

BUDGETING FOR CLIMATE CHANGE IN LABOUR AND PRODUCTIVITY



CENTRE FOR SOCIAL JUSTICE (CSJ)

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By

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ACRONYMS

CCN	Climate Change for Nigeria
CO ₂	Carbon Dioxide
FGN	Federal Government of Nigeria
FMoE	Federal Ministry of Environment
FMoLP	Federal Ministry of Labour and Productivity
GHGs	Greenhouse Gases
ILO	International Labour Organization's
INDC	Intended Nationally Determined Contributions
LEDS	Low Emission Development Strategies
MDAs	Ministries, Departments and Agencies
NASPA	National Adaptation Strategy and Plan of Action
NASPA-CCN	National Adaptation Strategy and Plan of Action on Climate Change for Nigeria
NDC	Nationally Determined Contributions
NDE	National Directorate of Employment
R&D	Research and Development
WHO	World Health Organisation

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EXECUTIVE SUMMARY

Addressing the challenges of climate change is imperative to preserve jobs today and to secure the resilience of economies and societies for future jobs. Estimates based on the International Labour Organization's (ILO) Global Economic Linkages suggest that unmitigated climate change and its associated impact on enterprises and workers will have negative effect on output in many industries, with drops of 2.4% by 2030 and 7.2% by 2050. On the other hand, greener economies could reverse the trend and yield productivity gains (ILO 2013). The implementation of low emission development strategies (LEDS) will cause shifts in the volume, composition and quality of employment across sectors and will affect the level and distribution of income. In particular, eight economic sectors employing around 1.5 billion workers, approximately half the global workforce, will undergo major changes. They are agriculture, forestry, fishing, energy, resource intensive manufacturing, recycling, buildings, and transport (ILO, 2013). In general, four categories of change can be expected: some jobs will be created; some will be lost; some will be substituted; while others will be transformed in the way work they are performed. Overall, positive labor market outcomes can be expected given that the job creation potential outweighs the risks of job losses.

It is therefore critical for Nigeria's Nationally Determined Contributions (NDC) and the resulting climate change policies to account for their potential implications for labor markets in terms of job creation and losses, change in existing occupation and skills needed for new and emerging occupations. These programmatic and pragmatic approaches cannot be achieved without the active and informed collaboration of the Federal Ministry of Labour and Productivity. The deployment of the Ministry's recurrent and capital expenditure ought to be focused on the transition to low carbon emitting jobs and a resilient economy. However, labour and productivity are cross-cutting issues that are not entirely dependent on the allocations and fiscal measures of the Labour and Productivity Ministry alone but on issues bordering on overall fiscal and monetary policies, macroeconomic management, trade, social security systems and environmental protection, etc.

The right to work is a fundamental right which is an intrinsic and indispensable part of the right to life. Human beings cannot survive and live without a means of earning their livelihood. This right has been recognized in a plethora of standards including the Universal Declaration of Human Rights¹, International Covenant on Economic, Social and Cultural Rights² and the African Charter on Human and Peoples Rights³. Climate

¹ Article 23

² Article 6

³ Article 15

change threatens this right and the ability of many individuals especially in poor countries like Nigeria to gain a reasonable means of livelihood.

The Federal Ministry of Labour and Productivity has a vision to facilitate and promote peaceful, productive and harmonious industrial relations, safe and decent working environment and enhanced social security coverage for all Nigerians and a mission to create an enabling environment for growth and sustainable development through best practices in labour administration⁴. Therefore, it is necessary for the Federal Ministry of Labour and Productivity to use the annual budget to deliver projects and programmes that will contribute to sustainable jobs through climate change adaptation and mitigation. Overall, labour and job focused interventions will facilitate the preparation of workers for alternative jobs in the green economy, finance social and environmental costs and address the climate change challenge in a way and manner that will reduce the negative impacts, especially for the poor and vulnerable.

After reviewing the allocations to the sector over four years, the Study made the following recommendations.

