# CHANGING ENVIRONMENT, JUST TRANSITION AND JOB CREATION

Perspectives from the South

## **Chrislain Eric Kenfack**



Serie Estudios e Investigaciones







## CHANGING ENVIRONMENT, JUST TRANSITION AND JOB CREATION

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## CHANGING ENVIRONMENT, JUST TRANSITION AND JOB CREATION

### PERSPECTIVES FROM THE SOUTH

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Consejo Latinoamericano de Ciencias Sociales



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### **INTRODUCTION**

The world in which we currently live is characterised by a multiplicity of challenges that we must face with urgency if we want to avoid future catastrophes. Those challenges, because of the globalisation of systems, have also become global challenges, and need global responses. One of the most important of those challenges faced by the current global community remains the environmental crisis, and more specifically the climate crisis also known as global warming. Most scientists, non-sovereign actors and policy makers are convinced that the salvation of our world definitely depends on urgent and strong actions aimed at reducing the emission of Greenhouse gases and therefore limiting climate change (Mitigation). Moreover, such actions should put in place mechanisms and policies aimed at reducing the impacts of the already occurred climate change on environmental, human and socio-political systems (Adaptation). Beyond this challenge of global concern, there is also the global challenge of unemployment enhanced by the financial and economic crisis as well as the lack of alternative employment policies in a changing environment. These two challenges are important threats not only to the world security, but above all to the sustainable development in general and development in the global South in particular. In an era in which restructuring world and nationals economies is becoming unavoidable, we have to learn

from past experiences. "There is a concern that significant periods of economic restructuring in the past have often happened in a chaotic fashion leaving ordinary workers, their families and communities to bear the brunt of the transition to new ways of producing wealth" (Olsen, 2010). Because of that important and fundamental concern, it is nowadays more important than ever to think alternative development mechanisms that will be more integrative and that "will promote sustainable development which is socially just, environmentally friendly, and economically efficient, while emphasising on governance and management changes to better service decent lives of millions of people" (Olsen, 2010). It is in this context that the concept of a "Just transition to a low-carbon economy" emerged in the international climate change arena, as an important component in the official position of Argentina during the negotiations in 2006. Since then, such concept has taken a great importance in the global debates on climate change fighting mechanisms, and appears to be the best way of integrating workers in the global fight, since just transition comes as an attempt to find ways to address the unfairness of expecting working people to bear the brunt of the adjustment that results from the disappearance of unsustainable jobs (Canadian Labour Congress, 2000). Coming to the specific case of South Africa, we have to mention that the transition to a low carbon or green economy has massive implications for labour. In fact, as Cock (2007) states it, "historically the labour movement in South Africa has neglected environmental issues, and this is largely because of a widespread understanding that environmental protection threatened jobs". That is what makes the One Million Climate Jobs Campaign more than important and useful. In fact, the One Million Climate Jobs Campaign appears to be a mechanism initiative that aims at a just transition to a low-carbon economy in South Africa, through research, networking and advocacy for the creation of green jobs that will satisfy both the welfare of people and the fight against climate change, in the South African context. It comes as an alternative to the neo-liberal form of production, where development was pursued at the expense of the environment and the human beings, and it proposes a new approach of human-nature relations based on mutual benefits. Its specificity lies in the fact that, by its very nature, it aims at simultaneously articulating the three elements of a just and fair transition: ecological sustainability, social justice and State intervention. Basically, it aims at fighting for a transition to a low-carbon economy that will require a paradigm shift in industrial policy, provision for sectors sensitive to changes in energy prices, building up new climate-friendly industries in order to sustain employment and investment. In short, it fights for provision to be made for transition from emissions-intensive sectors to low or zero carbon development without delay. In fact, if we want to survive the current changing environments, "we must start planning now if we are to have a just transition to a low carbon economy" (TUC and Allan, 2008: 41).

### **OBJECTIVE AND SCOPE**

The objective of this work is to present the One Million Climate Jobs Campaign (mechanism based on research, networking and advocacy) as a movement which prefigures a just transition to low-carbon development in South Africa, and to investigate in what sense this perspective from the South can be adapted and used in other Southern contexts in particular, and in the global context in general. Such campaign assumes a paradigmatic role in a world dominated by the unemployment crisis and the climate change challenges.

Nevertheless, the campaign cannot be understood if it is not situated within the global framework of the "just transition to low-carbon economy" as coined by the on-going global negotiations on climate change, held under the banner of the United Nations Convention on Climate Change (UNFCCC). That is why we will first of all investigate and better understand the concept of "Just transition to low-carbon economy", and subsequently see its application in a specific context which is the One Million Climate Jobs Campaign of South Africa, and we will end up with the generalisation of such perspective. To be clear, our perspective is a circular one, which starts with the global context, and end with the global context as well, but passing through a process of learning from the South.

### RESEARCH QUESTIONS AND IMPORTANCE OF THE ANALYSIS

In order to properly reach our goals, we will basically try to provide answers to the following questions in the cause of our analysis

- What is the One Million Climate Jobs Campaign, and why is it of relevance to the global fight against the environmental and the unemployment crises?
- What is the current state of the global debates on climate change, and why is a paradigm shift necessary?
- What do we understand by "just transition to a low-carbon economy", and what is its importance in the on-going global climate fight?
- How does the "One million climate Job campaign" relate to the "just transition to a low-carbon economy"?
- How can the One Million Climate Jobs Campaign be replicated in other parts of the global South in particular, and in the world at large?

The answers provided to these questions are what make our analysis of the situation more interesting and important in the current context. Such importance can be evaluated from two different perspectives:

- In the first place, this research analyses an important public action which is being carried out in South Africa to stimulate the creation of jobs in the context of global warming. Investigating this perspective helps to better understand alternative policies in the fight against global warming, and that have the potential to create synergies between Mitigation and Adaptation policies while aiming at reconciling the creation of new jobs with the protection of the environment.
- Secondly, in the context of a Western-centric world where all that is considered relevant is what comes from the global North, and where Countries of the global South have the quasi generalised tendency to function according to the "copy and paste" mode without much contextualisation, this perspective comes as an example and specific contribution of the South to the global efforts against climate change. The One Million Climate Jobs Campaign is original in this sense that it stresses the importance of the wellbeing of people and environmentally friendly jobs creation as a way forward, while the global debates are mostly focused on carbon trading mechanisms, financial figures and power logics among State themselves, and between States and corporations (Valentin, 2009; Kenfack, 2013; Kenfack, 2015). That is the specific and original contribution that the Southern perspective brings to the global climate debates and actions, and that this research intend to dwell on.

### STRUCTURE OF THE TEXT

This work, even though it tackles a multiplicity of items, will basically be developed in three main parts divided as follow:

In the first part entitled "A World in Need of Change", we will mostly describe the context from which emerged the idea of the One Million Climate Jobs Campaign. This description is mostly concerned with the global context dominated by the double crisis of global warming and jobs scarcity. In the second moment, the focus is put on the post-apartheid South African context mostly dominated by climate vulnerabilities, jobs scarcity, highly carbon intensive economy and great social inequalities and injustice; conditions that made the emergence of the idea of just transition unavoidable. This part equally describes the methodology used by this research and the main theories that guided the research and acted as the mirror path for the analysis, namely the analysis of public policies through network theory, and the theory of Just transition to low carbon economy.

The second part, with the title "The One Million Climate Jobs Campaign (OMCJC)" focuses on the campaign per se. As such, it analyses the organisation, preparation and the implementation of the campaign, its actors, its main areas of research and activism as well as its main results and achievements. It is important to mention that the idea of the One Million Climate Jobs Campaign did not come ex-nihilo; it is inspired by a similar campaign carried in the United Kingdom, with a thorough effort of contextualisation. That is the reason why this section equally presents briefly the UK campaign from which originated the South African campaign. Finally, given the importance attached to research by the campaign, this section equally gives a point of interest on the main research fields and the quantified results of those researches in terms of jobs creation perspectives

The third part bearing the title "The OMCJC: from National to Global", focuses on the lessons learnt from the South African campaign on one side and, on the other side it analyses the possibilities of scaling up the national campaign. The South African campaign is therefore presented as an example from the South to help handle the climate issue, the jobs crisis and the social injustices in a synergetic way. Secondly, the context in which the campaign was initiated in Durban (in 2011, during the eleventh Conference of the Parties to the United Nations Framework Convention on Climate Change), clearly portrays it as a seed for the global movement to advocate for a just transition to a low carbon economy at the international level. That is why this section focuses specifically on presenting the OMCJC and its jobs creation perspectives as a valuable alternative to the current failing carbon trading system dominating the global climate political environment and capitalist mode of exploitation, production, consumption and waste disposal that are mostly concerned with profits for the capital at the expense of the workers, of social justice and of the environment.

### FIRST PART A WORLD IN NEED OF CHANGE

## I. CHANGING ENVIRONMENT: A WORLD OF CLIMATE THREATS AND JOBLESSNESS

The current global society presents a certain complexity, which from day to day is being enhanced by globalisation mechanisms and tendencies. This complexity is made up of a multiplicity of challenges that needs to be addressed by global as well as national and sub-national policies. Even though most of those challenges result from the scaling up of locally situated phenomena and crisis to matters of regional and global attention such as some armed conflicts leading to international concern and requiring a global approaches in providing a response, others are by their very nature global challenges and can in no way be tackled from regional or national perspectives; such are the cases of the current environmental crisis in general and global warming in particular, and the unemployment crisis resulting from the current development models advocated and supported by the capitalist system centred on the market and the interest of the rich minorities. Given their geographical scale, the number of people affected and the multiple relations between these two crises, it is nowadays impossible to study or to tackle them independently.

#### **GLOBAL WARMING CRISIS**

Climate change is unavoidably and without doubt one of the most important and mobilising challenges faced by the international community since a few decades. Addressing the unabated rise in greenhouse gas emissions and the resulting negative impacts of climate change. such as altered ecosystems, weather extremes and risks to society, remains an urgent, critical challenge for the global community among others, and is the most important and pressing issue the international community has to address if we have to save our planet and our living environment from catastrophes. In fact, as Goldmark (2013) points out, "the increased frequency of severe storms and weather-related disasters is driven in part by global carbon emissions, which are rising sharply. We are heading rapidly toward a series of irreversible, adverse consequences including more destructive storms, severe droughts, reduced agricultural vield, decreased availability of water, and hundreds of millions of "climate refugees". This warning of Goldmark is further enhanced, updated and developed by the 2015 United Nations report on the Millennium Development Goals (MGDs) as follow:

A continual rise in greenhouse gas emissions is projected to further warm the planet and cause long-lasting changes in the climate system, threatening severe and irreversible consequences for people and ecosystems. Impacts on natural and human systems are projected to span the globe, with varying effects region to region. They include altered ecosystems and habitats; detrimental impacts on agriculture, potentially leading to food shortages; and more and longer lasting weather extremes and natural disasters, along with numerous risks to society.

