 2028, with the elimination of 1.1 million jobs pushing workers into different industries and occupations. According to this study, the construction sector is expected to create 460,000 jobs, or 11.9% of the total, during the period from 2018 to 2028.

B. Philippine Construction Industry Roadmap 2020-2023

In 2019, the Department of Trade and Industry- Construction Industry Authority of the Philippines (DTI-CIAP), in partnership with the Philippine Constructors Association (PCA), developed the Philippine Construction Industry Roadmap 2020-2030 themed "TATAG AT TAPAT 2030." This initiative was hailed as the future blueprint for the construction sector, aiming to enhance its capacity, uphold values, and strengthen institutional integrity over the next decade. The roadmap is the answer to the demands of the expanding industry, driven by factors such as the growth of the Business Process Outsourcing sector, increased tourism and investment, and extensive infrastructure projects like the Build Build Build program. These demands result in a pressing need for coordinated efforts among key stakeholders to sustain this growth trajectory and mitigate potential challenges in the coming years.

The roadmap was divided into actionable steps to streamline the efforts of diverse stakeholders toward achieving their vision, which is “a future-oriented, biodiversity-sensitive, and globally competitive construction industry capable of partnering with the world in building nations, in building the Philippines, and in building the Filipino family.” These actionable steps are dubbed the 7+1 Action Plans. They outline seven (7) key goals for stakeholders in the construction industry, along with the critical objective of revitalizing and strengthening the DTI-CIAP. This initiative underscores the vital role of the DTI-CIAP in leading and fostering the development and regulation of the industry through collaboration with government agencies and private institutions. These Action Plans are designed to initiate simultaneous efforts by stakeholders, while not limiting additional relevant activities and programs. They encourage continuous development through ongoing dialogue, making them "living documents" that will be reviewed and updated at each industry congress. The thirty (3) Action Plans for 2020-2030 are summarized in the table below:

Table 3. Philippine Construction Industry Roadmap 2020-2030 Action Plans

<p>A. CIAP REVITALIZATION ACTION PLAN</p> <ol style="list-style-type: none"> 1. Activate the Steering Committee for the Roadmap (DTICIAP’s Strategy Management) 2. Create a “New CIAP” organized under a unified legal mandate, integrating related functions and organizations related to the construction industry 3. Modernize the services of CIAP in compliance with the Ease of Doing Business Law, through various funding sources 4. Create a private sector-led funding mechanism for industry development, as prescribed in the Roadmap, in coordination with rationalized responsibilities of a “New CIAP” 	<p>B.5. POLICY REFORM ADVOCACY PLAN</p> <ol style="list-style-type: none"> 16. Rationalize policies on quarry materials on sourcing, extraction and transport (including taxation) 17. Support improvements of Right-of-Way Acquisition Policies 18. Advocate for the enactment of a new Public-Private Partnership (PPP) Law, and support policy development for standardized PPPs at the local level 19. Support improvement of procurement policies (e.g. policy on electronic bidding beginning with procurement of simple government construction projects, up to more sophisticated design-build-maintain contracts, increase points for innovative technologies in bidding)
<p>B.1. COMMUNICATIONS ACTION PLAN</p> <ol style="list-style-type: none"> 5. Promote the Roadmap consistent with “TATAG at TAPAT” and “BUILDING with INTEGRITY” through available media 6. Produce materials for Information, Education and Communication (IEC) including the development of knowledge products 	<ol style="list-style-type: none"> 20. Pursue trade liberalization policies with reciprocity which includes support to the amendment of Public Service Act. 21. Support biodiversity sensitive strategic environment assessment. 22. Advocate for a law on Security of Payments 23. Enhance Standards and Compliance on Sustainability and Resiliency especially on public infrastructure projects through strict

	<p>implementation of existing laws, passage of the Philippine Buildings Act, promotion of enterprise-driven efforts, provision of Sustainability incentive programs, and inclusion of PLI for Design-Build projects</p>
<p>B.2. INFRASTRUCTURE MASTER PLAN DEVELOPMENT ADVOCACY PLAN</p> <ol style="list-style-type: none"> 7. Collaborate in the development of a long-term infrastructure plan for the country 8. Draft and file the bill for a 30-Year Infrastructure Development Plan and provide support such as technical papers, policy notes and statistics. 9. Assist in the drafting of rules and regulations or similar policy instruments that will ensure implementation of a long term infrastructure masterplan 	<p>B.6. GOVERNMENT-INDUSTRY-ACADEME PARTNERSHIP ACTION PLAN</p> <ol style="list-style-type: none"> 24. Develop facilities for research and development and training, managed by the construction sector, supported by government and academe 25. Support the continuous development of Construction and Entrepreneurship Curricula and Programs through GIA Tripartite Partnership Agreement, modeling with successful pilots on a localized basis 26. Conduct annual national and regional summits of construction groups, government agencies and academe to strengthen network and foster collaboration (i.e. in the areas of ethics, values formation in curricula, and filling in the gap for NC 3-5 in Dual Training System, and competency-based certification programs).
<p>B.3. PROFESSIONAL, SKILLS, AND PRODUCTIVITY UPGRADING ACTION PLAN</p> <ol style="list-style-type: none"> 10. Promote competency-based and skills based certification, bridging programs and dual training, and professional licensing program (for construction professionals and managers, supervisors, workers, trade and entrepreneurs), supported by the Government-Industry-Academe (GIA) Partnership Action Plan, supported with one registry and ID system, and provided with productivity-enhancing tools and technologies 11. Promote values formation as part of brand development at the firm/management and individual levels through inclusion of ethics, quality, safety, environment, and health in the curriculum and 	<p>B.7. CONSTRUCTION SERVICES EXPORTS AND OUTSOURCING PLAN</p> <ol style="list-style-type: none"> 27. Support construction firms and A&E firms to strategically plan, build, and scale capabilities for providing EPC services. 28. Encourage the use of and training on international contracting standards and regulations (e.g. FIDIC, NEC including contract preparation, negotiation, management and administration) 29. Institutionalize a system that will study the scope for expansion of construction and related services in outsourcing, search for foreign market leads on project opportunities, and undertake systematic marketing activities 30. Provide support to construction companies and developers, including professionals and workers exporting their services through fiscal and non-fiscal

<p>continuing certification and education programs</p> <p>12. Institutionalize safety nets for the benefit of the construction workers and professionals through collaboration with the labor sector, the insurance industry, and other relevant agencies in exploring and creating new facilities and products.</p>	<p>incentives, and access to low-cost financing and guarantees.</p>
<p>B.4. DIGITIZATION AND MODERNIZATION ACTION PLAN</p> <p>13. Create a Technical Council to propose the national standards for digitization and digitalization (e.g. BIM, Big Data, Automation, Internet of Things, AR/VR)</p> <p>14. Institutionalize the use of digital technology for regulatory, permitting, and infrastructure life cycle (planning, design, construction, and facility management)</p> <p>15. Provide and promote incentives for digital transformation (e.g. BIM, Research and Development, facilities, equipment, and the creation of a Philippine BIM Center)</p>	

Source: CIAP

B.3. Professional, Skills, and Productivity Upgrading Action Plan in particular focuses on raising productivity, which is a key component of the long-term growth strategy for both the government and the construction industry, as outlined in the national development plan, AmBisyon Natin 2040. This plan emphasizes investing in human capital to ensure Filipinos can adapt to new technologies and societal changes. The construction industry needs a workforce equipped with technology and digitization skills, favoring competency-based certification over traditional higher education credentials. Currently, only about 10.8% of the four million construction workers are professionals, highlighting a significant gap between industry needs and academic output.

To address this gap, the Roadmap's action plans for professional and skills upgrading include promoting competency-based and skills-based certification, bridging programs, dual training, and professional licensing programs for construction professionals and workers. These efforts are supported by a Government-Industry-Academe Partnership Action Plan and aim to provide workers with productivity-enhancing tools and technologies. Additionally, values formation at both firm/management and individual levels is encouraged by incorporating ethics, quality, safety, environment, and health into curricula and continuing education programs.

Furthermore, the Roadmap calls for the establishment of safety nets for construction workers and professionals. This involves collaboration with the labor sector, insurance industry, and

other relevant agencies to create new facilities and products that benefit the workforce. These initiatives are designed to ensure that the construction industry can meet its evolving needs and continue to thrive in the future. The table below lists the action plans under B.3 and its related tasks, responsible units, partner allies, and timeline for completion.

Table 4. Action Plan, Related Tasks, Responsible Units, Partners and Allies, and Timeline for B.3. Professional, Skills, and Productivity Upgrading Action Plan

ACTION PLAN and the Related Tasks	Responsible Units	Partners and Allies	Timeline
#10. Promote competency-based and skills-based certification, bridging programs and dual training, and professional licensing program (for construction professionals and managers, supervisors, workers, trade and entrepreneurs), supported by Government-Industry-Academe Partnership Action Plan and supported with one registry and ID system, provided with productivity-enhancing tools and technologies.			
Strengthen the use of Construction Industry One Registry System (CIORS) in partnership with TESDA and private sector	CMDF, PDCB	TESDA, Private Sector, DOLE-BLE	2020-2022
Tap Philjobnet and TESDA 911 as a local registry of skilled construction workers for job matching in the local and national construction projects.	CMDF, PDCB	TESDA, DOLE-BWC, DOLE-BLE	2020-2022
Support the industry-TESDA dialogue on the regular matching of training available with the industry needs	CMDF, PDCB	DOLE, TESDA	2020-2022
Mapping of skills needed based on the Master Plan on Infrastructure Development	CMDF, PDCB	TESDA, DOLE-BLE	2020-2022
Modification of curriculum to include project immersion of at least one semester and Occupational Safety And Health (OSH) topics	CHED	CMDF, TESDA, DEPED	2020-2022
Licensure examinations to include practical questions related to project development and management	PRC	CMDF, Industry Stakeholders, TESDA, DOLE-BWC, DOLEBLE	2020-2022
Standardization of knowledge and requirements: DPWH's requirement on the Project Engineers (PE) for civil, electrical, mechanical and others; Materials Engineer	DPWH	CMDF, PDCB, Industry Stakeholders	2020-2022
Establishing Career Progression Approach in the CPD Units in	CMDF, PDCB, PRC	DOLE, CHED, Industry	2020-2022

Expanded Tertiary Education Equivalency Accreditation Program for Masteral and Doctoral Programs (in view of developing specialists) including the expansion programs to include procurement, contract development and management and the inclusion of regulatory set-up laws		Stakeholders	
Increase ACPE registered engineers	CMDF, POCB, PRC	DOLE, Industry Stakeholders	2020-2022
Promote industry-wide certification on the qualified construction workers	TESDA	CMDF, PDCB, DOLE, Industry Stakeholders	2020-2022
Expansion of the Competency Assessment and Certification for Workers (CACW) on assessment and certification of workers to cover future skills requirements	TESDA	DOLE, CMDF, PDCB, Industry Stakeholders	2020-2022
Train Assessors based on the skill requirement of the industry	CMDF, TESDA	DOLE, Industry Stakeholders	2020-2022
Leveling of Philippine Qualifications Framework and ASEAN Qualification Framework and Registry	CMDF	PQF Council, Industry Stakeholders	2023-2025
#11. Promote values formation as part of brand development at the firm/management and individual levels through the inclusion of ethics, quality, safety, environment, and health in the curriculum and continuing certification and education programs.			
Inclusion of ethics in the curriculum and CPDs consistent with the Blooms Taxonomy (Knowledge, Skills, Values)	CMDF, CHED, DEPED, PRC	DOLE, Industry Stakeholders	2020-2022
Include values formation and OSH in the Authorized Managing Officers (AMO) Seminars	PCAB, CMDF	DOLE-OSHC, DOLE-BWC, DOLE-ECC, DOLE-SPECS, Industry Stakeholder	2020-2022
Promote firm-level initiatives (e.g., toolbox training)	CMDF, PDCB	Private Sector	2020-2022
#12. Institutionalize safety nets for the benefit of construction workers and professionals through collaboration with the labor sector, the insurance industry, and other relevant agencies in creating new facilities and products			
Consult with the labor sector for the	Roadmap	DOLE-BWC,	2020-2022

promotion of the welfare of workers and the development of safety nets program	Steering Committee	Industry Stakeholders	
Provide affordable housing loan packages for workers and professionals	Roadmap Steering Committee	SSS, Industry Stakeholders	2020-2022
Discuss with relevant agency/ies (e.g., SSS) the creation of new facility for such safety nets	Roadmap Steering Committee, CIAP Board	SSS, Industry Stakeholders	2020-2022
Collaborate with the insurance industry in designing products fit on the peculiarities of the construction industry and development projects	Roadmap Steering Committee, CMDF	IC, Industry Stakeholders	2022-2023
Consider the requirement of ISO certification on Quality Environment Safety Health; determine which category and size of projects we will require such ISO certification	PDCB	DOLE, Industry Stakeholders, GPPB	2022-2023
Require contractors to upgrade frequency and quality of safety training	PDCB, PCAB	DOLE, Industry Stakeholders, GPPB	2020-2022
Facilitate the provision of Employees Compensation Rehabilitation Program for work-related construction contingencies thru info exchange with the involved stakeholders regarding construction-related accidents.	DOLE-OSHC, DOLE-BWC, DOLE-EEC, Roadmap Steering Committee	CMDF	2020-2022
Revise the COA ceiling of total project cost (0.1%) for safety expenses to take into account the inherent risk involved in the project	PDCB	COA, GPPB	2020-2022
Study the possibility of requiring engineers who will practice their profession to secure PII / PLI	PDCB	PRC, GPPB, COA	2020-2022
Communicate with the insurance firm to establish the minimum rate	PDCB	Insurance Commission, GPPB, COA	2020-2022

Source: CIAP

Meanwhile, B.4. Digitization and Modernization Action Plan discusses how the Roadmap for the construction industry aims to develop new, improved skills and professional competencies by incorporating modern technology, innovation, and digitization, which are expected to significantly boost worker productivity. Then-DTI Secretary Ramon M. Lopez

emphasized the government's commitment to enhancing the quality of construction services through sustainable practices, increasing the global competitiveness of Filipino construction industry players, and equipping the entire project cycle with efficient and modern technologies. Digital technologies, such as Building Information Modeling (BIM), prefabrication, wireless sensors, automated and robotic equipment, and 3D-printing, are gradually transforming the construction industry, impacting the design, construction, operation, and maintenance of infrastructure and real estate.