- Increase capital allocations to the Ministry to catalyse investments in adaptation, mitigation and environmental remediation for sustainable jobs and livelihoods.
- Consider new funding sources including green bonds and specific infrastructure bonds tied to creating green jobs.
- The key mitigation measures adopted in the Nigerian NDC would require skilled labour, expertise and sound knowledge of the personnel to implement the measures. Therefore, training and retraining of labour force becomes imperative. This would involve collaboration between key ministries including education and the environment.
- The already declining allocations to labour related trainings should be addressed. There is need for constant training and retraining. Michael Imoudu Institute for Labour Studies which is the major institution for labour-related training in Nigeria should be used as a focal point to harness and disseminate labour-related climate change knowledge.
- Engagement of organized labour on the need for “*a just transition of the workforce and the creation of decent works and quality jobs*” that respond to reduction of GHGs. This will enhance *education, training, public awareness,*

⁴ See www.labour.gov.ng, 2016.

public participation, public access to information and cooperation on the transition.

- Specifically, the promotion of renewable energy technology which generates more jobs in local production/manufacture installation and service.
- Development of an executive budget preparation framework that mainstreams the creation of sustainable green jobs as a key indicator for admission into the budget.
- Development of a legislative oversight framework that mainstreams the creation of sustainable green jobs as a key indicator for successful implementation of budgets.
- Engagement and sensitization of National Assembly members to understand the nexus between climate change and job creation/loss in a bid to facilitate climate sensitive constituency projects that can create jobs.
- Build local capacity to produce appliances such as solar panels and equipment rather than importing them. Young engineers and technologists can be trained by National Directorate of Employment to do this.
- Labour and climate change issues should be included in our academic curriculum from secondary school level as is being done in some countries like Japan.
- In collaboration with MDAs in agriculture and environment, forest zones should be created and trees rich in agricultural and economic benefits e.g. shea butter should be planted in them. The shea butter tree helps improve soil structure as well as provide economic benefits.
- Use of fossil fired generators in ministries should be gradually replaced with renewable energy sources. The office of the permanent secretary of ministry of power that is being powered with inverters should be used as a model and replicated in other government offices.

1.1 INTRODUCTION

Addressing the challenges of climate change is imperative to preserve jobs today and to secure the resilience of economies and societies for future jobs. Estimates based on the International Labour Organization's (ILO) Global Economic Linkages suggest that unmitigated climate change and its associated impact on enterprises and workers will have negative effect on output in many industries, with drops of 2.4% by 2030 and 7.2% by 2050. On the other hand, greener economies could reverse the trend and yield productivity gains (ILO 2013). The implementation of low emission development strategies (LEDS) will cause shifts in the volume, composition and quality of employment across sectors and will affect the level and distribution of income. In particular, eight economic sectors employing around 1.5 billion workers, approximately half the global workforce, will undergo major changes. They are agriculture, forestry, fishing, energy, resource intensive manufacturing, recycling, buildings, and transport (ILO, 2013). In general, four categories of change can be expected: some jobs will be created; some will be lost; some will be substituted; while others will be transformed in the way work they are performed. Overall, positive labor market outcomes can be expected given that the job creation potential outweighs the risks of job losses.

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1.2 THE IMPACT OF CLIMATE CHANGE ON EMPLOYMENT

Climate change will impact on the production, distribution and consumption systems and patterns in the short, medium to long terms. In a change environment, winners and losers will emerge. When climate change is mainstreamed in employment creation strategies, the risks inherent in the creation of losers will be minimised whilst the gains of producing winners will be increased. The negative impacts on employment will be the result of extreme weather events such as droughts, cyclones and/or floods (Fischer and Knutti, 2015). They will also arise from slower processes such as sea level rise. The greater incidence of extreme weather events will affect urban employment because

damage to transport, industrial infrastructures and settlements affects the ability of workers to commute and or to find alternatives when workplaces have to close. An illustration of this is the near destruction by flooding of Lokoja and some parts of Makurdi in 2012, which resulted in the loss of several jobs.

Negative impacts of climate change on employment can include:

- *“Job losses in urban labour markets due to greater incidence of extreme weather events and resulting worker displacement and damage to business assets, transport and industrial infrastructure, and settlements.*
- *In rural labour markets due to a greater incidence of heavy precipitation and/or extreme heat and resulting damage to agricultural crops.*
- *Impacts on business assets and business interruptions due to weather damage or disruption of private and public infrastructure, such as buildings, machinery, production sites, raw materials and supply chains.*
- *Impacts on working conditions, occupational safety and health affecting labour and productivity. For instance, heat stress in workers due to rising temperatures results in loss of working hours and days.*
- *Forced short-term and long-term migration due to income reduction, job losses and uninhabitable environment as a result of environmental risks and abrupt extreme weather events”⁵.*

There are risks and opportunities in the emerging climate and job scenario. Box 1 tells the story of employment and the transition to a low carbon economy.