Between 1990 and 2012, global emissions of carbon dioxide increased by over 50 per cent. Data collected over two decades show that the growth in global emissions has accelerated, rising 10 per cent from 1990 to 2000 and 38 per cent from 2000 to 2012, driven mostly by growth in the developing regions. (United Nations, 2015: 53)

Going from the above declaration, we can easily draw the conclusion that climate change is not only an environmental issue, but above all, it is a very important social issue with great political and security implications, that needs to be addressed urgently if the international community in general and the developing countries in particular want to resolutely engage in the path of sustainable, clean and just development.

#### **GLOBAL UNEMPLOYMENT CRISIS**

The recent global economic and financial recession enhanced the already existing and preoccupying phenomenon of joblessness, job scarcity, and job precariousness around the word. In fact, faced with the

economic and financial crisis, the private sector reduced drastically the number of employed around the world in order to continue securing the profits of the capital and to keep the businesses going while, in the public sector, we have witness an increase intervention of global and regional financial institutions in the management of Sovereign States through the implementation of imposed and non-contextualised structural adjustment plans, with a great reduction of Civil servants and other States' workers in several parts of the world. Such situation of joblessness has become a persistent one and, according to Poushter's previsions, it will be the second most important trend for the year 2015 (Poushter, 2014) and probably beyond, if we continue to observe the current tendencies, despite all the political discourses about the end of recession and the current and projected economic growth. This contradiction that Summers (2014: 1) calls "persistent jobless growth' refers to the phenomenon in which economies exiting recessions demonstrate economic growth while merely maintaining-or, in some cases, decreasing-their level of employment"; and to enlighten his understanding of the situation, he continues:

If we look at the data on workers aged 25 to 54—the group we think of as a backbone of the workforce—the percentage of those who are not working has risen by a factor of more than three over the course of my lifetime, and that trend seems inexorably upward. If current trends continue, it could well be that a generation from now a quarter of the middle-aged demographic will be out of work at any given moment. Even China, which has enjoyed unprecedented growth in competitiveness and exports, has seen manufacturing employment decline over the last 20 years, thanks to its rapid industrialisation and use technology and automation. This is a long-term trend and we are likely to observe these phenomena across the world, even among emerging economies as they travel the well-trodden path of industrialisation. The robotics and 3D printing revolutions could accelerate this trend still further, as the comparatively low entry cost for these disruptive technologies makes them widely accessible to everyone, including developing economies. (Summers, 2014: 1-2)

This situation described by Summers goes in line with, and completes that of the International Labour Organisation's (ILO) in its 2012 Global Employment Trends. According to the ILO, 74.8 million youths between the ages 15-24 were unemployed in 2011, which represents an increase of 4 million since 2007. ILO report warns that the "World faces a 600 million jobs challenge". The report further stresses that young people are almost three times as likely as adults to be unemployed (International Labour Organisation, 2012). Going further and stressing on the African context, another report of the same International Labour Organisation quoted by Arowolo clarifies that "global youth

unemployment reveals that South Africa rates higher in regional average youth unemployment. It further shows that in 2012, over 50 per cent of young people in the labour force are jobless in the first three quarters in South Africa.<sup>1</sup> This statistic is even worse for some countries in sub-Saharan Africa, for instance, in 2008 Namibia was stated to have 58.9% while Lesotho grappled with 34.4% in the same year. This situation is not likely to get better if deliberate and pragmatic approaches are not embarked on" (Arowolo, 2015). The most recent global statistics demonstrate that:

Employment opportunities have diminished in both the developing and the developed regions. The employment-to-population ratio in the developing regions has fallen by 3.3 percentage points from 1991 to 2015, while in the developed regions it has declined by 1 percentage point. The largest declines are found in Eastern Asia and Southern Asia, which have experienced drops in the employment-to-population ratio of 6.7 and 4.6 percentage points, respectively. The employment situation has improved slightly in sub-Saharan Africa, but progress in livelihoods has been offset by persistently high underemployment and informal employment, as well as low labour productivity. [Moreover]

Youth, especially young women, continue to be disproportionately affected by limited employment opportunities and unemployment. Only four in ten young women and men aged 15-24 are employed in 2015, compared with five in ten in 1991. This represents a fall of more than 10 percentage points. While the drop is partially a result of young people staying longer in school, still about 74 million young people are looking for a job in 2015. Globally, the youth unemployment rate is almost three times higher than the rate for adults. In 2015, the situation is most acute in Northern Africa and Western Asia, where the proportion of young people that is employed is only half of that of the entire working-age population. (United Nations, 2015: 17)

The 2105 fourth Quarter (Quarter 4) shows more optimistic data compared to 1 the three previous Quarters of the same year. According to that report, "Between Q3: 2015 and Q4: 2015, the expanded unemployment rate decreased by 0,6 of a percentage point to 33,8%." (P. xii) Nevertheless, such decrease during the fourth Quarters is not characteristic of year 2015. In fact, the same report goes on pointing out that "Since 2009, the fourth quarter of each year consistently recorded declines in unemployment levels. The most noticeable decreases were realised during the fourth quarter of 2010, 2011 and 2014. The largest decrease in unemployment was recorded during Q2: 2015 at 305 000. Unemployment levels decreased by 225,000 in Q4: 2015 compared to Q3: 2015" (P. xi). For further analysis, refer to: Statistic South Africa. 2016. Quarterly Labour Force Survey, Quarter 4: 2015. Available at http://www.statssa. gov.za/publications/P0211/P02114thQuarter2015.pdf This situation of constant fluctuations open a way to multiple questioning: are the jobs created simple seasonal ones? What is the situation of those who lose their jobs after those periods of higher employment? Are they precarious jobs, without acceptable payments or contract? Can there be other social drivers that justify the reduction of the unemployment rate during the fourth Quarter of every year?

From the above said, we can conclude that the challenges posed by the global climate crisis and the global economic and financial crisis. culminating in the job scarcity and job precariousness, have to be addressed together. As Arowolo (2015) states: "the world, and Africa in particular, must seek a way of mainstreaming youth unemployment into climate negotiations"; only such entanglement of the two crisis can lead to the conception and implementation of what Pope Francis recently called "sustainable and integral development" and which leads to the conception of an "integral ecology", an ecology "which by definition does not exclude human beings. [and that] needs to take account of the value of labour" (Pope Francis, 2015: Number 124), with the deep conviction that "the environment is part of a logic of receptivity. It is on loan to each generation, which must then hand it on to the next" (Portuguese Bishops' Conference, 2003: Number 20). The struggle for such conciliation of the global climate and the unemployment fights, following an intra-generational and inter-generational perspective is at the centre of the just transition ideal defended by the One Million Climate Jobs Campaign.

#### II. RESEARCH METHODOLOGY

#### **II.1- LITERATURE REVIEW**

The first step in this research consisted of doing a literature review of the available knowledge an information on both the emerging just transition theory and the One Million Climate Jobs Campaign of South Africa. In order to do so, a special attention was given to the publications resulting from the actions and research of the One Million Climate Jobs Campaign. To get these working materials, we used resources from libraries, search engines from the web such as Google and Google-scholars, and specialised web portals such as those of the UNFCCC, the One Million Climate Jobs Campaign, and those dedicated to climate jobs research among others. We equally requested and received some unpublished materials and reports from the contact persons working for the organisation that participated to the campaign, and made some copies of the key and thematic documents and report of the campaign available in their premises both in Johannesburg and Cape Town, which we later on used for this research.

#### **II.2- FIELDWORK AND DATA ANALYSIS**

For the fieldwork part of the research, we established contacts with some leaders and organisers of the campaign based in South Africa. After several sessions of discussion and exchange of Emails, we agreed on organising and carrying out some interviews with the focal persons of the leading organisations of the campaign based both in Johannesburg and in Cape Town<sup>2</sup>. We then built an interview guide, with the aim of collecting data mostly useful for qualitative rather than quantitative analysis. These interviews took the "story telling approach", with the aim of giving more flexibility to the respondents, who could better dwell on details and give their personal perception than in the case of more structured interviews (Schneider, 2007), and to give more insights about the success stories, the challenges and the limits of the campaign.

The choice of the qualitative approach on its side, was motivated by the fact that my aim was to evaluate the quality of the actions and their impacts on the decision making process and on people's perceptions, rather than mapping and quantifying the actors or second level activities carried out within the campaign framework.

#### **II.3- LIMITS OF THE METHODOLOGY**

The time dedicated to the research being a bit limited, I focussed on the use of interviews for the data collection. This single approach, for an important campaign, seems insufficient. In fact, to better investigate and understand all the aspects and impacts of the campaign on an on-going basis, it would have been necessary to take some time for a direct observation. This lack of direct observation therefore opens the way to the possibility of further researches on the campaign based on a greater contact and experience of the campaign and its mechanisms. Especially that South Africa is such a Unionised Labour country in terms of the struggle against apartheid internally with COSATU (Congress of South African trade-unions) that a direct observation of all those struggles will always be of great necessity.

Secondly, I have to point out that the research was mostly focussed on the post-campaign activities. The fact that I was not able to observe the preparation and the deployment of the campaign limited a bit my scope of understanding. In fact, understanding a campaign based on a post-event context raises the question on the level of objectivity of the materials used, since all are secondary sources. Nevertheless, this post-event analysis can open perspectives for further studies based on comparative analysis between the perceptions Campaigners have of their actions and the actual real actions. Such further work will be possible only when "on the spot" studies are carried out on

<sup>2</sup> It is nevertheless important to mention that the focus of our work was not on Johannesburg and Cape Town, but on the One Million Climate Job Campaign. Unfortunately all the organizers and key participants to the campaign we wanted to interview live and work in one or the other city, as well as the structures that organised, and are currently running the campaign.

future campaigns. In such further work The YouTube visuals might be researched too, but the SABC (South African Broadcasting Corporation) news footages would be the best (re)sources.