To support this transformation, the creation of a Technical Council is recommended to propose national standards for digitization and digitalization, including BIM, Big Data, Automation, Internet of Things (IoT), and Augmented/Virtual Reality (AR/VR). Institutionalizing the use of digital technology across regulatory, permitting, and infrastructure life cycles, encompassing planning, design, construction, and facility management, is also suggested. Additionally, providing and promoting incentives for digital transformation—such as BIM, research and development, facilities, equipment, and the establishment of a Philippine BIM Center—will further drive the adoption of these advanced technologies in the construction sector.

III. Build Better More Infrastructure Program

The Philippine Construction Industry Roadmap 2020-2030, launched during the Duterte administration's Build, Build, Build (BBB) initiative, laid the groundwork for advancing professional competencies and skills through technological innovation and digitalization. This strategic framework aims to elevate construction service standards, cultivate globally competitive Filipino construction entities, and embed sustainable practices. As a pivotal economic force, contributing 8.8% to the GDP in 2023, the current administration led by President Ferdinand R. Marcos Jr. builds on this foundation with the Build Better More (BBM) program. This initiative seeks to propel the nation's socio-economic transformation by implementing 185 high-impact infrastructure flagship projects valued at PHP 9.55 trillion.

These projects span crucial sectors like transportation, water resources, agriculture, health, and digital connectivity, aiming to bolster physical linkages, reduce operational costs, and expand market opportunities, particularly for micro, small, and medium enterprises (MSMEs). The BBM program integrates advancements such as rail transport systems, farm-to-market roads, and upgraded air and seaports, aligning with projected economic growth trajectories and underscoring the construction industry's pivotal role in realizing a "Bagong Pilipinas."

With an annual infrastructure investment commitment of 5-6% of GDP, equivalent to USD 20-40 billion, the BBM program aligns closely with the Philippine Development Plan (PDP) 2023-2028. Its focus on job creation, poverty alleviation, and enhancing overall living standards reflects a strategic approach endorsed by the National Economic and Development Authority (NEDA). Leveraging public-private partnerships (PPPs) and official development assistance (ODA), including substantial funding from Japan, the Asian Development Bank, and other global partners, is pivotal to expediting these transformative endeavors.

By addressing infrastructural deficits and fostering an enabling investment climate, the Build Better More program aspires to position the Philippines as a premier logistics hub in Asia and enhance its competitiveness on the global stage. President Marcos Jr.'s commitment to infrastructure development, as reiterated in his State of the Nation Address, underscores the program's role in driving sustainable economic growth and national development.

The BBM infrastructure program from 2023 to 2028 encompasses a total of 185 high-impact infrastructure flagship projects (IFPs), with some projects carried over from the previous BBB program. The table below lists the number of projects per sector and their corresponding project cost in billions. As seen from Table 5, the BBM program primarily focuses on enhancing physical connectivity through 134 IFPs, requiring an estimated investment of P8.2 trillion. This comprehensive effort includes projects such as 24 rail infrastructure initiatives (P4.1 trillion), 65 roads and bridges projects (P2.3 trillion), 17 air transport projects (P1.1 trillion), 21 urban transportation projects (P544.41 billion), and 6 maritime infrastructure projects (P224.23 billion) (Figure 4). These initiatives underscore the program's commitment to bolstering infrastructure across various sectors, aligning with its goal to transform the Philippines into a competitive logistics hub in Asia. The additional IFPs encompass 29 water resources projects (P727.82 billion), which include dams, flood control projects, and irrigation systems. There are also 9 agriculture-related IFPs (P213.62 billion), 5 health-related projects amounting to P92.28 billion, and 3 digital connectivity projects totaling P164.78 billion.

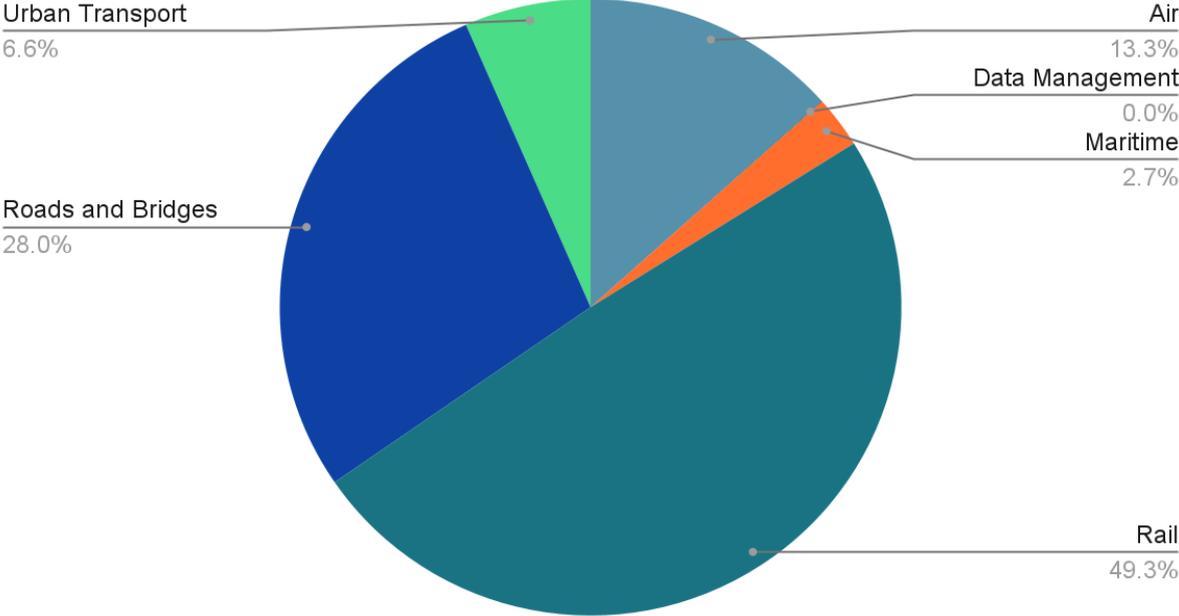
Table 5. Infrastructure Flagship Projects for 2023-2028

Sector	Number	Project Cost (in PHP Billion)
Physical Connectivity	134	8,287.53
Water Resources	29	727.82
Agriculture	9	213.62
Health	5	92.28
Digital Connectivity	3	164.78
Power and Energy	1	10.19
Education	1	30.56
Other Infra	3	28.17
TOTAL	185	9,554.95

Source: NEDA as of April 2024

Figure 4. Physical Connectivity IFPs by Sub-Classification (Indicative Total Project Cost in P Billion)

Physical Connectivity Sub-Classification



Notably, the top five IFPs with the highest indicative project cost are all under the Physical Connectivity sector. All five of these projects are targeted to be completed beyond 2028, with three projects already undergoing construction. Moreover, these projects span in Luzon only, particularly in Regions I, III, IV-A, and NCR (Table 6).

Table 6. List of Infrastructure Flagship Projects with the Top 5 Highest Indicative Project Cost (in PHP B)

Sector	Project Title	Implementing Agency	Indicative Project Cost (in PHP B)	Fund Source	Development Partner (if ODA)	Region/s	Target Year of Completion	Status/ Milestone
PHYSICAL CONNECTIVITY	North-South Commuter Railway (PNR North 1,PNR North 2,PNR South Commuter)	DOTr	873.62	ODA	ADB, Japan	NCR, III, IV-A	Beyond 2028	Ongoing
PHYSICAL CONNECTIVITY	New Manila International Airport (Bulacan international Airport)	DOTr	735.63	PPP	N/A	III	Beyond 2028	Ongoing
PHYSICAL CONNECTIVITY	Subic-Clark-Manila-Batangas Dedicated Rail Corridor Formerly 'Subic Clark Railway'	DOTr	657.75	ODA	China	NCR, III, IV-A	Beyond 2028	Pre-project preparation
PHYSICAL CONNECTIVITY	Metro Manila Subway Project Phase 1	DOTr	488.48	ODA	Japan	NCR	Beyond 2028	Ongoing
PHYSICAL CONNECTIVITY	North Long Haul Railway	DOTr	400	PPP	N/A	I	Beyond 2028	Approved for implementation

Of the 185 IFPs, 103 are scheduled for completion in 2028 and beyond. As of April 2024, 3 IFPs have been completed: (1) the P12.54B Flood Risk Improvement and Management Project for Cagayan De Oro River (FRIMP-CDOR), which involved the implementation of structural (e.g., river improvement) and non-structural measures to reduce flooding in high-risk areas, develop the Cagayan de Oro River, and strengthen the resilience of communities along the river (from Macajalar Bay to Pelaez Bridge) to climate change and hydro-meteorological hazards, (2) the P7.57B Integrated Disaster Risk Reduction and Climate Change Adaptation (IDRR-CCA) Measures in the Low-Lying Areas of Pampanga Bay Project, which was meant to reduce flood levels and duration in Macabebe, Masantol, Minalin, and Sto. Tomas, and improve drainage efficiency in the Third River and its branches, including the Eastern Branch, Caduang Tete, and Sapang Maragul Rivers, and (3) the P1.24B Samar Pacific Coastal Road Project, which involved a 18.647 km road construction/improvement and construction of 3 bridges (261 lm), and intends to link the so-called “Pacific Towns” in Samar.

Presented below is the summary on the number of IFPs per region. There are 16 IFPs that span the whole country, while 41 are interregional. In terms of region-specific IFPs, NCR has the most number of IFPs at 29, followed by Region X with 15, and Regions III and VII both with 12 each. BARMM, CAR, Regions I and XII has the least number of IFPs with only 2 projects each. In view of the Area-Based Demand-Driven (ABDD) TVET central strategy of TESDA, the IFPs per region and the nationwide and interregional IFPs that impact the regions inform the respective TESDA regional and provincial offices (ROPOs) of the skills requirements that would need to be delivered or developed as each project will create demand for various skills, especially in construction, engineering, and related trades. Moreover, ABDD TVET ensures that training programs are designed based on local economic activities. When the ROPOs identify their priority programs and set their targets in the implementation, they consider the current and future programs and projects in their areas. By leveraging the data on IFP distribution, TESDA can focus on specific regions where there is either a demand-supply mismatch or where opportunities for growth through infrastructure projects are evident. This would ensure that regional workforce development is aligned with ongoing and future projects

The complete list of IFPs under the BBP program can be found in the Annex section of this report.

Table 7. Number of Projects by Spatial Coverage

Spatial Coverage	No. of Projects	Percentage Share
Nationwide	16	8.60%
Interregional	41	22.04%
Region-Specific	129	69.35%
NCR	29	15.59%
X	15	8.06%
III	12	6.45%
VII	12	6.45%
VI	9	4.84%
XI	9	4.84%
II	8	4.30%
IV-A	7	3.76%
V	5	2.69%
IX	4	2.15%
MIMAROPA	4	2.15%
VIII	4	2.15%
XIII	3	1.61%
BARMM	2	1.08%
CAR	2	1.08%
I	2	1.08%
XII	2	1.08%
Total	186	100.00%

Source: NEDA

IV. Employment and Skills Requirements

TESDA's 2022 Labor Market Information (LMI) on Future Proofing the Construction Sector specified the skills requirements for the construction industry and matched them with the equivalent TVET programs to address these needs.