Box 1: Frequently Asked Questions on Climate Change and Jobs

What are the employment effects of transitioning to a low-carbon economy?

Climate action and the transition to low-carbon economies will affect employment in several ways:

- a. Jobs will be created in new emerging green sectors, such as renewable energies where the demand for goods and services is expanding;
- b. Certain jobs will be eliminated without direct replacement, for example, through banning or discouraging the use of particular processing methods or resources especially in energy-intensive and polluting industries;
- c. Certain jobs will be substituted as a consequence of industrial transformation. For

⁵ http://www.ilo.org/global/topics/green-jobs/WCMS_371589/lang-en/index.htm: Frequently asked questions on jobs and climate change.

example, jobs in waste incineration plants will be substituted with jobs in recycling facilities;

- d. The majority of existing jobs will be transformed and redefined in terms of their profile requirements and working methods i.e. plumbers and architects in the adoption of more environmentally friendly practices such as efficiency improvements.

While most studies show that a transition to a low-carbon economy will lead to a net increase in employment, importantly, the number of jobs created throughout the transition process depends on the demand and investment for greener products and services, the labour intensity requirements for such products and services and their overall trade implications.

What are the employment opportunities of mitigating climate change?

Mitigation strategies aim to limit or reduce the magnitude of long term climate change, primarily by reducing or preventing the emission of greenhouse gases (GHG). Mitigation strategies have significant potential to create new employment by:

- a. Stimulating investment and innovation in new green products and services that are more environmentally friendly and low-carbon. This also enables enterprises to access new markets and offers them a comparative advantage and for new enterprises to emerge.
- b. Improvements in energy and raw material efficiency at enterprise level. The greening of workplace practices can reduce the amount of resources needed for production; lower the amount of waste generated and thereby save energy costs.

What are the employment opportunities of adapting to climate change?

Adaptation strategies aim to minimize the negative effects of climate change on societies and economies and take advantage of any related opportunities. Adaptation measures offer opportunities for job creation and climate resilient communities, including through:

- a. Relocation of exposed settlements and industry
- b. Establishment of coastal defences
- c. Reinforcement of buildings and infrastructure
- d. Construction of new climate resistant infrastructure
- e. Transfer of new climate friendly technology

Source: International Labour Organisation⁶

Accordingly, jobs will be created and lost in short, medium to long terms:

A short-term effect, when jobs are lost in directly affected sectors and new ones are created in replacement industries. We can think of this as the direct employment effect.

A medium-term effect, when the impact of climate change policy ripples through the economy. Jobs are created and lost along the value chains of affected industries. These are the higher-order, economy-wide effects of climate policy.

⁶ http://www.ilo.org/global/topics/green-jobs/WCMS_371589/lang--en/index.htm: Frequently asked questions on jobs and climate change.

A long-term effect, when innovation and the development of new technologies create opportunities for investment and growth. We can call this the dynamic effect of climate policy⁷.

1.3 CLIMATE CHANGE AND RURAL EMPLOYMENT

Rural employment will also be affected by climate change. Due to a greater incidence of heavy precipitation and the damage to crops this entails, it is anticipated that employment in the agricultural sector will be adversely affected, especially seasonal jobs that depend on harvesting and crop-processing in a globalized economy. Rural communities that are heavily dependent on natural resources and climate sensitive resources will be more adversely affected. Communities where poverty is prevalent, without alternative sources of livelihood, social protection mechanisms will definitely be less able to adapt to climate change and may suffer more job losses. This will likely impact more negatively on women and the vulnerable groups.