## III. POLITICAL AND SOCIAL NETWORKING AT THE SERVICE OF JUST TRANSITION: THE MIRROR PATH

#### **III.1- NETWORK AND NETWORKING IN POLICY-BUILDING**

In the public policy context, the term 'network' is used to "describe clusters of different kinds of actors who are linked together in political, social or economic life. Networks may be loosely structured but still capable of spreading information or engaging in collective action" (Paterson, 2003: 1). Policy networks are therefore the result of a more or less stable non-hierarchical cooperation among organisation that know and recognise themselves, negotiate, exchange resources and can exchange norms and interest (Le Galès and Thatcher, 1995). Within the political network acting parties or groups have the capacity to bargain over policy designs and details and therefore to determine the success or failures of public policies in a given sector (Peterson and Bomberg, 1999: 8). This transforms the decision making frameworks into fields of mixed, complementary or conflicting interests, where the keywords are influence, blackmailing and bargaining.

Conscious of the fact that the structure of networks operating in any policy sector will determine, explain and predicts the policy outcomes (Paterson, 2003), the analysis of public policies through the network approach investigates "the ways in which network structures affect the selected aspects of the behaviour of actors and their interactions—for instance in the spread of information, strategies of actors, exchanges amongst them and policy outcomes" (Thatcher, 1998: 410). This approach equally helps to give an account on the way networks are built and constituted, the management mechanisms they put in place to survive and be efficient, the possible conflicts, their position within the decision making field, the power relations and the agreements necessary for the decision making and its implementation; It equally helps to better understand the actors' strategies in the negotiation and the configurations of the processes (Buyse, 2003).

In the context of global negotiations on climate change, characterised by the absence of a leading power capable of imposing rules and securing their proper implementation, we are faced with a reality where decisions are taken after serious negotiations and bargaining among Sovereign States, under more or less strong influences from corporations, interests groups and environmental movements. In such context, networking is becoming more and more a necessity and a reality among non-sovereign actors, with the aim of building more strategic alliances capable of influencing the outcomes of the negotiations. The use of the network approach will help us to explain policy outcomes by investigating how networks, which facilitate bargaining between stakeholders over policy design and details, are structured in the global climate decision making processes on one side and, on the other side, I will use this analytical tool to better investigate the emerging ways of influencing global climate policies and politics, through the construction of more influential network of international non-sovereign climate actors. I will mostly focus on the category of actors who, in their fights, give a central consideration to the transition to a new form of resources exploitation, production and consumption; the so called and long awaited "just transition to a low carbon economy.

#### **III.2- JUST TRANSITION TO LOW-CARBON ECONOMY**

The analysis of the One Million Climate Jobs Campaign cannot be possible if we do not situate it within the broader framework of the global fight against climate change and the attempts by the non-sovereign actors to put into place mechanisms to influence the negotiations and urge the States to action, with a focus on "just transition to low-carbon economy". It is in this framework that we will place our research.

#### **III.2.1- ORIGIN AND DEFINITION OF THE JUST TRANSITION**

The term Just Transition was coined by Californian activists seeking to improve relations with workers in industries affected by environmental campaigns. The original organisation behind the call is the Just Transition Alliance, founded in 1997. However, as a concept, its break-through moment came when the Canadian Labour Congress [CLC] released their 2000 report "Just Transition for workers during Environmental Change". This report gave the term 'Just Transition' a solid basis within the labour movement. (O'Driscoll, 2011)

In fact, most scientists and political leaders recognise the need to act urgently and appropriately in the context of global warming, if we want to save our planet. Nevertheless, this agreement and the production of scientific knowledge and evidences on one side, and their consideration in decision making processes related to the fight against climate change present a great contrast, which can be observed through the difficulties in building legally binding agreements, and the minimal political interest in adaptation and mitigation related issues (Roberts, 2010), both at the global and local levels. Since mitigation deals with the cause of climate change, and adaptation with

the adjustments and preparations needed to live with climate change until it is stopped (AIDC, 2013), putting in place fighting mechanisms through adequate public policies and actions becomes a matter of survival for the world populations which, at the same time, have to face the challenges of development and unemployment threatened by the current economic and financial crisis, and the degradation of their living environments. It is in this context that the concept of just transition emerged, meaning a transition from an unfair neoliberal economy and its traditional high-carbon modes of production and consumption to a fairer low-carbon economy. The project of just transition is about fairness, environmentally friendly development and environmental justice; it is about quality employment in an economy based on sustainable production and infrastructure: it is about communities as the focus of just transition programs is on communities as centres of diverse, labour-intensive industries, with a strong public sector to support them; it is, above all, about alternative employment in a sustainable economy (Canadian Labour Congress, 2000; Varela, 2006: Republic of Argentina, 2006: Barbier, 2010: Roberts, 2010).

There is a clear contrast between the current context urging for solutions to mitigate and adapt to climate change, while securing development and jobs in a just and fair society on one side, and on the other side the inability of governments to provide sustainable and federative solutions to those two challenges. This contrast reveals the need to implement enhanced mechanisms to guide and influence the decision making processes at the global, national and intra-national levels. This passes through two main channels: 1) the construction of a usable science, a science which produces knowledge that can contribute directly to the design of policy or the solution of a problem (Lemos and Morehouse, 2005; National Research Council, 2009a, National Research Council. 2009b: Weiss. 1978): 2) the creation of influential networks and mechanisms. For instance, in the global warming context, if the unemployed and the workers are mobilised and if they join forces with the many different organisations and individuals who are active on climate change issues, then there is a chance that the governments might be forced to take quick steps in the right direction (Dilling and Lemos, 2011).

Just Transition to a low carbon economy recognises that support for environmental policies are conditional on a fair distribution of the costs and benefits of those policies across the economy, and on the creation of opportunities for active engagement by those affected in determining the future wellbeing of themselves and their families. (Wikipedia, consulted on 01/12/2014) It is definitely a mechanism aiming at promoting sustainable development that is socially just, environmentally friendly, and economically efficient, with an emphasis being placed on governance and management changes to better service decent lives of millions of people. (Olsen, 2010). The just transition is framed on the basis of four fundamental principles, mainly:

- 1. The Investment in environmentally friendly activities that create decent jobs that are paid at living wages, that meet standards of health and safety, that promote gender equity and that are secure,
- 2. The putting in place of comprehensive social protections (pensions, unemployment insurance, etc.), in order to protect the most vulnerable,
- 3. The conducting of research into the impacts of climate change on employment and livelihoods in order to better inform social policies
- 4. Skills development and retraining of workers to ensure that they can be part of the new low-carbon development model. (Cock, 2011)

In this analysis I will therefore make use of this theoretical perspective to build a framework of anthropo-centred climate decision making process and action, which is more participatory and integrative of non-sovereign actors.

#### **III.2.2- PRINCIPLES OF THE JUST TRANSITION**

## MEANINGFUL ENVIRONMENTAL TRANSITION AND SUSTAINABLE DEVELOPMENT

The essential element of the just transition project is to reconcile two important challenges of our modern societies, namely the protection of the environment and the development of our States. In fact, the current unsustainable models of exploitation, production and consumption have to be revised and completely reverted if we want to prevent our environment from reaching the tipping point in term of degradation. The safeguard of our living milieus has to pass through the radical change in our exploitation, production and consumption habits. Nevertheless, this shift should not jeopardise the development efforts of our States and Nations. The equation of reconciling environment protection and sustainable development seems difficult to solve, especially in the current capitalist model of development highly dependent on fossil fuel, but it is definitely the only way to go. It is a matter of choosing between controlling our current behaviours and compromising the future of our planet, our common future in this planet and the wellbeing of future generations. According to the UNFCCC (2009), an economic transition is needed that shifts global economic growth patterns towards a low emission economy based on more sustainable production and consumption, promoting sustainable lifestyles and climate-resilient development while ensuring a just transition of the workforce.

#### REPRESENTATION, PARTICIPATION AND EMPLOYEE INVOLVEMENT

Conceiving and implementing suitable participatory mechanisms is a key factor that can guarantee the success of any project. Through this not only we ensure the representation, but also and above all, we ensure the full involvement of all the parties and stakeholder in the decision making processes and their outcome, and therefore contribute to the enhancement of the sense of belonging. In this context, the participatory process does not merely aims at consulting the employee and labour movements, but at obtaining their consent. The importance of insisting on consent rather than consultation lies in the basic difference between the two approaches, as pointed out by Maharian et al. (2012): "Consent is the result of an independent and collective decision-making process to a certain proposal or action. On the other hand, consultation is a mechanism as a democratic right for expressing and exchanging views and opinions on a certain issue, proposal or action to influence its outcome or final decision". The principle of representation, participation and involvement of workers does not merely aims at giving a hypothetical influential role with regard to the outcomes of the decision, but above all, it aims at providing them with the tools, and letting them be the full actors of the final outcomes. That is the reason why just transition provides a measure of workers' participation and control over our own future. It considers participation as a building block for a sustainable economy, one essential element in a progressive environmental policy (Canadian Labour Congress, 2000). Just transition project should always be built on the full and informed participation of governmental, private business or civil society entities, including the youth and addressing the need for gender equity (UNFCCC, 2009). In the same line, According to principle 10 of the 1992 United Nations Conference on Environment and Development known as the Rio conference:

Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

From the above declaration there are basically three environmental democracy rights to be respected, namely: the right to participate in environmental decision making, the right for citizens affected by environmental decisions to receive pertinent information, the right to access judicial and administrative proceedings. In fact, workers have a right to know how their employers will plan for de-carbonisation, a right to speak and to be consulted and a right to co-determination. Decisions that are taken over the heads of workers are not sustainable. Decisions have to be taken with the workers (European Federation of Public Service Unions, 2015). In fact, substantial evidence exists that environmental transition happens fastest and most efficiently when workers are involved, so that those affected by environmental policy are secure in the knowledge that their views and needs are being fully considered and responded to. Involving employee representatives, such as trade unions, in the planning of environmental measures—as advocated by Just Transition-is one way to make better use of employees as drivers of environmental change (TUC, 2008). In the same line:

Researchers at the European Trade Union Institute (ETUI) have developed a new tool called the European Participation Index (EPI) designed to examine the relationship between workers participation and social cohesion, economic performance and sustainable development in Europe. The Index shows that companies located in countries that recognise a greater participatory role for workers operate more in coherence with social and ecological objectives and this has a beneficial effect on European society as a whole. Europe needs skilled, mobile, committed, responsible workers that are able to identify with the objective of increasing competitiveness and quality without fear of losing their job. The 'strong rights' group of countries surpassed the other in a wide variety of key indicators: GDP per capita, labour productivity, overall employment rate, employment rate of older workers, youth educational attainment, expenditures on R&D, progress on the reduction of greenhouse gas emissions and consumption of energy." (European Trade Union Institute, 2009)

That is why, more than a simple formality to be accomplished, Worker participation appears to be more a necessity to be validated and implemented if we want to created sustainable climate jobs in this current changing environment.