Table 8. Equivalent TVET Programs for the Priority Jobs/Skills in the Construction Industry, by Value Chain

Value Chain	Technical Jobs/Skills/Qualifications	Equivalent TVET Program (TR/CS)
Project Management	Maintenance Technician	Heavy Equipment Servicing (Mechanical) NC II
	Project Manager	No Equivalent TVET Program
	Construction Manager	No Equivalent TVET Program
	Project Supervisors	No Equivalent TVET Program
	Field Engineers	No Equivalent TVET Program
	Materials Engineer	No Equivalent TVET Program

	Materials Testing Technician	No Equivalent TVET Program
	Quality Control Supervisors/Engineers	No Equivalent TVET Program
	Document Controller	No Equivalent TVET Program
	Environment, Safety & Health Engineers/Officers	No Equivalent TVET Program
	Safety Assistants	No Equivalent TVET Program
	Community Relations Officer	No Equivalent TVET Program
	Quantity Surveyors	No Equivalent TVET Program
	Contract & Commercial Management Specialists	No Equivalent TVET Program
	Cost Engineers	No Equivalent TVET Program
	Procurement & Materials Management Officer	No Equivalent TVET Program
	Material Inventory Assistants / Warehouse	No Equivalent TVET Program
	Toolkeepers	No Equivalent TVET Program
	Site HR Officers	No Equivalent TVET Program
	HR Assistants / Timekeepers	No Equivalent TVET Program
	Site Accounting Assistant	No Equivalent TVET Program
	Admin Assistant	No Equivalent TVET Program
	Equipment Dispatchers	No Equivalent TVET Program
Direct Workers	Rough Carpenters	Carpentry NC II
	Welders	Gas Metal Arc Welding (GMAW) NC I
		Gas Metal Arc Welding (GMAW) NC II
		Gas Metal Arc Welding (GMAW) NC III
		Flux Cored Arc Welding (FCAW) NC I
		Flux Cored Arc Welding (FCAW) NC II
		Flux Cored Arc Welding (FCAW) NC III
		Submerged Arc Welding (SAW) NC I
		Submerged Arc Welding (SAW) NC II
		Gas Welding NC I
		Gas Welding NC II
		Pipefitters

	Plumbers	Plumbing I
		Plumbing II
		Plumbing III
	Painters	Construction Painting NC II
		Construction Painting NC III
	Electricians	Electrical Installation and Maintenance NC II
	Tile Setters	Tile Setting NC II
	Tig/SMAW/ GTAW Welder	Manual Metal Arc Welding (MMAW) NC I
		Manual Metal Arc Welding (MMAW) NC II
		Manual Metal Arc Welding (MMAW) NC III
		Manual Metal Arc Welding (MMAW) NC IV
		Gas Tungsten Arc Welding (GTAW) NC II
		Gas Tungsten Arc Welding (GTAW) NC IV
	Scaffolders	Scaffolding Works NC II (Supported Type Scaffold)
	Certified Scaffolders	Scaffolding Works NC II (Supported Type Scaffold)
	Erection Crew/Erectors	Structural Erection NC II
	Formworks Crew	System Formworks Installation NC II
	Tinsmiths	No Equivalent TVET Program
	Foreman	Construction Trade Supervision Level IV
		Construction Site Supervision Level IV
	Leadmen	No Equivalent TVET Program
	Finishing Carpenters	Carpentry NC II
		Carpentry NC III
	General Foremen	Construction Trade Supervision Level IV
		Construction Site Supervision Level IV
	Master Electrician	Electrical Installation and Maintenance NC II
		Electrical Installation and Maintenance NC III

		Electrical Installation and Maintenance NC IV
	Semi Skilled Workers	No Equivalent TVET Program
	Unskilled Workers (Laborers / Helpers)	Masonry NC I
	Millwright	No Equivalent TVET Program
	Pre Cast Masons/Skilled	No Equivalent TVET Program
	Finishing Masons	No Equivalent TVET Program
	Sandblasting Crew	No Equivalent TVET Program
	Water well drilling	Water Well Drilling Level II
	Elevator Installation Technician	Elevator Installation Level II
Equipment (Operators and Maintenance)	Backhoe Operators	HEO (Hydraulic Excavator) NC II
	Crane Operators (Tower Cranes)	HEO (Tower Crane) NC III
	Compactors	HEO (Road Roller) NC II
	Grader Operators	HEO (Motor Grader) NC II
	Dump Truck Drivers	HEO (Articulated Off-Highway Dump Truck) NC II
		HEO (Rigid Off-Highway Dump Truck) NC II
		HEO (Rigid On-Highway Dump Truck) NC II
	Transit Mixer Truck Drivers	HEO (Transit Mixer) NC II
	Service Vehicle Drivers	Driving NC II
		Driving (Passenger Bus/Straight Truck) NC III
	Equipment Technicians	Heavy Equipment Servicing (Mechanical) NC II
	Riggers	Rigging NC I
	Crane Operators (Mobile)	HEO (Crawler Crane) NC III
		HEO (Rough Terrain Crane) NC III
		HEO (Truck Mounted Crane) NC III
	Alimak Operators	Construction Lift Passenger/ Material Elevator Operation NC II
	Gondola Tenders	No Equivalent TVET Program
Generator Set Tenders	No Equivalent TVET Program	
Tower Light Tenders	No Equivalent TVET Program	
Skid Loader Operators	No Equivalent TVET Program	

	Stamping Machine Operators	No Equivalent TVET Program
	Drilling Rig Operators	No Equivalent TVET Program
	Boom Truck Drivers	No Equivalent TVET Program
	Heavy Equipment Mechanic (Advance)	No Equivalent TVET Program
	Equipment Maintenance Supervisors	No Equivalent TVET Program
	Equipment Tool Keepers	No Equivalent TVET Program
	Spotters	No Equivalent TVET Program
Corporate / Head Office Support	Procurement Staff	No Equivalent TVET Program
	Accounting Staff	No Equivalent TVET Program
	Cost Planning & Control	No Equivalent TVET Program
	Tender Planning & Estimating Staff	No Equivalent TVET Program
	Treasury Staff	No Equivalent TVET Program
	Billing & Collection Staff	No Equivalent TVET Program
	Human Resource Staff	No Equivalent TVET Program
	Logistics & Support Staff	No Equivalent TVET Program
	Liaison Staff	No Equivalent TVET Program

Source: LMI on Future Proofing the Construction Sector

Given that the BBM infrastructure program spans the entire nation, it will necessitate workers from all regions of the Philippines. Through TESDA's Area-Based Demand-Driven TVET central strategy, each region has identified its priority programs, whether existing or emerging, for 2024-2026. This identification process helps assess the capacity of Technical Vocational Institutions (TVIs) across all regions to supply the skilled workers needed for the implementation of the BBM project. The table below summarizes the equivalent TVET programs of the skills requirements of the construction sector, and the regions that prioritized them for 2024 to 2026. It should also be noted that

Table 9. Required TVET Programs of the Construction Sector and the Regions that Prioritized Them

TVET Program	Regions
Heavy Equipment Servicing (Mechanical) NC II	I, II, IV-A, IV-B, V, VI, IX, X, XI, XII, BARMM
Masonry NC I	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, BARMM
Carpentry NC II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
Gas Metal Arc Welding (GMAW) NC I	NCR, III, IV-A, V, VI
Gas Metal Arc Welding (GMAW) NC II	NCR, III, IV-A, V, VI, VII, VIII

Gas Metal Arc Welding (GMAW) NC III	NCR, III, IV-A, V, VI, VIII
Flux Cored Arc Welding (FCAW) NC I	NCR, III, IV-A, V, VI
Flux Cored Arc Welding (FCAW) NC II	NCR, III, IV-A, V, VI, VII
Flux Cored Arc Welding (FCAW) NC III	NCR, III, IV-A, V, VI
Submerged Arc Welding (SAW) NC I	NCR, III
Submerged Arc Welding (SAW) NC II	NCR, III, VII
Gas Welding NC I	NCR, III, V, VI, VII
Gas Welding NC II	NCR, III, V, VI, VII
Pipefitting (Metallic) NC II	CAR, NCR, III, IV-A, IV-B, V, VI, VIII, X
Plumbing I	CAR, NCR, I, III, IV-A, IV-B, V, VI, VIII, IX, X, XI, XII
Plumbing II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
Plumbing III	CAR, NCR, II, III, IV-A, IV-B, V, VI, VIII, X, XII
Construction Painting NC II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
Construction Painting NC III	CAR, NCR, III, IV-A, IV-B, V, IX, XII
Tile Setting NC II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
Manual Metal Arc Welding (MMAW) NC I	III, XII
Manual Metal Arc Welding (MMAW) NC II	III, XII
Manual Metal Arc Welding (MMAW) NC III	III, XII
Manual Metal Arc Welding (MMAW) NC IV	III, XII
Gas Tungsten Arc Welding (GTAW) NC II	NCR, III, IV-A, IV-B, V, VI, VII, VIII
Gas Tungsten Arc Welding (GTAW) NC IV	NCR, III, IV-A, V, VII
Scaffolding Works NC II (Supported Type Scaffold)	CAR, I, II, III, IV-A, IV-B, V, VI, VIII, IX, X, XI, XII, CARAGA, BARMM
Structural Erection NC II	CAR, NCR, II, IV-A, IV-B, V, XII
System Formworks Installation NC II	IV-A, IV-B, V, XII
Construction Trade Supervision Level IV	NCR, IV-B

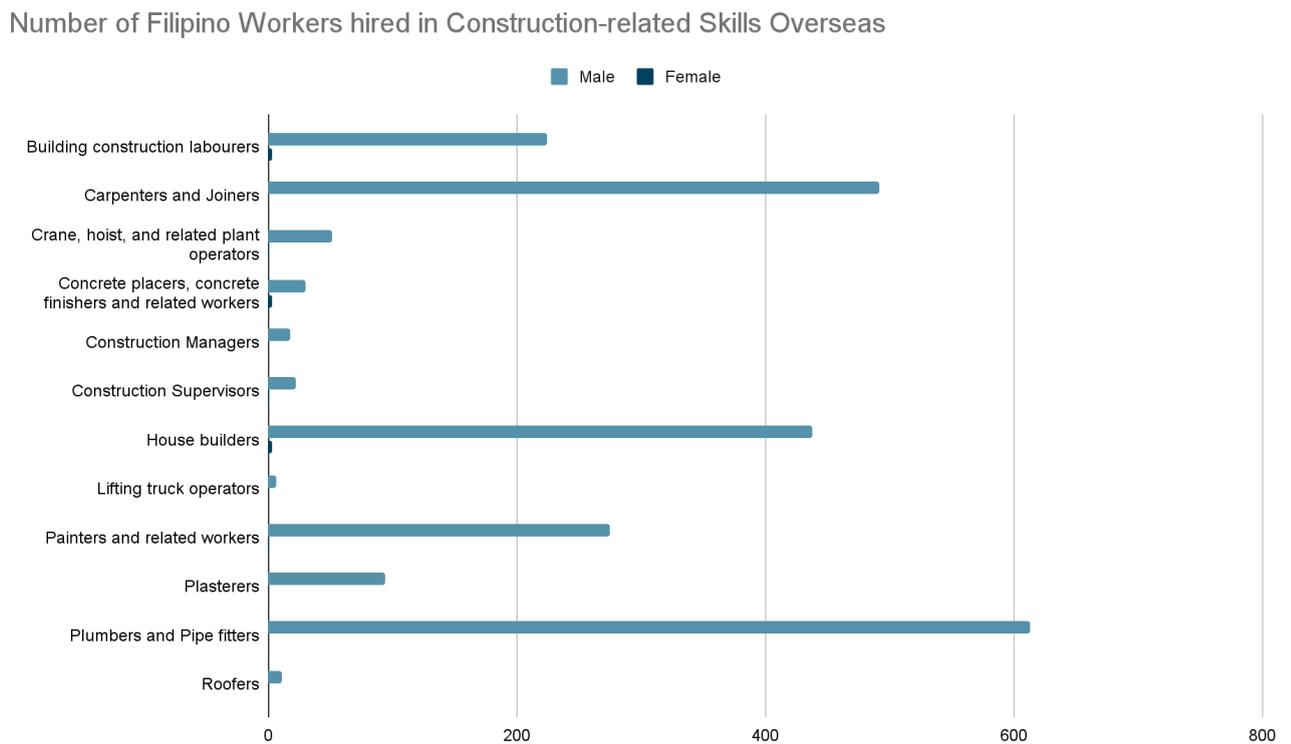
Construction Site Supervision Level IV	NCR, III, IV-B
Electrical Installation and Maintenance NC II	II, III, IV-A, IV-B, V, VI, VIII, IX, X, XI, XII, CARAGA
Electrical Installation and Maintenance NC III	III, IV-A, IV-B, V, VI, XII
Electrical Installation and Maintenance NC IV	III, IV-A, V, VI, XII
Water Well Drilling Level II	IX
Elevator Installation Level II	none
HEO (Hydraulic Excavator) NC II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
HEO (Tower Crane) NC III	CAR, NCR, II, IV-A, IV-B, V, VI, VII, XII, CARAGA
HEO (Road Roller) NC II	CAR, NCR, II, III, IV-A, IV-B, V, VI, VII, IX, X, XI, XII, CARAGA, BARMM
HEO (Motor Grader) NC II	CAR, NCR, II, III, IV-A, IV-B, V, VI, IX, X, XI, XII, CARAGA, BARMM
HEO (Articulated Off-Highway Dump Truck) NC II	CAR, NCR, I, II, III, IV-A, IV-B, V, VI, VII, X, XII
HEO (Rigid Off-Highway Dump Truck) NC II	CAR, NCR, II, III, IV-A, IV-B, V, VI, VII, IX, X, XII, CARAGA, BARMM
HEO (Rigid On-Highway Dump Truck) NC II	CAR, I, II, III, IV-A, IV-B, V, VI, VII, XII CARAGA
HEO (Transit Mixer) NC II	IV-A, V, XI
Driving NC II	none
Driving (Passenger Bus/Straight Truck) NC III	IV-A, V, VII
Rigging NC I	IV-A, BARMM
HEO (Crawler Crane) NC III	CAR, NCR, I, III, IV-A, IV-B, V, VII, VIII, IX, X, XI, XII, CARAGA, BARMM
HEO (Rough Terrain Crane) NC III	II, IV-A, V, VI
HEO (Truck Mounted Crane) NC III	III, VIII, XI
Construction Lift Passenger/ Material Elevator Operation NC II	IV-A

Source: R/PTESDPs of all TESDA Regional and Provincial Offices (Action Programming)

Meanwhile, the figure below presents data on the number of Filipino workers deployed overseas to perform construction-related jobs. Based on the table, plumbers and pipefitters

are employed most (613), followed by carpenters and joiners (492), and housebuilders (441). This shows that these skills are most in-demand overseas, and thus might pose some negative implications for the hiring of workers domestically since local employers will be competing with foreign employers. Moreover, the data shows that women take up only 0.52% of the construction workers hired abroad. The more detailed data on the number of Filipino workers hired in construction-related skills and the specific countries where they were employed can be seen in the Annex.