1.4 CLIMATE CHANGE AND WORKERS PRODUCTIVITY

Climate change is also expected to reduce workers' productivity by increasing mortality and morbidity because of the resurgence and proliferation of certain diseases. It will worsen the working conditions of workers who carry out their activity outdoors, such as construction workers. Rising temperatures, increases in respiratory and or water and food-related diseases and the risk of malnutrition will also negatively affect employment. The latter will also condition the future incorporation of young workers into the workforce due to irreparable childhood health damage (WHO, 2009). Increased migration and mortality will further aggravate problems such as worker turnover and the loss of qualified workers. The latter issue is of special concern as technical knowledge is essential in order to adapt to changing working conditions. Increased productivity will depend on the ability of any given society to respond to the climate threat with sufficient knowledge and innovation, sensitisation and mobilization of its works force.

1.5 THE ROLE OF THE BUDGET OF THE FEDERAL MINISTRY OF LABOUR AND PRODUCTIVITY

With these identified challenges of climate change on labour and socio economic activities, a central poser arises. How has the budget of the Federal Ministry of Labour and Productivity contributed to addressing the impacts of climate change in line with the National Policy on Environment, National Adaptation Strategy and Plan of Action on

⁷ Climate Change, Innovation And Jobs <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/02/climate-change-innovation-jobs.pdf>

Climate Change for Nigeria (NASPA-CCN) and the Nationally Determined Contributions (NDC) of Nigeria?

This review will examine the trend of budget allocations to the Federal Ministry of Labour and Productivity for a period of four years (2013-2016) and suggest budget and policy recommendations and low hanging fruits that the Ministry can adopt in mitigating the adverse effect of climate change in the labour sector.

2.1 TREND OF BUDGET ALLOCATION TO FEDERAL MINISTRY OF LABOUR AND PRODUCTIVITY FROM 2013-2016

There is a dearth of fiscal studies in Nigeria linking climate change to labour and productivity and showing in terms of money, the sums needed to increase job creation that is consistent with climate change mitigation and adaptation. The trend of allocations to the Ministry of Labour and Productivity 2013 - 2016 is shown in Table 1.

Table 1: Trend of Budget Allocation to Federal Ministry of Labour and Productivity from 2013-2016

Year	Total Allocation	Recurrent Budget Allocation	Percentage of Recurrent Expenditure	Capital Budget Allocation	Percentage of Capital Expenditure
2016	13,278,259,992	7,735,604,366	58.25	5,542,655,626	41.74
2015	8,821,277,308	8,305,830,880	94.16	515,446,428	5.84
2014	10,370,725,221	8,569,176,624	82.63	1,801,548,597	17.37
2013	12,502,931,181	8,177,764,515	65.41	4,325,166,667	34.59

Source: Budget Office of the Federation (2013-2016)

The budget of the Federal Ministry of Labour and Productivity shows that recurrent expenditure has the highest allocation in the four years period under study. For example, in 2013, recurrent expenditure got 65.41 percent while capital expenditure got only 34.50 percent. In 2014, 82.63 percent was allocated to recurrent expenditure alone while 17.37 percent was allocated to capital expenditure. The year 2015 has the smallest allocation to capital expenditure with a paltry 5.84 percent and whopping 94.16 percent allocated to recurrent expenditure while in 2016, capital expenditure got 41.74 percent and 58.25 percent is allocated to recurrent expenditure. These figures do not show commitment to capital projects and programmes on the part of the Federal Ministry of Labour and Productivity. On the average, 75.11 percent went to recurrent expenditure whilst 24.89 percent was allocated to capital expenditure. The preponderance of recurrent expenditure in the Ministry constitutes a major challenge to the creation of new climate smart and green jobs.

Again, the trend shows that the Ministry did not enjoy priority in allocations considering that in no year did its budget reach 1 percent of the overall budget vote⁸.

3.1 POSSIBLE POSITIVE IMPACT OF BUDGET ALLOCATIONS ON CLIMATE CHANGE

It is imperative to start by stating that the allocations to the Ministry of Labour and Productivity seem to be climate insensitive in terms of not recognizing the obvious impact of climate change on job gains and losses and the productivity of Nigerians. It more or less pretends that climate change is not real. The key words including climate, adaptation, mitigation, resilience, vulnerability were all missing from the language of the Ministry's budget. But the Research and Development projects listed in Table 2 below if well programmed and directed could positively impact on climate change.