#### STABLE EMPLOYMENT AND LONG-TERM PLANNING

The prime aim of Just Transition is the continuation of employment without loss of pay, benefits or seniority. Job equity is at least as deserving of preservation as the equity of corporations (TUC and Allan, 2008: 36). As such, in the spirit of just transition conceivers and activists, one of the most important and non-negotiable thing is the creation and preservation of jobs for the peoples. The reality of labour in this context is closely related to the idea of security, justice and wellbeing.

The security dimension refers not only to the guarantee of long term employment with possibilities of advancement and conversion to new positions requiring new skills, but it equally refers to the health and physical security of employees in their job environment. For that purpose, employers, under the continuous control of governments, must put in place fair and just advancement mechanisms within corporate, develop and implement clear follow up and training plans to enhance the capacity of workers and ensure possibilities of job conversions whenever necessary. Equally proper health and security mechanisms and policies are to be conceived and applied in the working environments so as to secure not only the physical security, but as well the health wellbeing of those categories of workers who are most exposed, on a daily basis and who, in contexts of pollution and environmental degradations are the most affected and the less prepared to face the crisis.

As for the justice dimension, it is important to note that just transition does not only deal with the creation of proper and cleaner jobs, but it equally fights for the just access and maintenance of every person to the job market. In fact, as far as employees are concerned, justice in this line concerns the equitable access to the job market for all, equity in the chances to access managerial roles, obtaining the right salary in relation to the job carried out, participating in the decision making in the corporations and having their contributions, competencies and opinions being recognised.

Concerning the wellbeing dimension, it is worth noticing that the value of labour does not only lie on the financial incentives in produces for the workers, but only and above all, work is a means of self-fulfilment. As such, corporate have the responsibility of putting in place policies, mechanisms and activities that create a sense of belonging, self-identification of employees with corporate values and happiness. Based on those three dimensions, the One Million Climate Jobs Campaign "want a million new jobs, not ones people are already doing. We don't want to add up existing and new jobs and say that we now have a million climate jobs. We don't mean jobs with a climate connection, or a climate aspect. We don't want old jobs with new names, or ones with 'sustainable' in the job title. And we don't mean 'carbon finance' jobs" (Campaign Against Climate Change, 2009: 7)

However, in their search and quest for clean jobs, both the labour movements and the climate jobs campaigners and activists still have to resolve a key question: 'are green jobs one component of a new green capitalism, which is turning the climate crisis into an opportunity for accumulation? Or, are green jobs part of a 'green economy' which—"based on rights, sustainability principles and decent work" can meet the challenge of a just transition'? (Sustainlabour, 2011) Not being able to respond to such question in a clear and precise way, the campaign preferred the terminology of Climate jobs, rather than green jobs. In fact, according to the campaigners, "climate jobs are jobs that cut down the amount of greenhouse gases we put in the air and thus slow down climate change. 'Green jobs' can mean anything-jobs in the water industry, national parks, landscaping, bird sanctuaries, pollution control, flood control and many more things. All these jobs are necessary. But they do not affect global warming" (Campaign Against Climate Change, 2009: 7). Climate jobs, on their side, are based on three principles: ecological sustainability, social justice and state intervention, and are jobs that: 1. Reduce the amount of greenhouse gasses we emit, to make sure that we prevent catastrophic climate change: 2. Build our capacity to adapt to the impacts of climate change (e.g. jobs that improve our food security); 3. Provide and secure vital services, especially water, energy and sanitation (this includes reducing wasteful over-consumption)<sup>3</sup>. Moreover, climate jobs include retrofitting of buildings for energy conservation, the retraining of workers to become energy auditors, developing renewable energy sources, promoting sustainable transport systems, supporting community-based sustainable industries, community revitalisation projects, moving towards a complete waste recycling program, and creating a publicly owned infrastructure that will manage in the public good (Canadian Labour Congress, 2000).

#### **GOVERNMENT BACKING AND A UNITED PURPOSE**

Achieving Just Transition relies on a high level of commitment from all relevant stakeholders, including among others the Government, trade unions and employer federations (O'Driscoll, 2011). As the main

<sup>3</sup> Cf. One million climate Jobs campaign. One Million Climate Jobs: A just transition to a low carbon economy to combat unemployment and climate change. P. 9 Available at: http://womin.org.za/images/the-alternatives/fighting-destructive-extractivism/One%20Million%20Climate%20Jobs.pdf

organiser and legitimate manager of public affairs in each national and sub-national territory, national as well regional and local governments have the responsibility of ensuring the wellbeing of their populations, the sustainable management of resources and the preservation of the environment within the limit of their territorial and functional boundaries. It is in that line that, for the transition to low carbon economy to be properly conceived and implemented continuously, in our countries, regions and other territorial constituencies, there is a need of "Government-led investments in education/training and skills programmes, from the workplace to national levels, to equip students and the workforce with the skills for a low carbon, resource-efficient economy. Promoting individual worker rights to training to ensure access for all workers" (Change partnership, consulted on 07/10/2015).

To this effect, according to an important report produced in 2008 by Bill et al., an example from Australia shows that "just transition requires government intervention and community partnerships to create the regulatory framework, infrastructure and market incentives for the creation of well-paid, secure, healthy, satisfying environmentally friendly jobs with particular attention to appropriately meeting the needs of affected workers and their communities" (Bill et al., 2008: 5). Equally, as the report continues, it is the responsibility of the governments to scale the transition to minimise the costs to the communities affected.

Finally, to be schematic, Bill et al. (2008: 11) give a very detailed list of the responsibilities that governments, at all levels, have to assume for the just transition to a low carbon economy to be effective and efficient. According to them, Government support must include:

- Assistance for both displaced workers and for contractors;
- Adequate notice of workplace change and closures;
- Consultation and full engagement of relevant unions;
- Support for innovation and partnerships for new local industries;
- Investment in research and development and infrastructure;
- Training for alternative employment tailored to local and individual needs and opportunities;
- Special targeted support for older, disabled and less educated workers;
- Relocation assistance for displaced workers;
- Income maintenance, redundancy entitlements and retraining allowances;

- Cheap loans and subsidies for new industries and employers;
- Compensation and equipment buy-outs for contractors;
- Assistance programs extended to workers employed by contractors;
- A just transition requires investment in training programs and apprenticeships
- to create a highly trained 'green' workforce;
- The introduction of a Job Guarantee.

By fully playing their role, governments do guarantee not only the preservation of the environment, but above all, they play an important role in securing social and environmental justice.

#### SOCIAL JUSTICE AND A FAIR DISTRIBUTION OF COSTS (AND BENEFITS)

The distribution issue is one of the central elements, not only of climate justice, but also of the global climate negotiations and governance. In fact, it is closely related to the vulnerability on one side and, on the other side to the benefits resulting both from adaptation and mitigation of global warming. In the vulnerability aspect, it is important to mention that it refers to the unfair distribution of global warming effect on countries and populations; among countries, those which contributed the most to the occurrence of the situation are more prepared than which did not. At the intra-national level, those having less financial and material resources are more impacted than the rich. If this unfair distribution of the climate natural burden does not result from any human distributive mechanism, we cannot say the same thing concerning the distribution of cost and that of the benefits. That is the reason why we can argue that is not environmental change itself but the distribution of the burden of adjustment to environmental change that gives rise to the need for Just Transition arrangements. The current distribution mechanism is profoundly unfair. Individual workers bear most of the cost of adjustment, while they share in the environmental benefits only to the extent that members of society as a whole benefit (Canadian Labour Congress, 2000). In this regard considering the condition of each social category when we talk of distribution becomes a matter of great importance, and the role of just transition in such context will be to ensure that the costs of environmental change will be shared fairly. Failure to create a just transition means that the cost of moves to sustainability will devolve wholly onto workers in targeted industries and their communities (CLC, 2000: 4)

In fact the distribution of the climate burden and benefits is a matter of social and climate justice. At the international levels, States, and above all richer ones have the responsibility to equip poorer and weaker ones to better adapt to global warming, this will ensure that the later do not endure the greater share of the climate change burden because of their lack of material, financial and technical resource. At the national and sub-national levels, both national, regional and local governments and other stakeholders have the responsibility of ensuring that the most vulnerable communities, households and individuals are provided with the means of capacities for better facing the adverse effects of climate change. This requirement for fair distribution equally applies to the distribution of benefits resulting from the preservation of the environment, and other natural resources. Everything has to be done so that all components of the society, being them internally or internationally profit from incentive generated by the environmental protection initiative. As such, "just Transition recognises that support for environmental policies are conditional on a fair distribution of the costs and benefits of those policies across the economy "(TUC and Allan, 2008: 3), ""and on the creation of opportunities for active engagement by those affected in determining the future wellbeing of themselves and their families" (Wikipedia, consulted on 01/12/2014); this will ensure that the costs of environmental change will be shared fairly. In short, failure to create a just transition means that the cost of moves to sustainability will devolve wholly onto workers in targeted industries and their communities (CLC, 2000: 4), and that will for sure be a great obstacle to the effective and efficient fights against global warming both at the international, national and sub-national levels.

#### **III.2.3- GOALS OF THE JUST TRANSITION**

The main aim of the just transition project is to make sure the current highly carbon intensive economy is turned into a low and possibly a zero carbon economy one. This goes from the conviction that "the shift to a low carbon economy will mean massive changes in the way we produce goods and services, in travel and transport, and in the pattern of future investment" (TUC, 2008: 36). Such transition is not only concerned with environmental issue and economic stability but, above all, it stresses on matter of social and environmental justice by giving a great importance to the redistribution of climate burdens and benefits, the wellbeing of workers and the creation of secured and sustainable climate jobs, the participation of all the stakeholders to the decision making processes, and the government backup to make sure the interest of the capital do not prevail over the wellbeing of the society in general and of workers in particular. In this same line,

the ITUC report (2009) titled *Equity, Justice and solidarity in the fight against climate change* stresses the need "to create green and decent jobs, transform and improve traditional ones, and include democracy and social justice in environmental decision-making processes". With this, Just Transition can be described as a "tool the trade union movement shares with the international community, aimed at smoothing the shift towards a more sustainable society and providing hope for the capacity of a 'green economy' to sustain decent jobs and livelihoods for all" (ITUC, 2009). Definitely, the just transition project appear to be the best approach if we want to integrate matters of environmental justice in general and climate justice issues in particular in the current climate regime both at the global, national and sub-national levels.