Figure 5. Number of Filipino Workers Hired in Construction-related Skills Overseas, by Sex, for January to October 2020



Source: POEA

V. TVET Capacity

The table below presents the data on the enrolled and graduates of the equivalent qualifications (WTR or with Training Regulations) of the skills requirements identified by the construction industry from the last five years (2019-2023), categorized by sex. Based on the data, Driving NC II had the highest number of both enrolled and graduates for the given period, followed by Shielded Metal Arc Welding (SMAW) II. Electrical Installation and Maintenance II had a higher number of enrolled than Shielded Metal Arc Welding (SMAW) I, although the latter had a higher number of graduates than the latter. The qualification with the fifth highest number of enrolled and graduates is Carpentry NC II.

As the construction jobs that hired the highest number of Filipino overseas workers, Plumbers and Pipefitters saw their equivalent TVET programs in Plumbing NC I, Plumbing NC II, Plumbing NC III, and Pipefitting (Metallic) NC II respectively. Among these qualifications, Plumbing NC II had the highest output for enrolled and graduates for the last five years, followed by Plumbing NC I and Pipefitting (Metallic) NC II. Meanwhile, Carpenters and Joiners had the second highest number of Filipino overseas workers. One of its equivalent qualifications, Carpentry NC II has the fifth highest number of enrolled and graduates.

Table 10. Number of Enrolled and Graduates of Equivalent Programs (WTR) of the Skills Requirements of the Construction Industry, by Sex, for 2019 to 2023

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate		
		Female	Male	Total																											
Automotive and Land Transportation	Driving (Passenger Bus/Straight Truck) III	129	1,221	1,350	118	1,143	1,261	11	225	236	12	118	130	35	676	711	30	488	518	47	904	951	45	983	1,028	33	1,100	1,133	33	993	1,026
Automotive and Land Transportation	Driving II	8,570	27,093	35,663	7,412	24,152	31,564	5,678	14,510	20,188	4,034	11,030	15,064	12,995	30,438	43,433	11,929	29,010	40,939	16,497	36,484	52,981	17,186	38,117	55,303	15,462	34,941	50,403	13,797	31,502	45,299
Construction	Carpentry II	1,410	11,109	12,519	1,064	8,140	9,204	523	4,660	5,183	658	5,814	6,472	1,174	7,612	8,786	941	6,851	7,792	1,582	7,346	8,928	1,783	8,058	9,841	1,274	7,155	8,429	1,317	6,718	8,035
Construction	Carpentry III	0	45	45	0	49	49	0	20	20	0	39	39	4	66	70	4	40	44	2	24	26	2	46	48	5	101	106	5	98	103
Construction	Construction	454	1,541	1,995	392	1,316	1,708	214	511	725	178	519	697	679	1,606	2,285	583	1,224	1,807	712	1,406	2,118	771	1,612	2,383	316	1,048	1,364	297	940	1,237

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate			Enrolled			Graduate		
		Female	Male	Total																											
Metals and Engineering	Flux Cored Arc Welding (FCAW) I	7	43	50	7	43	50	0	0	0	0	0	0	4	71	75	4	20	24	2	4	6	0	47	47	0	0	0	2	22	24
Metals and Engineering	Flux Cored Arc Welding (FCAW) II	18	179	197	11	137	148	0	25	25	5	43	48	7	66	73	0	25	25	22	146	168	22	144	166	4	101	105	4	121	125
Metals and Engineering	Gas Metal Arc Welding (GMAW) I	16	245	261	15	238	253	0	0	0	1	24	25	25	100	125	12	34	46	9	43	52	12	62	74	10	115	125	5	110	115
Metals and Engineering	Gas Metal Arc Welding (GMAW) II	177	1,666	1,843	162	1,413	1,575	75	604	679	60	583	643	115	841	956	108	862	970	107	988	1,095	129	1,120	1,249	97	965	1,062	91	957	1,048
Metals and Engineering	Gas Metal Arc Welding (GMAW) III	1	16	17	0	9	9	0	0	0	1	7	8	1	22	23	1	22	23	0	0	0	0	0	0	3	22	25	3	21	24
Metals and Engineering	Gas Tungsten Arc Welding (GTAW) II	239	2,451	2,690	195	2,057	2,252	63	728	791	84	904	988	131	1,341	1,472	135	1,435	1,570	70	866	936	90	1,011	1,101	85	953	1,038	88	943	1,031
Metals and Engineering	Gas Welding I	0	0	0	0	0	0	0	0	0	0	0	0	1	24	25	1	24	25	3	22	25	3	21	24	0	0	0	0	0	0
Metals and Engineering	Gas Welding II	0	16	16	0	17	17	0	0	0	0	9	9	0	2	2	0	2	2	1	10	11	1	15	16	0	6	6	0	1	1
Metals and Engineering	Shielded Metal Arc Welding (SMAW) I	2,501	24,148	26,649	1,901	19,321	21,222	1,583	11,475	13,058	1,434	12,319	13,753	3,256	22,074	25,330	3,273	21,597	24,870	2,509	20,993	23,502	3,052	23,959	27,011	2,340	25,010	27,350	2,178	23,172	25,350
Metals and Engineering	Shielded Metal Arc Welding (SMAW) II	3,824	40,887	44,711	2,991	32,953	35,944	1,879	15,242	17,121	1,525	13,800	15,325	3,269	25,894	29,163	3,427	26,154	29,581	2,641	23,210	25,851	3,199	27,236	30,435	2,023	23,899	25,922	1,777	21,790	23,567
Metals and Engineering	Shielded Metal Arc Welding (SMAW) III	158	1,558	1,716	150	1,458	1,608	93	580	673	60	518	578	247	1,658	1,905	255	1,695	1,950	95	736	831	134	925	1,059	148	1,414	1,562	144	1,417	1,561
Metals and Engineering	Shielded Metal Arc Welding (SMAW) IV	14	86	100	14	85	99	11	147	158	10	135	145	30	111	141	30	110	140	0	0	0	0	0	0	31	149	180	31	149	180
Metals and Engineering	Submerged Arc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 11. Number of Assessed and Certified of Equivalent Programs (WTR) of the Skills Requirements of the Construction Industry, by Sex, for 2019 to 2023

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Automotive and Land Transportation	Driving (Passenger Bus/Straight Truck) NC III	213	5,937	6,150	193	5,769	5,962	49	2,190	2,239	47	2,101	2,148	86	3,864	3,950	82	3,634	3,716	112	5,878	5,990	102	5,577	5,679	85	6,197	6,282	85	5,964	6,049
Automotive and Land Transportation	Driving NC II	9,627	44,198	53,825	8,962	42,291	51,253	5,424	22,941	28,365	5,041	21,616	26,657	12,124	42,290	54,414	11,192	39,515	50,707	16,506	51,475	67,981	15,320	48,938	64,258	13,409	48,325	61,734	12,353	46,046	58,399
Construction	Carpentry NC II	1,394	14,450	15,844	1,288	13,720	15,008	630	6,146	6,776	592	5,807	6,399	893	6,919	7,812	845	6,675	7,520	1,744	10,233	11,977	1,627	9,835	11,462	1,488	11,314	12,802	1,415	11,052	12,467
Construction	Carpentry NC III	3	157	160	2	146	148	6	62	68	6	59	65	12	59	71	12	58	70	19	115	134	18	110	128	25	138	163	19	129	148
Construction	Construction Lift Passenger/Material Elevator Operation NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Construction Painting NC II	438	1,903	2,341	421	1,840	2,261	158	648	806	152	638	790	438	1,073	1,511	430	1,050	1,480	749	1,822	2,571	724	1,766	2,490	266	1,353	1,619	264	1,340	1,604
Construction	Construction Painting NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Heavy Equipment Operation (Articulated Off-Highway Dump Truck) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Heavy Equipment Operation (Crawler Crane) NC II	3	489	492	3	488	491	0	121	121	0	116	116	0	302	302	0	281	281	0	284	284	0	270	270	1	100	101	1	96	97
Construction	Heavy Equipment Operation (Crawler Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0	9	9	0	20	20	0	20	20	1	252	253	1	223	224	
Construction	Heavy Equipment Operation (Hydraulic Excavator) NC II	85	7,809	7,894	83	7,618	7,701	20	2,217	2,237	20	2,167	2,187	118	4,909	5,027	117	4,763	4,880	169	6,926	7,095	161	6,690	6,851	154	6,616	6,770	139	6,398	6,537

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Construction	Heavy Equipment Operation (Motor Grader) NC II	9	747	756	8	711	719	2	298	300	2	287	289	8	519	527	8	501	509	7	562	569	7	527	534	9	487	496	9	462	471
Construction	Heavy Equipment Operation (Rigid Off-Highway Dump Truck) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	238	243	5	232	237	2	542	544	2	541	543
Construction	Heavy Equipment Operation (Rigid On-Highway Dump Truck) NC II	0	0	0	0	0	0	0	31	31	0	26	26	0	0	0	0	0	0	24	3,253	3,277	18	2,995	3,013	35	3,425	3,460	33	3,315	3,348
Construction	Heavy Equipment Operation (Road Roller) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	468	484	15	419	434	33	772	805	33	705	738
Construction	Heavy Equipment Operation (Rough Terrain Crane) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232	232	0	204	204	0	68	68	0	68	68
Construction	Heavy Equipment Operation (Rough Terrain Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	144	0	113	113	1	457	458	1	408	409
Construction	Heavy Equipment Operation (Tower Crane) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	369	372	3	368	371	0	98	98	0	98	98
Construction	Heavy Equipment Operation (Tower Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	27	0	27	27	0	267	267	0	237	237
Construction	Heavy Equipment Operation (Transit Mixer) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	600	600	0	556	556	3	577	580	3	565	568
Construction	Heavy Equipment Operation (Truck Mounted Crane) NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1,038	1,040	2	998	1,000	3	596	599	1	580	581
Construction	Heavy Equipment Operation (Truck Mounted Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	277	282	5	228	233	3	659	662	3	528	531

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Construction	Heavy Equipment Servicing (Mechanical) NC II	11	436	447	10	421	431	0	51	51	0	51	51	3	133	136	3	124	127	10	325	335	10	311	321	6	572	578	6	551	557
Construction	HEO (Mechanical) NC II	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Rigid Off-Highway Dump Truck) NC II	2	204	206	2	185	187	3	48	51	3	48	51	1	82	83	1	80	81	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Rigid On-Highway Dump Truck) NC II	63	4,410	4,473	60	4,280	4,340	7	1,532	1,539	7	1,496	1,503	38	3,303	3,341	32	3,109	3,141	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Road Roller) NC II	6	411	417	6	403	409	1	165	166	1	162	163	1	429	430	1	378	379	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Rough Terrain Crane) NC II	1	679	680	1	667	668	1	124	125	1	120	121	0	216	216	0	216	216	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Rough Terrain Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	1	39	40	0	20	20	0	0	0	0	0	0	0	0	0	0	0	
Construction	HEO (Tower Crane) NC II	1	687	688	1	686	687	2	180	182	2	175	177	2	301	303	2	298	300	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Tower Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	6	6	0	0	0	0	0	0	0	0	0	0	0	
Construction	HEO (Transit Mixer) NC II	1	139	140	1	131	132	0	47	47	0	46	46	2	162	164	2	152	154	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Truck Mounted Crane) NC II	9	1,511	1,520	9	1,501	1,510	2	629	631	2	620	622	1	842	843	1	809	810	0	0	0	0	0	0	0	0	0	0	0	0
Construction	HEO (Truck Mounted Crane) NC III	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	0	5	5	0	0	0	0	0	0	0	0	0	0	0	
Construction	Masonry NC I	217	1,812	2,029	214	1,749	1,963	228	898	1,126	224	883	1,107	348	1,669	2,017	333	1,623	1,956	831	3,843	4,674	818	3,782	4,600	469	2,171	2,640	461	2,156	2,617
Construction	Pipefitting (Metallic) NC II	0	0	0	0	0	0	2	15	17	2	15	17	68	726	794	68	721	789	59	1,714	1,773	25	1,647	1,672	32	1,954	1,986	26	1,946	1,972
Construction	Plumbing NC I	257	1,417	1,674	231	1,379	1,610	91	528	619	79	511	590	199	725	924	192	703	895	320	1,125	1,445	315	1,105	1,420	289	1,073	1,362	285	1,058	1,343