Table 2: Projects that could Positively Impact on Climate Change, 2013-2016

YEAR	PROJECT	ALLOCATION (N)
2016	RESEARCH AND DEVELOPMENT	157,697,500
	NATIONAL PRODUCTIVITY CENTRE	
	RESEARCH AND DEVELOPMENT	155,876,000
	NATIONAL DIRECTORATE OF EMPLOYMENT	
	RESEARCH AND DEVELOPMENT	813,854,092
2015	FEDERAL MINISTRY OF LABOUR AND PRODUCTIVITY – HQTRS	
	RESEARCH AND DEVELOPMENT	158,214,292
	INDUSTRIAL ARBITRATION PANEL	
	RESEARCH AND DEVELOPMENT	15,000,000
	FEDERAL MINISTRY OF LABOUR AND PRODUCTIVITY – HQTRS	
	RESEARCH AND DEVELOPMENT	289,813,001
	INDUSTRIAL ARBITRATION PANEL	
	RESEARCH AND DEVELOPMENT	44,600,000
	MICHAEL IMODU INSTITUTE OF LABOUR STUDIES	
	RESEARCH AND DEVELOPMENT	20,603,959
2014	NATIONAL PRODUCTIVITY CENTRE	
	RESEARCH AND DEVELOPMENT	38,260,000
2013	FEDERAL MINISTRY OF LABOUR AND PRODUCTIVITY – HQTRS	
	RESEARCH AND DEVELOPMENT	435,000,000
	MICHAEL IMODU INSTITUTE OF LABOUR STUDIES	

⁸ The overall budget allocations for the years 2013, 2014, 2015 and 2016 were N4.987 trillion; N4.695 trillion; N4.493 trillion and N6.060 trillion respectively.

	RESEARCH AND DEVELOPMENT	15,000,000
	NATIONAL PRODUCTIVITY CENTRE	
	RESEARCH AND DEVELOPMENT	31,260,000
	NATIONAL DIRECTORATE OF EMPLOYEMENT	
	RESEARCH AND DEVELOPMENT	3,479,160,667

Source: Budget Office of the Federation (2013-2016)

If the R&D could be channeled towards climate change mitigation and adaptation within the confines of the mandate of the Ministry, great results will be produced. Non disaggregated votes for R&D are not best practices worthy of replication. They create the impression of a slush fund that will be amenable to mismanagement.

Other provisions in the Ministry's budget during the study period (2016) that are not clearly defined but could be reprogrammed for climate change mitigation include collection of data⁹, baseline surveys¹⁰ and development of productivity solutions¹¹. Also, the development and implementation of national policies on industrial relations and the adoption and implementation of International Labour Organisation's standards and protocols will fit into this set of projects¹². These activities could be focused inter alia on issues around the impact of climate change on employment and productivity. The sums of N820.5 million for the provision of infrastructure; N178.9 million as a sinking fund for infrastructure and N600 million for the identification of emerging vocational trades were provided in the 2016 budget. How these funds are eventually deployed will determine their impact on climate change mitigation and adaptation. Emerging trades could be identified and facilitated in terms of their contribution to sustainability and low carbon emissions which improves climate resilience and adaptation.

Specific provisions for skills acquisition and empowerment centres; micro credit; training, empowerment and supervision; teaching aids and instructional materials, etc. were made under the allocation to the National Directorate of Employment in excess of N1.7 billion¹³. All the foregoing provisions could be linked with the acquisition of skills and competencies to facilitate climate change resilience, adaptation and mitigation.

There are projects in the budget of the Federal Ministry of Labour and Productivity, which are good and can immensely contribute to climate change mitigation. Such projects include "Rural Employment Promotion and Vocational Skills Development for School Leavers/Resettlement". Though these projects are few, there are repeatedly reflected in the budget but seem poorly implemented. Also the term 'Rural Employment'

⁹ This is for N3.5m

¹⁰ This is for N91.9m

¹¹ This is for N152m

¹² The first is for N24.144m whilst the second is for N67m.

¹³ See the 2016 allocations of the National Directorate of Employment.

is generic and did not specify any environmental intervention. However projects like mini grid solar energy programmes can create gainful employment for the youths in the rural areas through skills development or capacity building in renewable energy services. This programme can deliver the twin benefits of creating new jobs and emission reductions.