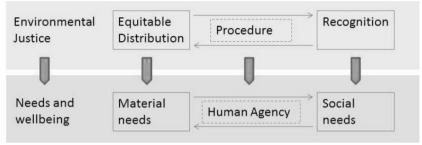
#### *JUST TRANSITION: THE PERFECT ATTEMPTS TOWARDS ENVIRONMENTAL JUSTICE*

One of the key issues in the context of environmental matters in general and global warming in particular is the issue of justice. In fact, even though all have not participated at the same level in the occurrence of climate change, it affects everybody; moreover, the most affected are those participating the least to the emergence and enhancement of the crisis because of their poor adaptive and resilience capacities. Equally all do not participate in the same way in the decision making process, and the climate crisis and regime affect the rights and dignity of some minorities and indigenous people. In fact, even though the concept is still very disputed and polemical, environmental justice can be understood and define from three different perspectives: As a movement originating from the USA in the 1990s putting a stress on the relation between race and pollution; As a concept which helps in the analysis of environmental problems: And as an activist concept that motivates for environmental action. In fact, framing issues in terms of environmental (in) justice allows mobilisations to transcend national borders and attract the attention of wider sets of activists and publics when a local issue gets re-framed as a matter of common interest or global public good. (Geoforum, 2014) According to Sikor:

Environment justice is basically distinguished by three basic concepts: Distribution (how equitable natural resource benefits, and how environmental harms are distributed among people), participation (who gets to have what say in public decision-making on environmental matters) and recognition (how we acknowledge people's collective identities and histories of resource management [e.g. indigenous peoples' identities as peoples and their histories of economic, political and cultural marginalisation])<sup>4</sup>

<sup>4</sup> This is from a presentation made during an online course in February 2015. Available at https://www.futurelearn.com/courses/environmental-justice/steps/26653

Fraser goes in the same line when he invites to think about justice in ways that extend beyond distribution to also include recognition and representation. (Fraser, 1997) Akol and Gross-Camp, despite their change of vocabulary, talk of the same dimensions of environmental justice, while relating each dimension to a specific human need, as demonstrated in the table below.



Source: Akol M. and Gross-Camp N. (Forthcoming)

These ideas of justice are at the foundation of the Martinez-Alier's (2002) vision of environmentalism of the poor. By this concept, Martinez-Alier intends to draw the attention on the struggles of the subaltern classes, mostly poor peasants from the global south, in defending their environment. Barca (2012), in a former analysis, going from such concept of *environmentalism* of the poor, and applying to the working class framed the concept of *Working-class environmentalism*, to stress the struggles of the working class for the protection of the environment, based on the cases of Brazil, Unites States and Italy, Whether based on Martinez-Alier concept of poor, or on Barca's definition of working class, the common point is that both refer to the lower classes of the society, those who from their daily contact with the environment, earn their living from manual work and are most of the time not included in the decision making channels and arenas. Nevertheless, it is important to note the demands of those subaltern categories of the society "are about the distribution of environmental goods and bads, whose visions of the environment are recognised, who participates in environmental decision-making, and what kinds of values come to matter" (School of International Development, 2014). In this regard environmental justice in general and climate justice in particular has become a central issue in the current global climate fight, and has motivated the emergence of many movements and activities geared towards its inclusion in the global fight instruments and its implementation in every climate public policy and action. Going from the broad and inclusive understanding of environmental justice, the concept of

climate justice can be singled out, and climate change viewed from the perspective of justice. The concept 'climate justice' appeared in the academic literature under the impulsion of Weiss in his 1989 work entitled In Fairness to Future Generations, and later in a 1992 contribution of Henry Shue on the "The Unavoidability of Justice" in the book edited by Hurrel and Kingsbury entitled The International Politics of the Environment: Actors. Interests and Institutions. In the vision of both authors the concept of climate justice is used to characterise the disparities and unequal responsibilities in the occurrence of the climate crisis on one side and, on the other side the differentiated impacts of the climate burden on different social categories and countries. In fact, even though all have not participated at the same level in the occurrence of climate change, it affects everybody; moreover, the most affected are those participating the least to the emergence and enhancement of the crisis because of their poor adaptive and resilience capacities. Equally all do not participate in the same way in the decision making process, and the climate crisis and regime affect negatively the rights and dignity of some minorities and indigenous people. Harlan et al. rightly summarise the justice dimensions of climate change in the following statement:

Climate change is a justice issue for three reasons: First, there are *causes* of climate change: Social inequalities drive overconsumption, a key source of unsustainable levels of greenhouse gas (GHG) emissions. Second, the *impacts* of climate change are unequally felt by the rich and the poor, and disparate impacts will continue to increase in future generations. Third, *Policies* designed to manage climate change have starkly unequal consequences, and the process by which emissions reduction and climate ad-aptation policies are decided tend to exclude the poor and the powerless (Harlan et al., 2015: 127)

By fighting for climate justice specifically, the focus is put on some basic principles that are wisely and tactfully defined by Harlan et al. in the following words:

- 1. Equity in distributing the burdens and sharing the benefits of climate change in communities and among nations;
- 2. Social and political processes that recognise currently or previously marginalised groups as rightful participants in the governance and management of climate change;
- 3. Freedom on peoples to make choices that maximises their capabilities to survive now and in the future;

4. Rebuilding damaged historical relationships between parties, correcting past wrongs against humanity, and restoring the Earth. (Harlan et al., 2015: 136)

Such justice should not only be inter-generational, but also and above all intra-generational, hence the need of conceiving new patterns of production and consumption that will be environmentally friendly, socially just and economically sustainable.

## **III.2.4- LIMITS OF THE JUST TRANSITION**

The concept of just transition, as previously mentioned in this work is not a homogenous one. In fact, even though all trade-unions advocate for just transition to a low carbon economy, they do not always agree on the actors and institutions to involve as well as on the nature of jobs to be created. Also, as some researches have realised, the views of global union organisations demonstrate a great deal of variability in the interpretation of the strategy to be implemented (UNEP 2008; UNEP 2011: ILO and UNEP 2012: Räthzel and Uzzell 2013: Stevis and Felli 2014). Nancy Faser, later on followed by Gough, does a twosided classification of the alternatives offered by the thinkers of just transition; for them there is an "affirmative" view of just transition and a "transformative" view. The "affirmative" view denotes the range of views that call for more equity within the parameters of the existing political economy, while "transformative" views refers to those that call for more profound changes of the political economy (Fraser, 1995; Fraser, 2005; Gough, 2010). Nevertheless, to better analyse these different view of just transition, I will use a framework built by Stevis and Felli (2014). Such framework, based on a shared solution, differentiated responsibility and social ecological differentiation gives in a very summarised and clear way the different internal conflicts surrounding the conceptualisation of just transition to a low carbon economy.

### JUST TRANSITION AND THE 'SHARED SOLUTION' APPROACH

According to the sympathisers of the 'shared solution' approach the just transition to a low carbon economy should be built on dialogue and mutual understanding among all the stakeholders involved. Such stakeholders include among others trade-unions at the international, national and local levels, international as well as national and subnational NGOs, global and regional governmental organisations. This perspective is found on the premise that the just transition can be properly carried out within the current existing framework, provided there is a previous and continuous dialogue on the procedures and

implementation mechanisms. Here, trade-unions are called to participate in the currents decision frameworks to order to make the voice of the workers heard. "This approach to just transition, therefore, remains largely within the parameters of affirmative environmental justice. While placing questions of equity front and centre and committing to green innovations, it does not envision transformative changes in the political economy" (Stevis and Felli, 2014: 10). Therefore, for this approach, the just transition is neither framed as altering the current balance of power, nor as an opposite alternative to the current social order; it is simply viewed as a mutually beneficial process that can lead to a socially acceptable society and a successful greening of the economy. That is why there is no need to transform current social. political and economic institutions: all that is needed is a better dialogue and understanding among already existing structures. Nevertheless, this vision is not shared by all the advocates of just transition. Others plead for a differentiated responsibility both in the conception, development and implementation of just transition.

## JUST TRANSITION AND THE DIFFERENTIATED RESPONSIBILITY APPROACH

The differentiated responsibility approach gives a great importance to the defence of the losers or victims of the current social and economic order. By so doing the main focus is put on the interest and protection of the workers in the production chain, and the role that unions have to play in defending them. Unions, as representatives of workers has a great power on which they can capitalise when it comes to participating in the decision making process. This approach therefore focuses on that nuisance power as a means that union can use to make the voice of workers hears and secure the respect of their rights and interest. For this approach States and the Capital are to be considered are the main responsible of the current environmental crisis, through their unsustainable exploitation and use of natural resources. That is why, in the context of transition, they equally have the responsibility towards the workers (as well as their families, their communities, and their unions). They have to make sure that the rights and jobs of workers currently employed in sectors that are at risk because of environmental degradation, deregulation and regulations policies and mechanisms are not endangered. The current global crisis being a result of the capitalist modes of exploitation, production and consumption of resources, dominating all the aspects of the socio-political and economic frameworks, it results that the society does not have to rely on the same structure and forces to solve the crisis they created; that is "why this approach to the just transition is placed closer to the transformative environmental justice category because it underscores

that structural rules are at play and that any transition must modify or constrain their operation" (Stevis and Felli, 2014: 11). Such transformation does not only concern the structures and the rules, but it equally concerns the jobs to be created; in fact, this demands transformation of existing jobs in order to make them sustainable rather than simply 'green.' This requires nevertheless the clarification about what are really "Green jobs": Are they jobs one component of a new green capitalism, which is turning the climate crisis into an opportunity for accumulation? Or, are green jobs part of a 'green economy' which—"based on rights, sustainability principles and decent work" can meet the challenge of a just transition'? (Sustainlabour, 2011) The One Million Climate Jobs Campaign of South Africa, while avoiding the concept of green jobs, uses the terminology Climate jobs and tries to provide an answer to this question in the following categorisation: they are based on three principles: ecological sustainability, social justice and state intervention and are jobs that 1. Reduce the amount of greenhouse gasses we emit, to make sure that we prevent catastrophic climate change: 2. Build our capacity to adapt to the impacts of climate change (e.g. jobs that improve our food security); 3. Provide and secure vital services, especially water, energy and sanitation (this includes reducing wasteful over-consumption).5

## JUST TRANSITION AND THE SOCIO-ECOLOGICAL APPROACH

The socio-ecological approach to just transition basically advocates for the democratic planning and the public control and ownership of natural resources. According to the developers of this approach the management of resources cannot be left to the hands of the capital and the regulation abandoned to the will and speculation of the market. Governments have to take responsibility not only in regulating, but also and above all in managing and leading the transition to low carbon economy. For this to be effective and efficient, public funding and control over resources exploitation and transformation as well as technologies, need to be strengthened (Stevis and Felli, 2014). This approach aims at a radical change of social structures and order, and count on the continuous pressure of civil society in general and workers' unions in particular to force government and capital to engage on the road of just transition. In the International Trade-unions Federation's (ITF) words, talking about just transition: *none of this will occur* 