Sector Title	Qualification	2019						2020						2021						2022						2023					
		Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified			Assessment			Certified		
		Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Construction	Plumbing NC II	511	4,314	4,825	479	4,090	4,569	269	1,619	1,888	255	1,555	1,810	295	1,862	2,157	259	1,674	1,933	525	2,875	3,400	484	2,615	3,099	340	2,581	2,921	323	2,442	2,765
Construction	Plumbing NC III	0	20	20	0	20	20	0	0	0	0	0	0	5	35	40	5	35	40	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Rigging NC I	19	3,250	3,269	19	3,235	3,254	7	821	828	7	807	814	20	1,499	1,519	18	1,421	1,439	29	2,143	2,172	27	2,048	2,075	44	2,161	2,205	43	2,120	2,163
Construction	Scaffolding Works (Supported Type Scaffold) NC II	29	964	993	28	926	954	42	1,393	1,435	39	1,301	1,340	86	4,425	4,511	84	4,313	4,397	223	7,828	8,051	212	7,535	7,747	438	9,403	9,841	434	9,087	9,521
Construction	Structural Erection NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Construction	System Formworks Installation NC II	0	0	0	0	0	0	0	0	0	0	0	0	1	19	20	1	19	20	6	16	22	6	16	22	14	131	145	14	128	142
Construction	Systems Formwork Installation NC II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Construction	Tile Setting NC II	1,323	7,312	8,635	1,263	7,033	8,296	539	2,394	2,933	518	2,350	2,868	935	3,321	4,256	898	3,171	4,069	1,234	4,176	5,410	1,204	4,093	5,297	1,161	4,450	5,611	1,121	4,335	5,456
Electrical and Electronics	Electrical Installation and Maintenance NC II	3,679	55,956	59,635	3,407	51,743	55,150	2,184	23,541	25,725	2,021	21,734	23,755	2,694	28,048	30,742	2,422	25,617	28,039	3,366	38,825	42,191	3,053	36,001	39,054	4,038	51,550	55,588	3,701	48,219	51,920
Electrical and Electronics	Electrical Installation and Maintenance NC III	72	1,764	1,836	67	1,570	1,637	35	819	854	33	750	783	43	1,243	1,286	39	1,121	1,160	101	1,873	1,974	90	1,726	1,816	91	1,536	1,627	82	1,386	1,468
Electrical and Electronics	Electrical Installation and Maintenance NC IV	2	36	38	2	30	32	0	0	0	0	0	0	0	3	3	0	3	3	0	10	10	0	10	10	8	21	29	8	21	29
Metals and Engineering	Flux Cored Arc Welding (FCAW) NC I	0	0	0	0	0	0	5	22	27	5	22	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals and Engineering	Flux Cored Arc Welding (FCAW) NC II	46	571	617	46	570	616	7	97	104	7	97	104	2	101	103	2	98	100	27	386	413	27	385	412	18	798	816	18	774	792
Metals and Engineering	Gas Metal Arc Welding (GMAW) NC I	22	270	292	21	269	290	4	58	62	4	56	60	9	21	30	9	21	30	23	98	121	17	81	98	24	236	260	24	229	253
Metals and	Gas Metal Arc	208	2,100	2,308	203	2,049	2,252	43	557	600	43	543	586	103	1,019	1,122	102	1,012	1,114	130	1,464	1,594	125	1,420	1,54	126	1,632	1,758	121	1,600	1,721

Construction	Water Well Drilling Level II	0	0	0	0	0	0	0	0	0	0
TOTAL		346	187	126	65	201	206	168	221	129	111

Table 13 below presents the TVET infrastructure, particularly the number of assessment centers, competency assessors, registered programs, and National TVET Trainers Certification (NTTC) holders of the identified qualifications as of December 2023. As with the number of enrolled, graduates, assessed, and certified, Driving NC II also had the highest figures in terms of TVET infrastructure. Electrical Installation and Maintenance NC II, and Carpentry NC II are also consistently in the top 5 qualifications with the highest TVET infrastructure. Driving (Passenger Bus/Straight Truck) NC III had both the fifth highest number of assessment centers and competency assessors. Notably, Tile Setting NC II has the fifth highest number of registered programs, while Gas Tungsten Arc Welding (GTAW) NC II has the fifth highest number of NTTC holders.

Conversely, the following qualifications have no recorded TVET infrastructure at all as of December 2023:

- Carpentry NC III (Amended)
- Construction Lift Passenger/Material Elevator Operation NC II
- Construction Painting NC II (Amended)
- Heavy Equipment Operation (Container Stacker) NC II
- Heavy Equipment Operation (Screed) NC I
- Masonry NC III (Amended)
- Structural Erection NC II
- Submerged Arc Welding (SAW) NC I
- Gas Tungsten Arc Welding (GTAW) NC IV
- Water Well Drilling Level II
- Elevator Installation Level II

Table 13. Number of Assessment Centers, Competency Assessors, Registered Programs, and National TVET Trainers Certification Holders as of December 2023

Sector	Qualification	Assessment Centers	Competency Assessors	Registered Programs	NTTC Holders
Construction	Carpentry NC II	132	242	223	788
Construction	Carpentry NC II (Amended)	0	0	12	0
Construction	Carpentry NC III	10	24	6	64

Construction	Carpentry NC III (Amended)	0	0	0	0
Construction	Construction Lift Passenger/Material Elevator Operation NC II	0	0	0	0
Construction	Construction Painting NC II	34	51	47	174
Construction	Construction Painting NC II (Amended)	0	0	0	0
Construction	Construction Painting NC III	0	0	0	3
Construction	Heavy Equipment Operation (Articulated Off-Highway Dump Truck) NC II	3	3	0	2
Construction	Heavy Equipment Operation (Backhoe Loader) NC II	35	52	56	144
Construction	Heavy Equipment Operation (Bulldozer) NC II	39	41	34	141
Construction	Heavy Equipment Operation (Concrete Pump) NC II	0	3	0	0
Construction	Heavy Equipment Operation (Container Stacker) NC II	0	0	0	0
Construction	Heavy Equipment Operation (Crawler Crane) NC II	2	6	1	14
Construction	Heavy Equipment Operation (Crawler Crane) NC III	9	4	0	1
Construction	Heavy Equipment Operation (Forklift) NC II	62	129	37	262
Construction	Heavy Equipment Operation (Forklift) NC II (Amended)	0	0	19	0
Construction	Heavy Equipment Operation (Gantry Crane) NC II	0	4	0	4
Construction	Heavy Equipment Operation (Hydraulic Excavator) NC II	88	125	43	287

Construction	Heavy Equipment Operation (Hydraulic Excavator) NC II (Amended)	0	0	27	0
Construction	Heavy Equipment Operation (Motor Grader) NC II	24	34	22	105
Construction	Heavy Equipment Operation (Overhead and Gantry Crane) NC III	6	6	0	2
Construction	Heavy Equipment Operation (Paver) NC II	1	2	0	2
Construction	Heavy Equipment Operation (Rigid Off-Highway Dump Truck) NC II	5	6	1	7
Construction	Heavy Equipment Operation (Rigid On-Highway Dump Truck) NC II	64	90	17	143
Construction	Heavy Equipment Operation (Rigid On-Highway Dump Truck) NC II (Amended)	0	0	15	0
Construction	Heavy Equipment Operation (Road Roller) NC II	29	20	14	54
Construction	Heavy Equipment Operation (Rough Terrain Crane) NC II	1	8	4	16
Construction	Heavy Equipment Operation (Rough Terrain Crane) NC III	10	5	0	10
Construction	Heavy Equipment Operation (Screed) NC I	0	0	0	0
Construction	Heavy Equipment Operation (Tower Crane) NC II	1	6	1	10
Construction	Heavy Equipment Operation (Tower Crane) NC III	6	5	0	1
Construction	Heavy Equipment Operation (Transit Mixer) NC II	16	16	2	18

Construction	Heavy Equipment Operation (Truck Mounted Crane) NC II	3	13	2	26
Construction	Heavy Equipment Operation (Truck Mounted Crane) NC III	10	6	0	4
Construction	Heavy Equipment Operation (Wheel Loader) NC II	81	86	88	239
Construction	Heavy Equipment Operation NC I	0	0	0	1
Construction	Heavy Equipment Servicing (Mechanical) NC II	6	14	3	22
Construction	Masonry NC I	57	97	81	1
Construction	Masonry NC I (Amended)	0	0	1	0
Construction	Masonry NC II	125	207	221	646
Construction	Masonry NC II (Amended)	0	0	6	0
Construction	Masonry NC III	8	14	2	65
Construction	Masonry NC III (Amended)	0	0	0	0
Construction	Pipefitting (Metallic) NC II	11	32	13	60
Construction	Pipefitting NC II	0	8	6	45
Construction	Plumbing NC I	36	27	44	0
Construction	Plumbing NC II	65	75	95	282
Construction	Plumbing NC III	2	3	1	14
Construction	PV System Design NC III	2	0	2	0
Construction	PV Systems Installation NC II	53	85	86	320
Construction	PV Systems Servicing NC III	7	6	7	47
Construction	Reinforcing Steel Works NC II	9	10	6	19
Construction	Rigging NC I	17	23	9	24
Construction	Scaffold Erection NC II	0	7	5	29

Construction	Scaffolding Works (Supported Type Scaffold) NC II	64	103	55	251
Construction	Structural Erection NC II	0	0	0	0
Construction	System Formworks Installation NC II	1	6	3	6
Construction	Technical Drafting NC II	50	75	65	287
Construction	Tile Setting NC II	85	140	133	405
Construction	Tile Setting NC II (Amended)	0	0	7	0
Metals and Engineering	Gas Metal Arc Welding (GMAW) NC I	12	11	14	0
Metals and Engineering	Gas Metal Arc Welding (GMAW) NC II	40	74	55	411
Metals and Engineering	Gas Metal Arc Welding (GMAW) NC III	2	6	3	15
Metals and Engineering	Flux Cored Arc Welding (FCAW) NC I	4	0	5	0
Metals and Engineering	Flux Cored Arc Welding (FCAW) NC II	20	20	15	198
Metals and Engineering	Flux Cored Arc Welding (FCAW) NC III	1	0	0	1
Metals and Engineering	Submerged Arc Welding (SAW) NC I	0	0	0	0
Metals and Engineering	Submerged Arc Welding (SAW) NC II	0	1	0	0
Metals and Engineering	Gas Welding NC I	2	2	1	0
Metals and Engineering	Gas Welding NC II	3	2	3	2
Metals and Engineering	Manual Metal Arc Welding (MMAW) NC I	0	3	0	0
Metals and Engineering	Manual Metal Arc Welding (MMAW) NC II	0	1	0	0
Metals and Engineering	Manual Metal Arc Welding (MMAW) NC III	0	3	0	0
Metals and Engineering	Manual Metal Arc Welding (MMAW) NC IV	0	3	0	0
Metals and Engineering	Gas Tungsten Arc Welding (GTAW) NC II	54	88	69	419

Metals and Engineering	Gas Tungsten Arc Welding (GTAW) NC IV	0	0	0	0
Electrical and Electronics	Electrical Installation and Maintenance NC II	297	524	507	1,802
Electrical and Electronics	Electrical Installation and Maintenance NC III	51	76	55	351
Electrical and Electronics	Electrical Installation and Maintenance NC IV	4	3	2	24
Automotive and Land Transportation	Driving NC II	406	758	736	2,942
Automotive and Land Transportation	Driving (Passenger Bus/Straight Truck) NC III	92	143	48	340
Construction	Construction Site Supervision Level IV			10	0
Construction	Construction Trade Supervision Level IV			9	0
Construction	Water Well Drilling Level II			0	0
Construction	Elevator Installation Level II			0	0
Total		2,257	3,637	3,054	11,550

VI. Ways Forward

Based on the reported information, the following actions are recommended to address the needs of the implementation of the Build Better More Infrastructure Program:

1. Prioritization of Construction Industry Skills Requirements for Review and Development of TVET Programs

As the identified skills requirements in the construction sector presented in this LMIR were obtained from an already existing LMIR for the construction sector, the following skills with no equivalent TVET programs have already been prioritized for the development of Training Regulations or Competency Standards. However, given that these skills will now address more specific and updated projects, it is recommended that each IFP undergo industry consultations and TESDA prioritization process again to come up with a more updated, specific and accurate identification of which skills will be developed into TRs or CS. Given the high number of IFPs and its implementation in specific regions, it is further recommended to conduct the prioritization process through the Area-Based Demand Driven TVET, where it will be the TESDA Regional and Provincial Offices that will spearhead the identification of priority skills requirements, and depending on the nationwide implications of the results, develop the corresponding TVET programs.