3.2 NEGATIVE IMPACT OF BUDGET ALLOCATIONS ON CLIMATE CHANGE

The Ministry continued the prevalent tradition of other MDAs with a lot of votes in maintenance of fossil fuel fired electricity generators, fuel for the plants; international travels and transport, etc. The total vote for these items over the four years was in excess of hundreds of millions of naira. Programming as if climate change is not real or budgeting without taking cognizance of climate change is in effect budgeting to decrease capacities for resilience, adaptation and mitigation. It will be very difficult to design “climate change neutral” projects. Budgetary votes either work for or against climate change effects.

4. AFFORDABLE LOW HANGING FRUITS TO IMPLEMENT MITIGATION AND ADAPTION IN LABOUR AND PRODUCTIVITY

In the absence of climate specific projects and programmes in the budget of the Federal Ministry of Labour and Productivity for the four year period under study, there are some projects which can offer low hanging fruits and can be adopted as either adaptation or mitigation measures to climate change effects. Some of these measures include but are not limited to:

- Federal Ministry of Labour and Productivity should through its National Directorate of Employment (NDE) focus more on sustainable and environment friendly activities, which can ultimately create green jobs. The jobs being created by NDE and the skills it imparts should be selected on the criteria of the quantity of carbon and other GHGs they are likely to emit. High emitting skills and jobs should be avoided. The skills acquisition curriculum should emphasize green job skills.
- Further to the above, skills in the development and deployment of renewable energy systems, adoption of cleaner technologies across all sectors will invariably generate new jobs across the value chain and should be given special consideration in the Ministry’s programmes.
- Considering the large number of Nigerians employed in agriculture, climate smart agricultural practices, water conservation and management, forest conservation, etc. should be part of the skills imparted at the skills acquisition centres.

- Certain jobs should be substituted as a consequence of industrial transformation. For example jobs in waste incineration plants will be substituted with jobs in recycling facilities.
- The Ministry should develop detailed guidelines and regulations for employment, jobs and skills across the sectors regarding their contribution to climate change and GHG emissions.
- While it is important to expand infrastructure that would create new jobs, it is equally important to reduce vulnerability by building resilience (climate-proofing) of existing infrastructure in order not to lose jobs that might be occasioned by extreme weather events.

5.1 BUDGET AND POLICY RECOMMENDATIONS

The budget of Federal Ministry of Labour and Productivity focused more on recurrent expenditure for the four-year period under study with little allocation for capital projects, which would have been a catalyst for the creation of new jobs. This review provides some recommendations to the Ministry that would facilitate certain climate mitigation actions. These mitigation actions would facilitate the reduction of GHG and also assist in meeting some of the mitigation targets under the Nigerian NDCs. The measures also have potentials to significantly create opportunity for new jobs.

The recommendations are:

- Increase capital allocations to the Ministry to catalyse investments in adaptation, mitigation and environmental remediation for sustainable jobs and livelihoods.
- Consider new funding sources including green bonds and specific infrastructure bonds tied to creating green jobs.
- The key mitigation measures adopted in the Nigerian NDC would require skilled labour, expertise and sound knowledge of the personnel to implement the measures. Therefore, training and retraining of labour force becomes imperative. This would involve collaboration between key ministries including education and the environment.
- The already declining allocations to labour related trainings should be addressed. There is need for constant training and retraining. Michael Imoudu Institute for Labour Studies which is the major institution for labour-related training in Nigeria

should be used as a focal point to harness and disseminate labour-related climate change knowledge.

- Engagement of organized labour on the need for “*a just transition of the workforce and the creation of decent works and quality jobs*” that respond to reduction of GHGs. This will enhance *education, training, public awareness, public participation, public access to information and cooperation* on the transition.
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- Use of fossil fired generators in ministries should be gradually replaced with renewable energy sources. The office of the permanent secretary of ministry of power that is being powered with inverters should be used as a model and replicated in other government offices.

5.2 CONCLUSION

As climate change will have an enormous impact on employment and the labour market, it is important that adaptation and mitigation measures are in compliance with the principle of sustainable development and take into account its “three pillars”; i.e. environmental protection, social development and economic growth. Policy coherence at both the national level will better ensure that the negative effects from adaptation and mitigation measures on employment and the labour market are reduced. Without regulations and labour market efforts to address this impact, especially in relation to participation, social protection and working conditions, unemployment and poverty may increase.

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