<sup>5</sup> Cf. One million climate Jobs campaign. One Million Climate Jobs: A just transition to a low carbon economy to combat unemployment and climate change. P. 9. Available at: http://womin.org.za/images/the-alternatives/fighting-destructive-extractivism/One%20Million%20Climate%20Jobs.pdf

without strong pressure from trade unions and their allies in society. Workers and communities have a decisive role to play in the planning and implementing of the transition (ITF, 2010: 47). For this last version of just transition, there is no way for a dialogue with the current institutions; they need to be confronted and forced to action through massive public contestations, marches and even civil disobedience. It is based on this ground that Stevis and Felli conclude that this last vision is more "confrontational (and less prone to advocating win-win solutions), because it rests on the assumption that the current crisis is being structured by an unequal distribution of wealth, property and power in capitalist society" (Stevis and Felli, 2014: 12). Definitely, as Stevis and Felli continue with their argument, this socio-ecological approach, such as the eco-socialist approach advanced by the ITF as well as some national labour unions and networks, is the one that holds the most promise because it seeks to integrate society, economy and environment. This last approach is the one used as framework in this work, giving the confrontational nature of the current actions of most climate justice movements in general, and of the One Million Climate Jobs Campaign of South Africa in particular

Just to sum up the just transition project, despite its internal differentiations and approaches, appears to be the best approach if we want to integrate matters of environmental justice in general and climate justice issues in particular in the current climate regime both at the global, national and sub-national levels.

## SECOND PART THE ONE MILLION CLIMATE JOBS CAMPAIGN OF SOUTH AFRICA (OMCJC)

## I. THE SOUTH AFRICAN CONTEXT: A FAVOURABLE GROUND FOR JUST TRANSITION STRUGGLE

The Republic of South Africa is a democratic state covering a surface of 1 219 090 km2, with a total population of 52,982,000 inhabitants, constituted of 25,823,300 (49%) male and: 27,158,700 (51%) female. The country has 11 official languages: English, isiZulu, isiXhosa, isiNdebele, Afrikaans, siSwati, Sesotho sa Leboa, Sesotho, Setswana, Tshivenda, Xitsonga. Constituted of nine provinces (Western Cape, Eastern Cape, KwaZulu-Natal, Northern Cape, Free State, North West, Gauteng, Mpumalanga and Limpopo), the country has three Capital cities: Pretoria (administrative), Cape Town (legislative) and Bloemfontein (judicial). The economy is fundamentally based on Mining services and transport, energy, manufacturing, tourism, agriculture and the currency used in the country is the Rand (ZAR).

Historically speaking, with the formalisation and legalisation of Apartheid after the Second World War, South Africa until 1994 witnesses one of the most racial, segregationist and unjust economic, social and political regime in the world. Under apartheid, South Africans were classified into several categories. In fact, in order to set laws that prevented black Africans to have access to land through the 1913 Natives' Land Act which introduced a uniform system of land segregation between the races, the administration divided the inhabitants of the countries on the basis of races, with different denominations: the Natives<sup>1</sup>, the whites, the Indians and Coloured (Tshekeisho Plaatje, 1916). Talking of this Land segregation issue and its consequences on the South African society today, in an article published on June 20th 1913, Rebecca DAVIS states that "Writing this year [2013] historian Colin Bundy suggested that the 1913 Land Act had a powerful relevance to both events [the horror of Marikana and the upheaval of the Western Cape farmworkers' strikes] because the 1913 law and its consequences "still shape rural South Africa."<sup>2</sup> Bundy's declaration is a useful explanation of the historical context for the Land Act:

The Land Act was not a sudden departure, nor did it transform the countryside. It followed a long history of colonial conquest and dispossession; it codified and ratified various discriminatory practices established in colonies and Boer republics. In order to understand the Act's core features, we need to recall how land alienation took place in British colonies and Boer republics before Union.<sup>3</sup>

On the other hand, as far as privileges related to the skin colours and the sustainable access to the job market is concerned, we can realised that the native and white races terminology was later on replaced and, in the 1960, the discourses mostly use the concepts of white and Bantu. Such separation and naming was based on the apartheid suppositions that belonging to one or the other race gave more or reduced rights and privileges, determined the suitability for some job positions or not based on skin colour, and as well was critical for access to the land and the place of settlement, since there were places for the whites and other places, mostly in reserves, for blacks also known as bantus; what equally gave birth to the concept of Bantustan or bantu homeland. The Bantu 'homelands' consisted "of 260 small and separate areas scattered throughout the country. They are South Africa`s backwa-

<sup>1</sup> According to Tshekeisho Plaatje's words, "native' shall mean any person, male or female, who is a member of an aboriginal race or tribe of Africa; and shall further include any company or other body of persons, corporate or unincorporate, if the persons who have a controlling interest therein are natives." (Tshekeisho Plaatje, 1916: 50)

<sup>2</sup> Davis. 2013. "Hundred years on, the Natives Land Act's legacy is with us still." *Daily Maverick.* (*South Africa*) Available at http://www.dailymaverick.co.za/article/2013-06-19-hundred-years-on-the-natives-land-acts-legacy-is-with-us-still/#.V2Dv9r0aIfS; and see also, Colin Bundy, "South Africa: Centenary of the 1913 Land Act." *LINKS: International Journal of Socialist Renewal.* Available at: http://links.org.au/node/3324.

<sup>3</sup> Bundy C. 2013. "South Africa: Centenary of the 1913 Land Act." *LINKS: International Journal of Socialist Renewal.* Available at: http://links.org.au/node/3324.

ters, primitive rural slums, soil-eroded and underdeveloped, lacking power resources and without developed communication systems. They have no cities, no industries, and few sources of employment" (1964). It is important to mention that all those racial categorisations were to better serve the ideology and practice of apartheid in South Africa. With the same evolution in the concept and racial classification of South African, mostly in the post-apartheid context, we are faced with a classification in four different races: the white, the black (replacing the previous Natives and Bantu denomination), the coloured, and the Indian/Asian.4 (The Economist, 2012) Following such stratification and according to the 2011 National census, Blacks-Africans are in the majority at just over 41-million, making up 79.2% of the total population. The coloured population is 4.615.401 (8.9%), while there are 4,586,838 (8.9%) whites. The Indian/Asian population stands at 1 286,930 (2.5%). In 2011, the category "other" was included in the Census, and accounts for 280,454 or 0.5% of the total population of the country. This apartheid situation created and maintained a situation of economic, political, social and racial inequalities, which are still visible and very much rooted in the current South African society. On the other side, during that period the Country got engaged in the path of fossil fuel intensive development, mostly sustained by mining activities. That is what basically justifies the need of rethinking the development path through new lenses which are less carbon intensive and climate friendly.

The One Million Climate Jobs Campaign of South Africa cannot be properly studied if we do not situate it in the specific context of South Africa, mostly the Post-Apartheid context and its multiple political, social, economic and environment challenges among others. In fact, the early days of the post-apartheid South Africa presents the Rainbow nation as a developmental state. To better understand the reality of developmental state here, we will adopt the definition provided by Bond:

Though it typically refers to the East Asian experience combining manufacturing-sector growth and diversification with authoritarian politics, I take this oft-abused phrase to mean—in a South African context—a combination of macro-economic neoliberalism and unsustainable mega-project development, dressed up with rather tokenistic social welfare policy and rhetorical support for a more coherent industrial policy (Bond, 2008: 8)

<sup>4</sup> See Stubbs' book, *Steve Biko 1978-77- I Write What I Like*, on racial divisions and its context because "black" is a later term. "Natives" "Non-Europeans", "Africans", etc. are very critical terms throughout the colonial and apartheid eras because the terms are connected to Land and land dispossessions.

This was a time of the presidency of Thabo Mbeki with his African Renaissance ideology; I think it will also be important to look at the Annual Reports of his Presidency or what President Mbeki said about "Developmental state" if he did—and what he defined it as. For a balance, Bond alone is misleading because knowledge is not neutral. And Mbeki wrote a lot, so you'll not have a problem finding his writings.

Such context, as we will see is mostly dominated by a multitude of challenges. Nevertheless in the context of this analysis, we will basically focus on the three main challenges that needed to be addressed urgently, in order to guarantee both the political, the economic and the social stability of the Rainbow nation, namely: The developmental and employment challenges, the social inequalities and redistribution of wealth, and the Changing environment and de-carbonisation challenges.

## I.1-THE DEVELOPMENTAL AND EMPLOYMENT CHALLENGES

The transition from the last Apartheid government led by Frederick De Klerk to the African National Congress (ANC) government led by Nelson Mandela saw the rise of great expectations for the creation of a new South Africa characterised by the empowerment of Black Africans and other minorities. This vision was to be applied through the Black Economic Empowerment (BEE), launched in 1994 and then revisited several times in the course of its implementation. The Black Economic Empowerment can briefly be defined as an integrated and coherent socio-economic process [which] aimed at redressing the imbalances of the past by seeking to substantially and equitably transfer and confer ownership, management and control of South Africa's financial and economic resources to the majority of the citizens. According to the rationale and vision of the government, the BEE was seen as

An integrated and coherent socio-economic process. It is located within the context of the country's national transformation programme, namely the RDP. It is aimed at redressing the imbalances of the past by seeking to substantially and equitably transfer and confer the ownership, management and control of South Africa's financial and economic resources to the majority of its citizens. It seeks to ensure broader and meaningful participation in the economy by black people to achieve sustainable development and prosperity. (BEE Commission Report, 2001: 2)

Basically, the objectives that the government was intending to attain through the implementation of the BEE were as followed:

- Empower more black people to own and manage enterprises. Enterprises are regarded as black-owned if 51% of the enterprise is owned by black people, and black people have substantial management control of the business.
- Achieve a substantial change in the racial composition of ownership and management structures and in the skilled occupations of existing and new enterprises.
- Promote access to finance for black economic empowerment.
- Empower rural and local communities by enabling their access to economic activities, land, infrastructure, ownership and skills.
- Promote human resource development of black people through, for example, mentorships, learnerships and internships.
- Increase the extent to which communities, workers, co-operatives and other collective enterprises own and manage existing and new enterprises, and increase their access to economic activities, infrastructure and skills.
- Ensure that black-owned enterprises benefit from the government's preferential procurement policies.
- Assist in the development of the operational and financial capacity of BEE enterprises, especially small, medium and micro enterprises (SMMEs) and black- owned enterprises.
- Increase the extent to which black women own and manage existing and new enterprises, and facilitate their access to economic activities, infrastructure and skills training.<sup>5</sup>