Table 14. List of Technical Jobs/Skills/Qualifications With No Equivalent TVET Programs

Value Chain	Technical Jobs/Skills/ Qualifications
Project Management	Project Manager
	Construction Manager
	Project Supervisors
	Field Engineers
	Materials Engineer
	Materials Testing Technician
	Quality Control Supervisors/Engineers
	Document Controller
	Environment, Safety & Health Engineers/Officers
	Safety Assistants
	Community Relations Officer
	Quantity Surveyors
	Contract & Commercial Management Specialists
	Cost Engineers

	Procurement & Materials Management Officer
	Material Inventory Assistants / Warehouse
	Toolkeepers
	Site HR Officers
	HR Assistants / Timekeepers
	Site Accounting Assistant
	Admin Assistant
	Equipment Dispatchers
Direct Workers	Tinsmiths
	Leadmen
	Semi Skilled Workers
	Millwright
	Pre Cast Masons/Skilled
	Finishing Masons
	Sandblasting Crew
Equipment (Operators and Maintenance)	Gondola Tenders
	Generator Set Tenders
	Tower Light Tenders
	Skid Loader Operators
	Stamping Machine Operators
	Drilling Rig Operators
	Boom Truck Drivers
	Heavy Equipment Mechanic (Advance)
	Equipment Maintenance Supervisors
	Equipment Tool Keepers
	Spotters
Corporate / Head Office Support	Procurement Staff
	Accounting Staff
	Cost Planning & Control
	Tender Planning & Estimating Staff
	Treasury Staff
	Billing & Collection Staff
	Human Resource Staff
	Logistics & Support Staff

Moreover, to ensure alignment with the Philippine Construction Industry Roadmap 2020-2023 and its Action Plans, more specifically the B.4. Digitization and Modernization Action Plan, it is recommended to regularly review and update training programs, competencies, and standards. This proactive approach helps to keep these programs relevant and responsive to industry changes and emerging trends, especially considering the timeline for Infrastructure Flagship Projects (IFPs).

By incorporating feedback from industry stakeholders—including construction firms, technology providers, and regulatory bodies—training curricula can be refined to meet evolving industry needs. This iterative process not only enhances the quality of training but also supports the adoption of modern technologies and practices within the construction sector. Ultimately, these efforts contribute to a skilled workforce capable of effectively contributing to the implementation of national infrastructure projects and sustaining the industry's competitiveness.

2. Strengthening of Infrastructure of the Construction-related TVET Programs

Following the identification of skills requirements for each Infrastructure Flagship Project (IFP), the next critical step is to ensure an adequate supply of skilled workers capable of meeting project needs. Under the previous administration's Build, Build, Build Project, which encompassed 61 projects as of February 2019 and required an estimated 25,449 workers, the Build Better More Project, with over 100% more projects, is expected to generate significantly more employment opportunities. Therefore, it is recommended to expand the number of registered programs, National TVET Trainers Certification (NTTC) holders, assessment centers, and competency assessors for priority TVET programs. This expansion is crucial to ensure that the BBM IFPs have a sufficient supply of competent workers ready to contribute effectively to the projects.

Some strategies that can be considered to achieve this include the implementation of the adopt-adapt strategies, wherein companies that are already conducting training programs can have their standards be adopted in the Philippine TVET system, adhering to the TESDA Circular No. 009 s. 2024 "Implementing Guidelines on Adopt-Adapt Strategies for Competency Standards/Training Regulations Review and Development," and the implementation of the Recognition of Prior Learning (RPL) for experienced construction workers and leaders that can serve as trainers and/or assessors.

3. Advocate Enrollment of Trainees in TVET Programs Under the Construction Sector

To ensure that there are sufficient workers for the implementation of the BBM IFPs, it is recommended that efforts be made to actively promote and advocate for the enrollment of trainees in TVET programs specifically tailored to the construction sector. This can be done through several initiatives, such as (1) providing scholarships, financial aid, and stipends to encourage enrollment in

construction-related TVET programs, (2) implementing enterprise-based programs to provide apprenticeship and internship programs that give real-world experience to trainees, (3) utilizing social media, traditional media, and community outreach programs to reach potential trainees and their families and remove the stigma attached to construction jobs, and (4) modernizing training facilities and equipping TVIs with the latest technology and resources to entice trainees to enroll. Moreover, in the advent of the embedment of TVET TRs in the Senior High School curriculum, more students will now have access to construction-related qualifications that will enable them to apply for assessment and certification.

The need to increase the number of trainees for construction qualifications is becoming more urgent. This urgency stems from the growing trend of construction workers being hired for overseas projects, leading to a shortage of skilled labor domestically. Boosting enrollment in construction training programs is essential to address this gap and ensure a steady supply of qualified workers to meet the demands of local construction projects.

4. Promoting Gender Equality in the Construction Sector

With the stark difference between the male trainees versus the female trainees, and more apparently in the male and female construction workers hired overseas, it is recommended that TESDA, with its advocacy for women in non-traditional trades, continue its gender mainstreaming efforts by integrating gender perspectives into all construction sector programs and projects, ensuring that gender considerations are central to planning, implementation, monitoring, and evaluation.

Further, to strengthen gender-sensitive policies and practices in the construction sector, it is essential to conduct thorough reviews of existing policies within construction companies to ensure they promote gender equality. New policies should be implemented where gaps are identified, focusing on recruitment, training, workplace environment, and career progression. Enterprises should be encouraged to develop recruitment campaigns specifically aimed at attracting women to construction roles. Additionally, expanding access to construction education and training for women is crucial. Offering scholarships, grants, and financial incentives can motivate women to pursue construction education and training programs. Partnerships with schools, colleges, and universities should be established to enhance construction-related curricula and create pathways that lead directly to careers in the construction sector. Encouraging women to enroll in construction qualifications is also an effort towards increasing the output of the construction sector.

5. Strengthen Collaboration with Other Government Agencies and Industries Involved in the Construction of the BBM Project IFPs

Strengthening collaboration with other government agencies and industries involved in the construction of the BBM Project IFPs is crucial for the successful implementation and sustainability of these initiatives. This recommendation involves several strategic actions. First is to establish inter-agency committees involving

TESDA, DPWH, DOLE, and other relevant agencies to ensure a coordinated approach in the identification of skills requirements and implementation of the identified training programs vis-a-vis the construction of the IFPs themselves. Regular meetings will align goals, share updates, and address challenges collaboratively.

Second is to foster partnerships between government and private sector construction firms to share best practices and resources, ensuring training programs meet industry needs. The national industry TVET board (ITB) for the construction sector can continue its collaboration with TESDA in all construction-related activities undertaken. The ITB for construction functions as an autonomous, industry-driven entity aimed at aligning vocational education and training with the demands of the construction industry. The ITB should ensure that TVET systems promptly respond to labor market requirements in their sector.

Third is to collaborate with the relevant government agencies, the ITB, the Philippine Constructors Association (PCA), and construction companies on developing training programs that align with BBM IFP requirements, incorporating latest technologies. Fourth is to create integrated apprenticeship and internship programs with industry partners for practical training. Fifth is to coordinate resource sharing among agencies for the development and enhancement of TVIs, improving program accessibility. Sixth is to establish mechanisms for data sharing among all parties involved to inform skill demand forecasts. Last is to implement a joint monitoring and evaluation framework to assess program impact and ensure objectives are met effectively. These efforts aim to build a skilled workforce capable of supporting the BBM infrastructure projects.

Annexes

Annex A. List of Infrastructure Flagship Projects Under the Build Better More Program According to Sector

Project Title	Implementing Agency	Indicative Project Cost (in PHP B)	Fund Source	Development Partner (if ODA)	Region/s	Target Year of Completion	Status/ Milestone
AGRICULTURE							
Second Additional Financing for Philippine Rural Development Project	DA	19.18	ODA	WB	CAR, I, II, III, IV-A, MIMAROP A, V, VI, VII, VIII, IX, X, XI, XII, XIII, BARMM	2025	Ongoing
Regional Fish Port Project for Greater	DA	14.07	GAA	N/A	NCR	2025	Ongoing

Capital Region Formerly 'Upgrading/Rehabilitation of the Navotas Fish Port Complex'							
Establishment of the Agricultural and Fishery Engineering Center (AFEC)	DA	2.52	TBD	N/A	NCR	2027	Under project preparation
Upgrading/Improvement of General Santos Fish Port Complex	DA	2.84	GAA	N/A	XII	2027	Ongoing
Pang Agraryong Tulay Para sa Bagong Bayanihan ng mga Magsasaka (PBBM Bridges) Formerly 'Priority Bridges for Better Movement Project'	DAR	28.24	ODA	Korea	CAR, I, II, III, IV-A, MIMAROP A, V, VI, VII, VIII, IX, X, XI, XII, XIII	2028	Approved for implementation
Philippine Rural Development Project (PRDP) Scale-Up	DA	45.01	ODA	WB	CAR, I, II, III, IV-A, MIMAROP A, V, VI, VII, VIII, IX, X, XI, XII, XIII, BARMM	Beyond 2028	Ongoing
Livestock Infrastructure Modernization and Enhancement Project (LIMEP) Formerly 'Livestock Inspection and Safety Enhancement Project Phase I (LISEP-I)'	DA	7.71	ODA	Korea	IV-A	Beyond 2028	Under project preparation
Farm-to-Market Ports Network Project	DOTr	63.25	ODA	TBD	Nationwide	Beyond 2028	Pre-project preparation
Port Cold Chain Network Project	DOTr	30.80	ODA	TBD	Nationwide	Beyond 2028	Pre-project preparation
DIGITAL CONNECTIVITY							

Philippine Identification System (PhilSys)	PSA	29.59	GAA	N/A	Nationwide	2024	Ongoing
National Government Data Center (NGDC)	DICT	100.00	GAA	N/A	Nationwide	2026	Ongoing
National Broadband Program (NBP)	DICT	35.19	GAA	N/A	Nationwide	2028	Ongoing
EDUCATION							
Infrastructure for Safer and Resilient Schools (ISRS) Project	DepEd	30.56	ODA	WB	CAR, I, II, III, IV-A, MIMAROP A, V, VI, VII, VIII, IX, X, XI, XII, XIII BARMM	Bey 8	For government approval
HEALTH							
Virology and Vaccine Institute of the Philippines Formerly 'Virology Science and Technology Institute of the Philippines'	DOST	3.35	GAA	N/A	Na	24	Ongoing
Health System Enhancement to Address and Limit (HEAL) COVID-19 Project	DOH	40.77	ODA	ADB, AIIB	Na	24	Ongoing
Philippines COVID-19 Emergency Response Project (PCERP)	DOH	29.38	ODA	WB	na	24	Ongoing
UP PGH Cancer Center Project	UP	6.05	PPP	N/A	NCR	2027	Approved for implementation
UP Philippine General Hospital (PGH) Diliman Project	UP	12.74	PPP	N/A	NCR	2028	For government approval
OTHER INFRASTRUCTURE							
Philippines Seismic Risk Reduction and	DPWH	15.09	ODA	WB	NCR	2026	Ongoing

Resilience Project (PSRRRP)							
Reconstruction and Development Plan for a Greater Marawi Stage 2 (Output 2 of Emergency Assistance for Reconstruction and Recovery of Marawi)	DPWH	6.84	ODA	ADB	BARMM	2027	Ongoing
Maritime Safety Enhancement Project	DOTr	6.25	ODA	Korea	IV-B, VII	Beyond 28	Approved for implementation
PHYSICAL CONNECTIVITY							
Samar Pacific Coastal Road Project	DPWH	1.24	ODA	Korea	VIII	2023	Completed
Arterial Road Bypass Project Phase III (Plaridel Bypass)	DPWH	5.26	ODA	Japan	III	2024	Ongoing
Central Luzon Link Expressway (CLLEX), Phase I	DPWH	14.94	ODA	Japan	III	2024	Ongoing
NLEX-SLEX Connector Road	DPWH	23.20	PPP	N/A	NCR	2024	Ongoing
Cagayan de Oro Coastal Road	DPWH	3.25	GAA	N/A	X	2024	Ongoing
Panguil Bay Bridge	DPWH	8.03	ODA	Korea	X	2024	Ongoing
Surallah-T'boli-San Jose Road, South Cotabato	DPWH	3.73	GAA	N/A	XII	2024	Ongoing
Cavite-Laguna Expressway (CALAX)	DPWH	35.74	PPP	N/A	IV-A	2025	Ongoing
SLEX Toll Road 4	DPWH/TRB	13.10	PPP	N/A	IV-A	2025	Ongoing
C5 South Link Expressway Project	DPWH/TRB	12.65	PPP	N/A	NCR	2025	Ongoing
Taguig City Integrated Terminal Exchange	DOTr	5.20	PPP	N/A	NCR	2025	Approved for implementation
Southeast Metro	DPWH/	31.32	PPP	N/A	NCR, IV-A	2025	Ongoing