In short, the "Black economic empowerment" laws—think affirmative action for the majority—affect everything from employment and business to welfare and charity. Ninety per cent of government workers are black (Cline, 2015). The vision of a 'new South Africa' is spelled-out in the Reconstruction and Development Programme (RPD) The goals of the RPD go beyond mere socio-economic development: building one million new homes, redistributing 30 per cent of the agricultural land within five years, providing clean water for 12m people without access to it at the present moment, and adequate sanitation for 21m people; supplying electricity to 19,000 black schools, (86 per cent of the total), and some 4,000 clinics presently without electricity, as well as two-

<sup>5</sup> For further analysis, refer to http://www.southafrica.info/business/trends/empowerment/bee.htm#objectives

thirds of the country's homes; redressing the imbalance in access to telephone lines—one line for 100 black people compared with 60 lines for 100 whites; and a social safety net for the vulnerable (Hawkins. 1994: vi). The broader goal of the RDP is to re-invent the South African society in its entirety: 'a brave new non-racial world must be created where the main institutions of society—the civil service, the security forces, the business community, the universities, the media, the stock exchange, the banks—are no longer dominated by whites' (Waldmeir and Holman, 1994: 1). But what became known as Black Economic Empowerment (BEE), was and is largely a bad joke, limited to a tiny black elite who were rapidly co-opted into the existing white, capitalist power structures. (Bowle, 2012)

## I.2-THE SOCIAL INEQUALITY AND THE ISSUE OF THE REDISTRIBUTION OF WEALTH

Right from the Apartheid era, the South African nation started building it foundations on institutionalised and globalised system of racial and social inequalities. Nevertheless, if the fall of Apartheid highly contributed to the progressive abolishment of the systematic racial segregation and racial inequalities, it gradually gave rise to new forms of social inequalities. As such, between 1991 and 1996 for example, the white middle class grew by 15% while the black middle class grew by 78%. The country has one of the most unequal income distribution patterns in the world: approximately 60% of the population earns less than 42,000 Rands per annum (about 7,000 US dollars), whereas 2.2% of the population has an income exceeding 360,000 Rands per annum (about 50,000 US dollars). Poverty in South Africa is still largely defined by skin colour, with blacks constituting the poorest layer. Despite many ANC policies aimed at closing the poverty gap, blacks make up over 90% of the country's poor, at the same time they are 79.5% of the population.<sup>6</sup>

In 2008, the wealthiest 10% earned 58% of the total income, and the top 5% earned 43% of the total income. This is a worsened situation from 1993, when the top 5% earned 38% of the total income (Leibbrand, Finn and Woolard, 2012) South Africa has one of the most unequal distributions of income in the world. Three quarters of the people receive only 30 per cent of the income. Average white incomes are 13 times those of the black labour force; 60 per cent of blacks live below the poverty level; 50 per cent of the black labour force cannot find jobs in the formal sector of the economy. Inequality

<sup>6</sup> For more detail, refer to http://en.wikipedia.org/wiki/Inequality\_in\_post-apart-heid\_South\_Africa Consulted on 12/05/2015

between urban and rural blacks is also very great, with up to 4 to 1 difference in income levels. /Inequality in the distribution of income is reinforced by inequalities in the distribution of social spending. State spending per capita is five times as much for whites as it is for blacks. White pensions are twice as much as those of blacks, etc... (O'Malley, 1994: 69)

Unfortunately, despite its noble and fair premises, it is nowadays commonly recognised that the above mentioned Black Economic Empowerment did not properly lead to the destruction of class differences, neither did it limit or reduce the gap between the poor and the rich in South Africa. In fact if for some the BEE was seen as the necessary first step toward deracialisation of the economy (Hunter-Gault, 2006: 53), for its critics, it reinforced racial identification (Zegeve, 2001) and instituted a situation of reverse racism through its preoccupations with racial quotas, that led to whites and to a lesser degree Coloured and Indians feeling discriminated with access to some jobs. Also, it is criticised as a short-sighted approach (Melville, 2004: 22) that did not take into consideration some fundamental prerequisites such as education and skill development programmes to enhance the blacks' managerial capabilities and the ability to properly participate in the economy (Ramphele, 2003). Because of all those limitations among other, the BEE instead enhanced the differences and created favourable grounds for the capital accumulation by an emerging black elite<sup>7</sup> that basically join the already existing white elite class, thus maintaining the basic class structure of former Apartheid regime. The only Blacks to have gained have been a tiny minority, many from the ranks of the (former) liberation movement and the trade unions as well as the South African Communist Party (SACP) (Bowles, 2012) The phenomenon of Black Economic Empowerment has facilitated these linkages and the flow of benefits into (black) private hands—a new development only in the sense of the inclusion of the black elite. BEE has facilitated the structural expansion of the white elite class to now include a small, black elite, overcoming the international constraints to capital accumulation posed by apartheid, while maintaining the basic class structure of South African society (Bond, 2008: 147). In fact, even though the aim of the BEE was to "transform the position of Black people and women in public and private sector employment" (Butler, 2004: 63), it ended up being used at

<sup>7</sup> Cyril Ramaphosa, Sakumzi Justice Macozoma and Mosima Gabriel Sexwale also known as "Tokyo Sexwale" are prominent examples of this black elite that succeeded to accumulate enough wealth in this context and to build important financial reputations.

the expense of the vast majority of black, by putting in place a "sizable middle, entrepreneurial and business [class] among the black majority" (Gumede, 2005: 222). Here many black soon to become part of the small elite, as Gumede (2005: 224) simply "lend their faces to white companies to that [those companies] can satisfy the requirements for government tenders." As he continues with his argument, once this black minority became part of the elite group, they forgot their black origin that was used to reach their goal and became further instrument of segregation against the vast majority, accused of being victims of their own predicament. Following the same critical line, Joel Netshitenzhe goes further by claiming that an effective change and real economic transformation in the post-apartheid South Africa required a total reconfiguration of the capitalist system in force in the country, and not only an implementation of programmes that had no benefits for the working class. According to him:

The reconfiguration of this capitalist system should entail more than just the racial dimension at elite level, the so-called black economic empowerment to which 'economic transformation' is usually reduced. The time has come, in addition to all the other programmes of economic transformation, for the political ruling elite and the ruling class, together to contribute to forging stakeholder capitalism in which the working class is a real beneficiary. (Netshitenzhe, 2012: 11)

#### **I.3-CHANGING ENVIRONMENT AND DE-CARBONISATION CHALLENGES**

In the context of global warming with it multiple challenges, it has become urgent for each States and other members of the international community to control the emission of the greenhouse gas (GHG) both within national territories and beyond, and to secure the transition to a sustainable, decarbonised and clean economy. According to Jeffrey Sachs

There are two basic dimensions of change that can make this [de-carbonisation] possible. The first is a massive rise in energy efficiency, meaning a sharp decline in primary energy use per unit of economic output. As stated earlier, the world currently uses around 170kg of oil equivalent to produce \$1,000 of output. That needs to come down by around 5 times, to around 30-35kg of oil equivalent per \$1,000 of output. The second is a shift to lower CO2 emissions per unit of energy. The current energy mix leads to 2.4 tonnes of CO2 for each tonne of oil equivalent. That could be reduced to around 1.5 tonnes of CO2 for each tonne of oil equivalent by shifting the global energy mix towards low-carbon or zero-carbon energy sources. With a world economy of \$280 trillion, using 31kg of oil equivalent per \$1,000 of output and emitting 1.4 tonnes of CO2 for each tonne of oil equivalent of primary energy, the result will be global annual emissions of around 13 billion tonnes of CO2 as of 2050, with the boundaries needed to keep the rise of temperatures below 2 degree Celsius. (Sachs, 2014)

Sachs global view of the issue and it globalised approach in proposing a solution is of great importance, as a mirror path and goals policy makers and actors of the de-carbonised world have to aim at. In fact, giving the urgency of the climate matter and the importance of preservation both of our environment, resources and populations, there is no other option of survival than revisiting and correcting our ways of exploitation, transformation, distribution and consumption. As he continues:

These transformations are feasible, but they are not easy to accomplish. They will require a major degree of global cooperation, to replace coal with low-carbon or zero-carbon alternatives; to shift to electric vehicles; to improve the energy efficiency of our buildings, cities and industrial processes. Each part of the world will need a road map on deep decarbonisation to ensure that it can have the energy that it needs for prosperity, while reducing drastically the CO2 emissions per unit of final output. (Sachs, 2014)

Unfortunately, despite the common agreement at the global level that something has to be done and quick, not all the national contexts allow or do abide to the global views, processes and goals. As Patrick Bond, Rehana Dada and Graham Erion have recently documented, [South African] "CO2 emissions rate in the all-important energy sector-measured per person per unit of output (i.e., the economy's per capita energy intensity) is twenty times worse than that of even the United States" (2009: 7). This situation, despite all efforts, makes of South Africa one of the key polluters of the planet. Yet, as the same scholars report, a survey conducted by GlobalScan in 2006 revealed that less than half South "Africans consider climate change a 'serious problem'. Consequently, they conclude, more than in nearly any other society, ordinary South Africans have been kept in the dark by government, media and business-with civil society making uneven efforts to address the deficit (Rehana Dada and Graham, 2009: 7). such exclusion makes the pursuance of the decarbonisation goal not only difficult, but above all it creates a situation of non-transparency in which everything is conceived, led and carried out mainly by government officials in conjunction with polluting entities. That is the reason why, for a true decarbonisation process to start in South Africa, a strong national and integrative movement has to be constituted in order to push decision makers and corporations towards the path of Just Transition to a low carbon or zero-carbon economy.

# II. ORIGIN AND ACTORS OF THE ONE MILLION CLIMATE JOBS CAMPAIGN OF SOUTH AFRICA

## II.1- ORIGIN AND AIMS OF THE OMCJC

The idea of the One Million Climate Jobs Campaign originally emerged in spring 2009 when approximately 200 union activists gathered at a conference and decided to start a serious fight for Green climate jobs in the UK. Following that conference, a working commission made up of members of several UK unions, nongovernmental organisations and many academic experts was put in place to draw up detailed plans for the programs (Campaign Against Climate Change, 2009). Basically, the campaign was inspired by the struggle of workers at the Vestas wind turbine factory on the Isle of Wight, who occupied their factory when it was slated for closure in mid-2009 with the loss of approximately 600 jobs, and its aim was not only to prevent jobs loss, but also and above all to think alternative jobs that will cumulatively address environmental issues and social justice issue.