Manila Expressway Project	TRB						
Cagayan de Oro Diversion Road Extension (Jct. Sayre Highway (Balubal)-Manolo Fortich-Malitbog-Claveria-Eureka, Gingoog City Road)	DPWH	3.80	GAA	N/A	X	2025	Ongoing
Davao City Coastal Road Project, including Bucana Bridge	DPWH	4.30	ODA/GAA	China	XI	2025	Ongoing
North Luzon Expressway (NLEX) Segment 8.2	DPWH/ TRB	11.50	PPP	N/A	NCR	2026	Approved for implementation
Bacolod-Negros Occidental Economic Highway	DPWH	8.23	GAA	N/A	VI	2026	Ongoing
New Cebu International Container Port Project	DOTr	9.19	ODA	Korea	VII	2026	Approved for implementation
CDO-Opol-El Salvador-Alubijid-Laguindingan Airport (Pueblo de Oro/CDO Airport to Jct. BCIR Laguindingan) Mountain Diversion Road	DPWH	7.85	GAA	N/A	X	2026	Ongoing
South Luzon Expressway (SLEX) Toll Road 5 (TR5) Segment 1	DPWH/ TRB	28.15	PPP	N/A	IV-A, V	2027	Approved for implementation
Sindangan-Bayog-Lakewood Road, Zamboanga del Sur and Zamboanga del Norte	DPWH	6.51	GAA	N/A	IX	2027	Ongoing
Improving Growth Corridors in Mindanao Road Sector Project	DPWH	25.26	ODA	ADB	IX, BARMM	2027	Ongoing
EDSA Greenways	DOTr	8.79	ODA	ADB	NCR	2027	Approved for implementation

							on
Metro Manila Bridges Project (under ADB Financing Facility) - 3 Bridges	DPWH	12.03	ODA	ADB	NCR	2027	Approved for implementation
Metro Manila Priority Bridges for Seismic Improvement Project	DPWH	7.93	ODA	Japan	NCR	2027	Approved for implementation
MRT-3 Rehabilitation Project	DOTr	29.61	ODA	Japan	NCR	2027	Ongoing
Priority Bridges Crossing Pasig-Marikina River & Manggahan Floodway Bridges Construction Project (under China Government Financing Facility) - 3 Bridges	DPWH	16.03	ODA	China	NCR	2027	Approved for implementation
MRT-7 Project	DOTr	77.00	PPP	N/A	NCR, III	2027	Ongoing
Laguna Lakeshore Road Network Development, Phase I (LLRN)	DPWH	181.02	ODA	ADB	NCR, IV-A	2027	Approved for implementation
Manila Metro Line 1 Cavite Extension (Baclaran - Niog, Bacoor) (a.k.a LRT 1 Cavite Extension Project)	DOTr	64.92	ODA/ PPP	Japan	NCR, IV-A	2027	Ongoing
Donsol-Pilar-Castilla-Sorsogon City (DonPiCaSo) Tourism Highway, Sorsogon	DPWH	15.36	GAA	N/A	V	2027	Ongoing
Boracay Circumferential Road	DPWH	1.94	GAA	N/A	VI	2027	Ongoing
Cebu Bus Rapid Transit Project	DOTr	28.78	ODA	WB, AFD	VII	2027	Ongoing
Iligan City Coastal Bypass Road	DPWH	4.79	GAA	TBD	X	2027	Ongoing
Davao City Bypass Construction Project	DPWH	70.81	ODA	Japan	XI	2027	Ongoing

Mindanao Rail Project Phase 1	DOTr	81.69	ODA	TBD	XI	2027	Under project preparation
Samal Island-Davao City Connector Bridge	DPWH	23.04	ODA	China	XI	2027	Approved for implementation
Road Network Development Project in Conflict-Affected Areas in Mindanao (RNDP-CAAM)	DPWH	12.86	ODA	Japan	BARMM, XII	2028	Ongoing
Cagayan Bridge Projects for Economic Development	DPWH	4.58	GAA	N/A	II	2028	Ongoing
Accelerated Bridge Construction Project for Greater Economic Mobility and Calamity Response	DPWH	24.50	ODA	TBD	Nationwide	2028	For government approval
EDSA Busway (Improved)	DOTr	30.00	PPP	N/A	NCR	2028	Pre-project preparation
Daang Maharlika (N1) Improvement	DPWH	251.19	GAA	N/A	NCR, I, II, III, IV-A, V, VIII, IX, X, XI, XII, XIII, BARMM	2028	Ongoing
Nautical Highway Network Improvement	DPWH	57.96	GAA	N/A	NCR, IV-A, MIMAROP A, V, VI, VII, VIII, IX, X, XI, XIII	2028	Ongoing
PNR South Long Haul	DOTr	175.32	ODA	China	NCR, IV-A, V	2028	Approved for implementation
Camarines Sur Expressway	DPWH	9.23	GAA	N/A	V	2028	Ongoing
Panglao-Tagbilaran Bus Rapid Transit	DOTr	18.15	GAA	N/A	VII	2028	Pre-project preparation
Samar Pacific Coastal Road (SPCR) II Project	DPWH	7.50	ODA	Korea	VIII	2028	Approved for implementation
Cagayan de Oro	DPWH	36.29	GAA	N/A	X	2028	Ongoing

Coastal Road (Puerto-Gusa Section)							
New Baguio Airport	DOTr	12.55	ODA/PPP	TBD	CAR	Beyond 2028	Pre-project preparation
Rehabilitation / Reconstruction / Improvement, Operation, and Maintenance of Kennon Road Project	DPWH	13.24	ODA/PPP	TBD	CAR, I	Beyond 2028	Under project preparation
Laoag International Airport Development Project	DOTr	15.00	PPP	N/A	I	Beyond 2028	Pre-project preparation
Tarlac-Pangasinan-La Union Expressway (TPLEX) Extension Project from the last exit in Rosario, La Union to San Juan, La Union	DPWH	23.36	PPP	N/A	I	Beyond 2028	Approved for implementation
North Long Haul Railway	DOTr	400.00	PPP	N/A	I	Beyond 2028	Approved for implementation
Urgent Bridges Construction Project For Rural Development (UBCPRD), Phase II	DPWH	41.65	ODA	ADB	I, II, III, MIMAROP A, V, VI, VIII, IX, XII, XIII, BARMM	Beyond 2028	Pre-project preparation
Alicia - Angadanan - San Guillermo - Cauayan City - Naguilian Alternate Route	DPWH	3.96	GAA	N/A	II	Beyond 2028	Ongoing
Aritao-Quirino Road	DPWH	2.67	GAA	N/A	II	Beyond 2028	Ongoing
San Mariano - Palanan Road	DPWH	8.07	GAA	N/A	II	Beyond 2028	Under project preparation
Dalton Pass East Alignment Road Project	DPWH	67.40	ODA	Japan	II, III	Beyond 2028	Approved for implementation
Luzon Eastern Seaboard Road Network	DPWH	86.32	ODA/GAA	TBD	II, III, IV-A	Beyond 2028	Under project preparation

Central Luzon Bus Rapid Transit	DOTr	21.11	GAA	N/A	III	Beyond 2028	Pre-project preparation
Capas-Botolan Road Project	DPWH	15.31	ODA	TBD	III	Beyond 2028	Ongoing
North-South Commuter Railway System New Clark City Extension	DOTr	71.50	ODA	TBD	III	Beyond 2028	Under project preparation
Subic Bay (Redondo-Ilanin) Bridge Project	SBMA	33.11	ODA	TBD	III	Beyond 2028	Pre-project preparation
Central Luzon Link Expressway (CLLEX) Phase II	DPWH	16.24	PPP	N/A	III	Beyond 2028	Under project preparation
New Manila International Airport (Bulacan international Airport)	DOTr	735.63	PPP	N/A	III	Beyond 2028	Ongoing
Bataan-Cavite Interlink Bridge	DPWH	219.31	ODA	ADB, AIIB	III, IV-A	Beyond 2028	Approved for implementation
Construction of Lopez Viaduct along Daang Maharlika, Lopez, Quezon	DPWH	2.58	GAA	N/A	IV-A	Beyond 2028	Ongoing
Light Rail Transit (LRT) 2 Cogeo Extension Project	DPWH	21.36	ODA	TBD	IV-A	Beyond 2028	Ongoing
New Zamboanga Airport	DOTr	15.00	GAA	N/A	IX	Beyond 2028	For government approval
Zamboanga Public Transport Modernization Project	DOTr	44.00	ODA	N/A	IX	Beyond 2028	Pre-project preparation
San Ramon New Port Project	ZCSEZA	19.09	PPP	N/A	IX	Beyond 2028	Under project preparation
Busuanga Airport Development Project	DOTr	17.00	GAA	N/A	IV-B	Beyond 2028	Under project preparation
Southern Palawan (Brooke's Point) Airport Development Project	DOTr	13.48	GAA	N/A	IV-B	Beyond 2028	Pre-project preparation

New Cagayancillo Airport	DOTr	12.00	ODA/PPP	TBD	IV-B	Beyond 2028	Pre-project preparation
Active Transport Network	DOTr	43.62	GAA	N/A	Nationwide	Beyond 2028	Pre-project preparation
New Modern Public Utility Vehicle Service Contracting Program	DOTr	2.40	GAA	N/A	Nationwide	Beyond 2028	Pre-project preparation
Philippine Automated Fare Collection System	DOTr	5.00	ODA	Korea	Nationwide	Beyond 2028	Under project preparation
Roll-on Roll-off (RORO) Network Upgrade Project	DOTr	146.03	ODA	TBD	Nationwide	Beyond 2028	Pre-project preparation
Air Traffic Services - Air Navigation Services (ATS - ANS) Project	DOTr	27.00	PPP	N/A	Nationwide	Beyond 2028	Pre-project preparation
National Transportation Database	DOTr	2.80	PPP	N/A	Nationwide	Beyond 2028	Pre-project preparation
LRT 2 West Extension	DOTr	10.12	GAA	N/A	NCR	Beyond 2028	Approved for implementation
Manila Bay Bus Rapid Transit	DOTr	22.55	ODA	TBD	NCR	Beyond 2028	Pre-project preparation
Metro Manila Bike Expressway Project	DOTr	10.00	ODA	TBD	NCR	Beyond 2028	Pre-project preparation
Metro Manila High Quality Bus Corridors	DOTr	55.00	ODA	TBD	NCR	Beyond 2028	Pre-project preparation
Metro Manila Subway Project Phase 1	DOTr	488.48	ODA	Japan	NCR	Beyond 2028	Ongoing
Metro Manila Subway Project - O&M	DOTr	68.39	PPP	N/A	NCR	Beyond 2028	For government approval
MRT Line 3 Operations & Maintenance	DOTr	3.00	PPP	N/A	NCR	Beyond 2028	Pre-project preparation
MRT Line 5	DOTr	250.00	PPP	N/A	NCR	Beyond 2028	Pre-project preparation
Ninoy Aquino	DOTr	170.59	PPP	N/A	NCR	Beyond	Ongoing

International Airport PPP Project						2028	
North NCR Intermodal Transit Interchange	DOTr	5.00	PPP	N/A	NCR	Beyond 2028	Pre-project preparation
North-South Commuter Railway (PNR North 1, PNR North 2, PNR South Commuter)	DOTr	873.62	ODA	ADB, Japan	NCR, III, IV-A	Beyond 2028	Ongoing
Subic-Clark-Manila-Batangas Dedicated Rail Corridor Formerly 'Subic Clark Railway'	DOTr	657.75	ODA	China	NCR, III, IV-A	Beyond 2028	Pre-project preparation
North-South Commuter Railway System - O&M	DOTr	164.13	PPP	N/A	NCR, III, IV-A	Beyond 2028	For government approval
MRT 4	DOTr	57.07	ODA	ADB	NCR, IV-A	Beyond 2028	Approved for implementation
MaPaLLa Ferry System (Pasig River Ferry System Project)	DOTr	29.50	PPP	N/A	NCR, IV-A	Beyond 2028	Pre-project preparation
MRT Line 4 Operations & Maintenance	DOTr	3.00	PPP	N/A	NCR, IV-A	Beyond 2028	Pre-project preparation
San Mateo Railway	DOTr	80.00	PPP	N/A	NCR, IV-A	Beyond 2028	Pre-project preparation
Naga Airport Development Project	DOTr	9.63	GAA	N/A	V	Beyond 2028	Pre-project preparation
New Masbate Airport Development Project	DOTr	8.74	GAA	N/A	V	Beyond 2028	Under project preparation
Pasacao-Balatan Tourism Coastal Highway	DPWH	14.97	GAA	N/A	V	Beyond 2028	Ongoing
Upgrade, Expansion, Operations, and Maintenance of the Bohol-Panglao International Airport Project	DOTr	4.53	PPP	TBD	V	Beyond 2028	Approved for implementation

Panay Railway System	DOTr	70.06	GAA	N/A	VI	Beyond 2028	Pre-project preparation
Panay-Guimaras-Negros Inter-Island Link Bridge	DPWH	187.53	ODA	Korea	VI	Beyond 2028	Approved for implementation
Iloilo-Capiz-Aklan Expressway (ICAEx)	DPWH	126.00	PPP	N/A	VI	Beyond 2028	Pre-project preparation
Iloilo-Santa Barbara Bus Rapid Transit	DOTr	70.06	PPP	N/A	VI	Beyond 2028	Pre-project preparation
Metro Cebu Expressway (Cebu Circumferential Road)	DPWH	94.07	GAA/PPP	N/A	VII	Beyond 2028	Ongoing
Cebu Public Transport Modernization Project	DOTr	30.50	ODA	TBD	VII	Beyond 2028	Ongoing
Cebu Urban Mass Rapid Transit (UMRT) Central Line	DOTr	77.91	ODA	Japan	VII	Beyond 2028	Pre-project preparation
Cebu-Mactan Bridge (4th Bridge) and Coastal Road Construction Project	DPWH	76.41	ODA	Japan	VII	Beyond 2028	Approved for implementation
Consolacion-Liloan Bypass Road Project	DPWH	32.74	ODA	TBD	VII	Beyond 2028	Under project preparation
New Dumaguete Airport Development Project (Bacong International Airport)	DOTr	10.45	ODA	Korea	VII	Beyond 2028	Approved for implementation
Panglao-Tagbilaran City Offshore Bridge Connector (PTCOBC)	DPWH	6.69	ODA/GAA	China	VII	Beyond 2028	Ongoing
Cebu Bus Rapid Transit Operations & Maintenance	DOTr	4.00	PPP	TBD	VII	Beyond 2028	Pre-project preparation
Tacloban Airport Development Project	DOTr	18.98	GAA	N/A	VIII	Beyond 2028	Pre-project preparation
2nd San Juanico Bridge Project	DPWH	12.80	ODA	Japan	VIII	Beyond 2028	Under project preparation
Samar and Agusan Daang Maharlika Road Improvement	DPWH	17.66	ODA	ADB	VIII, XIII	Beyond 2028	Pre-project preparation

Project							
Bukidnon Airport Development Project	DOTr	12.65	GAA	N/A	X	Beyond 2028	Pre-project preparation
Central Mindanao High Standard Highway Construction Project	DPWH	110.39	ODA	ADB, Japan	X	Beyond 2028	Under project preparation
Cagayan De Oro Bus Rapid Transit	DOTr	25.61	PPP	N/A	X	Beyond 2028	Pre-project preparation
Mindanao Railway Project Phase 3 (Northern Mindanao)	DOTr	111.08	PPP	N/A	X	Beyond 2028	Pre-project preparation
Naawan-Opol-Cagayan de Oro City-Villanueva Expressway (MisOrEx)	DPWH	46.68	PPP	N/A	X	Beyond 2028	Pre-project preparation
Upgrade, Expansion, Operation and Maintenance of the Laguindingan International Airport Project	DOTr	12.75	PPP	N/A	X	Beyond 2028	Approved for implementation
Davao Public Transport Modernization Project (DPTMP)	DOTr	73.38	ODA	ADB	XI	Beyond 2028	Approved for implementation
Metro Davao Public Transport Modernization Project	DOTr	41.25	ODA	TBD	XI	Beyond 2028	Pre-project preparation
Davao PTMP Operations & Maintenance	DOTr	TBD	PPP	N/A	XI	Beyond 2028	Pre-project preparation
Davao Sasa Port	PPA	9.88	PPP	N/A	XI	Beyond 2028	Ongoing
Butuan City - Agusan del Norte Logistical Highway	DPWH	26.21	GAA	N/A	XIII	Beyond 2028	Ongoing
Cabadbaran - Puting Bato - Lanuza Road	DPWH	8.86	GAA	N/A	XIII	Beyond 2028	Ongoing
New Siargao (Sayak) Airport	DOTr	10.00	ODA	TBD	XIII	Beyond 2028	Under project preparation

Agusan del Norte / Agusan del Sur North - South Lateral Road, (Las Nieves, Agusan del Norte - Kapalong, Davao del Norte)	DPWH	16.52	GAA	N/A	XIII, XI	Beyond 2028	Ongoing
EDSA Transport Road Network Rehabilitation Project	DPWH	19.67	ODA	TBD	NCR	TBD	Pre-project preparation
LRT Line 2 Operations & Maintenance	DOTr	3.00	PPP	N/A	NCR	TBD	Pre-project preparation
North Luzon East Expressway (La Mesa Parkways Project)	DPWH	7.80	PPP	N/A	NCR, III	TBD	Under project preparation
Metro Manila Subway Project - Phase 2	DOTr	246.50	ODA	Japan	NCR, III, IV-A	TBD	Pre-project preparation
Upgrading and improvement of the Iloilo International Container Port	PPA	10.53	PPP	N/A	VI	TBD	Approved for implementation
POWER AND ENERGY							
Agus-Pulangi Hydropower Plant Complex (APHC) Rehabilitation under Series of Project (SOP) 1	NPC	10.19	TBD	N/A	X	Beyond 2028	Under project preparation
WATER RESOURCES							
Integrated Disaster Risk Reduction and Climate Change Adaptation (IDRR-CCA) Measures in the Low-Lying Areas of Pampanga Bay Project	DPWH	7.57	ODA	Korea	III	2024	Completed
Pasig-Marikina River Channel Improvement Project, Phase V	DPWH	4.63	GAA	N/A	NCR	2024	Ongoing
Jalaur River Multipurpose Project - Stage II	NIA	19.70	ODA	Korea	VI	2024	Ongoing

Flood Risk Improvement and Management Project for Cagayan De Oro River (FRIMP-CDOR)	DPWH	12.54	ODA	Japan	X	2024	Completed
Water District Development Sector Projects (WDDSP)	LWUA	3.03	ODA	ADB	II, III, VII, X, XII, BARMM	2025	Ongoing
Angat Water Transmission Improvement Project - Aqueduct No. 7	MWSS	7.42	ODA	ADB	III, NCR	2025	Ongoing
Metro Manila Flood Management Project, Phase I	DPWH	23.50	ODA	WB, AIIB	NCR	2026	Ongoing
Balasig Small Reservoir Irrigation Project	NIA	2.50	GAA	N/A	II	2027	Under project preparation
Bayabas Small Reservoir Irrigation Project	NIA	2.44	GAA	N/A	III	2027	Ongoing
Cavite Industrial Area Flood Risk Management Project	DPWH	9.89	ODA	Japan	IV-A	2027	Ongoing
Upper Banaoang Irrigation Project	NIA	6.78	GAA	N/A	CAR	2028	Under project preparation
Delfin Albano - Sto. Tomas Pump Irrigation Project	NIA	7.91	GAA	N/A	II	2028	Under project preparation
Integrated Disaster Risk Reduction and Climate Change Adaptation (IDRR-CCA) Measures in the Low-Lying Areas of Pampanga Bay, Stage II	DPWH	63.11	ODA	TBD	III	2028	Under project preparation
New Centennial Water Source - Kaliwa Dam Project	MWSS	12.20	ODA	China	IV-A	2028	Ongoing
Maridagao (Kadingilan) Irrigation Project	NIA	2.99	GAA	N/A	X	2028	Under project preparation

Ambal Simuay River and Rio Grande de Mindanao River Flood Control and Riverbank Protection Project	DPWH	39.22	ODA	China	BARMM	Beyond 2028	Under project preparation
Buldon River Irrigation Project	NIA	8.71	GAA	N/A	BARMM, XII	Beyond 2028	Under project preparation
Integrated Flood Resilience and Adaptation (InFRA) Project - Phase I	DPWH	20.02	ODA	ADB	CAR, BARMM, I, X, XI	Beyond 2028	Approved for implementation
Ilocos Norte-Ilocos Sur-Abra Irrigation Project Formerly 'Ilocos Norte Irrigation Project, Stage 2'	NIA	37.50	GAA	N/A	I	Beyond 2028	Under project preparation
Tumauini River Multipurpose Project	NIA	8.58	GAA	N/A	II	Beyond 2028	Under project preparation
Magat Dam Sedimentation Countermeasure Project	NIA	16.00	ODA	TBD	II	Beyond 2028	Pre-project preparation
Integrated Flood Resilience and Adaptation (InFRA) Project - Phase II	DPWH	53.67	ODA	ADB	II, VI, IX, XI, XII	Beyond 2028	Under project preparation
Central Luzon - Pampanga River Floodway Control Project	DPWH	115.05	ODA	ADB	III	Beyond 2028	Under project preparation
Lipitan Small Reservoir Irrigation Project	NIA	6.60	GAA	N/A	IV-B	Beyond 2028	Under project preparation
Parañaque Spillway/Tunnel Project	DPWH	136.15	ODA	Japan	NCR, IV-A	Beyond 2028	Under project preparation
Pasig-Marikina River Channel Improvement Project (PMRCIP), Phase IV	DPWH	33.10	ODA	Japan	NCR, IV-A	Beyond 2028	Ongoing
Panay River Basin Integrated	NIA	20.79	ODA	TBD	VI	Beyond 2028	Under project preparation

Development Project							
Mindanao Irrigation Development Project	NIA	4.51	ODA	ADB	X, XI	Beyond 2028	Under project preparation
Davao City Flood Control and Drainage Project	DPWH	41.72	ODA	Japan	XI	Beyond 2028	Under project preparation

Annex B. Number of Deployed Filipino Workers per Sex, Country, Construction-related Skill for January to October 2020

Skills	Country	Number of Deployed		
		Male	Female	Total
Building construction labourers	Brunei Darussalam	4	2	6
	Canada	1	0	1
	Diego Garcia	1	0	1
	Japan	11	0	11
	New Zealand	4	0	4
	Poland	5	0	5
	Qatar	6	0	6
	Saipan	3	0	3
	Saudi Arabia	149	1	150
	United Arab Emirates	40	0	40
Subtotal		224	3	227
Carpenters and Joiners	Australia	1	0	1
	Brunei Darussalam	1	0	1
	Croatia	3	0	3
	Cuba	10	0	10
	Equatorial Guinea	2	0	2
	Ethopia	1	0	1

	Fiji	6	0	6
	Guam	115	0	115
	Guinea	1	0	1
	Japan	133	0	133
	Kuwait	1	0	1
	Malawi	1	0	1
	Maldives	9	0	9
	Malta	2	0	2
	New Zealand	112	0	112
	Palau	7	0	7
	Papua New Guinea	1	0	1
	Qatar	3	0	3
	Saipan	4	0	4
	Saudi Arabia	60	0	60
	Tonga	2	0	2
	Turks and Caicos Islands	1	0	1
	United Arab Emirates	14	0	14
	United States	1	0	1
	Zambia	1	0	1
Subtotal		492	0	492
Crane, hoist, and related plant operators	Brunei Darussalam	3	0	3
	Cuba	3	0	3
	Diego Garcia	1	1	2
	Equatorial Guinea	5	0	5
	Guinea	1	0	1
	Haiti	1	0	1

	Kuwait	3	0	3
	Papua New Guinea	3	0	3
	Qatar	5	0	5
	Saudi Arabia	27	0	27
Subtotal		52	1	53
Concrete placers, concrete finishers and related workers	Canada	5	0	5
	Japan	19	3	22
	New Zealand	5	0	5
	Saudi Arabia	1	0	1
Subtotal		30	3	33
Construction Managers	Brunei Darussalam	1	0	1
	Fiji	1	0	1
	Indonesia	2	0	2
	Malaysia	1	0	1
	Palau	1	0	1
	Papua New Guinea	4	0	4
	Saudi Arabia	1	0	1
	Zambia	7	0	7
Subtotal		18	0	18
Construction Supervisors	Bahrain	10	0	10
	Brunei Darussalam	2	0	2
	Cambodia	0	1	1
	Ethiopia	1	0	1
	Indonesia	1	0	1
	Mozambique	2	0	2
	Oman	2	0	2

	Palau	1	0	1
	Qatar	1	0	1
	Singapore	1	0	1
	United Arab Emirates	1	0	1
Subtotal		22	1	23
House builders	Australia	1	0	1
	Bahrain	2	0	2
	Cook Islands	1	0	1
	Equatorial Guinea	18	0	18
	Guam	2	0	2
	Indonesia	4	0	4
	Japan	180	3	183
	Madagascar	1	0	1
	Malta	1	0	1
	New Zealand	73	0	73
	Papua New Guinea	4	0	4
	Romania	1	0	1
	Saipan	21	0	21
	Saudi Arabia	60	0	60
	United Arab Emirates	69	0	69
Subtotal		438	3	441
Lifting truck operators	Canada	1	0	1
	Oman	2	0	2
	Papua New Guinea	1	0	1
	Saudi Arabia	3	0	3
Subtotal		7	0	7

Painters and related workers	Australia	10	0	10
	Bahrain	2	0	2
	Brunei Darussalam	1	0	1
	Canada	2	0	2
	Cuba	5	0	5
	Czech Republic	6	0	6
	Indonesia	7	0	7
	Japan	132	1	133
	Kuwait	2	0	2
	New Zealand	11	0	11
	Oman	7	0	7
	Palau	1	0	1
	Qatar	16	0	16
	Saudi Arabia	73	0	73
Subtotal		275	1	276
Plasterers	Bahrain	3	0	3
	Japan	23	0	23
	New Zealand	20	0	20
	Qatar	44	0	44
	Saudi Arabia	4	0	4
Subtotal		94	0	94
Plumbers and Pipe fitters	Australia	8	0	8
	Brunei Darussalam	2	0	2
	cuba	4	0	4
	Diego Garcia	1	0	1
	Equatorial Guinea	50	0	50
	Ethopia	1	0	1

	Guam	34	0	34
	Indonesia	93	0	93
	Japan	30	0	30
	Kuwait	2	0	2
	Malaysia	5	0	5
	malta	6	0	6
	Mozambique	2	0	2
	New Zealand	7	0	7
	Nigeria	10	0	10
	Oman	8	0	8
	Qatar	27	0	27
	Russia	16	0	16
	Saudi Arabia	214	0	214
	Singapore	26	0	26
	Thailand	2	0	2
	Turks and Caicos Islands	1	0	1
	United Arab Emirates	35	0	35
	United States	1	0	1
	Uzbekistan	24	0	24
	Zambia	4	0	4
Subtotal		613	0	613
Roofers	Japan	6	0	6
	New Zealand	1	0	1
	Saudi Arabia	4	0	4
Subtotal		11	0	11

Source: Overseas Employment Statistics, POEA as of Jan-Oct 2020

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