It is important nevertheless to mention that the One Million Climate Jobs Campaign was an initiative of the Campaign Against Climate Change Trade Union Group of the Campaign against Climate Change, which has as main goal to push for the urgent and radical action we need to prevent the catastrophic destabilisation of global climate. In fact, the Campaign against Climate Change generally abbreviated CCC or CaCC is a pressure group founded and based in the UK. It proposes to raise the awareness of the public on the human dimension of climate change through mass mobilisation and campaigns. The CCC was founded in 2001 as a response to the rejection of the Kyoto protocol by the Bush's administration. Since its creation, there has been a growing interest manifested by the population, as its December 3rd, 2005 London rally attended by close to 10,000 sympathisers can demonstrate. Equally, the following year, on November 4th, the Campaign organised a march from the US Embassy to the Count event in Trafalgar Square, where at least 25,000 people are reported to have attended<sup>8</sup>. To better understand the campaign, the best approach is to revisit its main objectives, as determined in its mission statement:

1. The CCC exists to secure the action we need—at a local, national and, above all, international level—to minimise harmful

<sup>8</sup> Reading https://en.wikipedia.org/wiki/Campaign\_against\_Climate\_Change will be of great interest in this regards.

climate change and the devastating impacts it will have. To that end the CCC seeks to raise awareness about the gravity and urgency of the threat from climate change and to influence those with the greatest power to take effective action to do so with the utmost speed and resolution. Where ignorance, short term greed and vested interests stand in the way of the action that is urgently needed, the CCC exists to fight against all of these things.

- 2. In particular the CCC brings people together for street demonstrations, designed to get together the greatest number of people possible, and to create a mass movement to push for our goals.
- 3. The CCC seeks a global solution to a global problem and aims to push for an international emissions reductions treaty that is both effective in preventing the catastrophic destabilisation of global climate and equitable in the means of so doing. To be effective such a treaty needs to secure such reductions in the global total of greenhouse gas emissions as are deemed by the broad consensus of qualified scientific opinion to be necessary to prevent harmful climate change. The CCC aims to campaign against those with the greatest responsibility for preventing or delaying the progress we urgently need towards an international climate treaty.
- 4. The CCC recognises that the issue of the destabilisation of global climate has enormous implications in terms of social justice and global inequality. The damage to the earth's atmosphere has so far been done mainly by the rich nations but it is the poorest who will suffer the greatest and most immediately. The CCC recognises that any solution to the problem must be as fair as possible, incorporating principles of social justice and not exacerbating global inequalities.
- 5. The CCC aims to bring together as many people as possible who support our broad aims of pushing for urgent action on climate and reducing global emissions. The CCC does not therefore campaign on the important but more detailed questions of how best to achieve these emission reductions and recognises that supporters will have different and deeply held views on these issues.<sup>9</sup>

<sup>9</sup> For more details and further development, refer to: Campaign against climate change. "Mission Statement: Campaign Aims and Objectives" available at: http://www.campaigncc.org/aboutus/missionstatement (Consulted on 18/08/2015)

Going from the above premises, the writing of the One Million Climate Jobs Now!, a report by the Campaign against Climate Change trade union group to the Communication Workers Union, Public and Commercial Services union, the Transport Salaried Staff Association and the University and College Union brought together a "wider network of academics, socialists, environmentalists, scientists, economists and trade unionists. With support from four major trade unions in the UK—the PCS (civil service). TSSA (rail workers). UCU (college workers) and the CWU (communications)" (Empson, 2010) who gathered all together their efforts, their visions and their ideas both for its production and its dissemination. Very detailed and accessible document for all types of publics, such document, based on scientific facts, was already the baseline for the One Million Climate Jobs Campaign that was later on deployed in the whole of UK through various caravans, rallies, sanitisations among other. Since then, the campaign has taken an international dimension, being adapted and implemented in several national contexts, including Scotland, Canada and South Africa among others, as well as during the Various COP meetings.

The One Million Climate Jobs Campaign of South Africa, on its part, was officially launched as part of the activities of environmental and climate defence movement fighting again the financialisation of nature and transition to low carbon economy during the COP 17, in Durban (South Africa) in December 2011. This campaign came as a joint mobilisation, research and advocacy project involving AIDC. key components of the labour movements, social movements, religious movements and other formations of civil society that realised the necessity and possibility of simultaneously tackling the economic and ecological crises, especially jobs and climate change (One Million Climate Job Campaign, 2011a). Since then the campaign has taken a more permanent form, with the aim of influencing the just transition on a continuous basis. South Africa, just like most countries of the world in general and the global South in particular, is facing an economic crisis leading to a huge unemployment, and at the same time the country is confronted to the rise in its GHG emissions that it has to cut down as part of the effort to fight global warming, under an economy dominated by the use of fossil fuels (Winkler and Marguand, 2009; Cock, 2012). The campaign is premised on the belief that we can help deal with both these crises at the same time—by creating millions of climate jobs that can reduce the amount of greenhouse gases we emit. and that build our capacity to adapt to the negative impacts of climate change.<sup>10</sup> The campaign then came as an attempt to help reaching the

<sup>10</sup> For further analysis and clarification, consult. http://www.aidc.org.za/media-room/press-releases/40-one-milllion-climate-jobs-press-statement

goals in fighting rising inequalities and accomplishing the promise South Africa made in 2009 to reduce its GHG emissions by 34 per cent by 2020 and 42 per cent by 2050, following the Business as Usual scenario, despite its current fossil fuel intensive dependent economy with 90 per cent cantered on the production of coal (Cock,, 2014) for consumption and exportation purposes. In the same line Cook (2011), reporting the declaration of the Cosatu, states that:

A new low carbon development path is needed which addresses the need for decent jobs and the elimination of unemployment. The issue of food security must be urgently addressed and all South Africans should have the right to clean, safe and affordable energy. Cosatu rejects market mechanisms to reduce carbon emissions and contends that developed countries must pay their climate debt and the Green Climate fund must be accountable. Finally, a 'just transition' towards a low-carbon and climate-resilient society is required.

The One Million Climate Jobs Campaign is therefore an alliance of labour, social movements and other civil society organisations in South Africa that are mobilising for real solutions to the threat of climate change. Cutting the pollution of those gases that lead to climate change is urgent and involves doing many things. Overcoming unemployment and giving decent work to our people is just as urgent. By placing the interests of workers and the poor at the forefront of strategies to combat climate change, we can simultaneously halt climate change and address our jobs bloodbath. This is why the campaigners are mobilising in order to force the government to create a million climate jobs now. Their demand is based on well-researched solutions for how South Africa can immediately begin a just transition to a low carbon economy." The project "works from the premise that a just transition to a low carbon economy provides opportunities both to reduce global greenhouse gas emissions and enhance the quality of life of South Africans through reducing localised pollution and providing decent jobs and skills development opportunities. Such a transition provides extensive opportunities to create more than a million jobsif driven by the state and its agencies."<sup>11</sup> Therefore, unless we bring Just Transition forward as an effective political issue, it will never form a central part of the environmental agenda. The environmental projects will go forward, but the transition aspects of the program will drop off the agenda and they will get lost in the delivery. (Canadian Labour Congress, 2000)

<sup>11</sup> For further analysis, refer to http://links.org.au/node/2676 consulted on 25/01/2015

## **II.2- THE ACTORS OF THE CAMPAIGN AND THEIR NETWORKING**

The main strength of the One Million Climate Jobs Campaign of South Africa lies in the fact that it succeeded to bring together a hand full of organisations from diverse origins and with diverse interests. In fact, ranging from social groups, faith-based association, research institutions, environmental defence organisations, labour and trade-unions movements among others, these 40 entities all went beyond their multiple and at times divergent interests to build a network that could more efficiently fight for a transition to a low carbon economy and for climate jobs in South Africa. The participating organisations were:

## SOCIAL AND FAITH-BASED GROUPS

- 1. The Abahlahi baseMjondolo
- 2. The Alternative Information and Development Centre
- 3. The Cooporative and Policy Alternative Centre
- 4. The Democratic Left Front
- 5. The Farmer Support Group UKZN
- 6. The New Women's Movement
- 7. The Progressive Youth Movement
- 8. The Rosa Luxemburg Foundation
- 9. The Rural People's Movement
- 10. The Trust for Community Outreach and Education
- 11. The Umphilo waManzi
- 12. The Youth Agricultural Ambassadors
- 13. The Southern African Faith Communities Environmental Initiative

## ENVIRONMENTAL DEFENCE ORGANISATIONS

- 1. The 350.org
- 2. The Africa Centre for Biodiversity
- 3. The Earthlife Africa Cape Town
- 4. The Earthlife Africa Johannesburg
- 5. The Environmental Monitoring Group
- 6. The Geasphere
- 7. The GroundWork

- 8. The Institute for Zero Waste
- 9. The International Alliance on Natural Resources in Africa
- 10. The Oxfam Australia
- 11. The South Durban Community Environmental Alliance
- 12. The WWF

## LABOUR AND TRADE-UNIONS MOVEMENTS

- 1. The Congress of South African Trade Unions [COSATU]
- 2. The Food and Allied Workers Union
- 3. The National Council of Trade Unions
- 4. The National Union of Metalworkers of South Africa
- 5. The National Union of Mineworkers
- 6. The Public and Allied Workers Union of South Africa
- 7. The South African Municipal Workers' Union
- 8. The South African Transport and Allied Workers' Union

## UNIVERSITIES AND RESEARCH INSTITUTIONS

- 9. The Civil Society Research and Support Collective
- 1. The University of Glasgow
- 2. The University of Cape Town
- 3. University of KwaZulu-Natal: Farmer Support Group
- 4. The University of Stellenbosch: Sustainability Institute
- 5. The University of Witwatersrand: School of Economics and Business Sciences
- 6. The University of Witwatersrand: Society, Work and Development

## **III. FIELDS OF ACTION: FROM RESEARCH TO ACTIVISM**

The campaign attached much interest on the arguments to back up its activities on one side and, on the other side on its visibility. In order to reach those goals, it engaged in serious scientific research with a great inclination to the quantification of jobs opportunities and to the communication aspects.

## III.1- THE OMCJC AND PRODUCTION OF A USEABLE SCIENTIFIC RESEARCH

The aim of this first and fundamental part of the campaign was to prepare the field by carrying out sound and concrete research to be used as ground for the following steps. The methodology used was a participatory one, involving relevant trade-unions, informal sectors and social movements in each particular sector. Four immediate research objectives were set for each Research Group and research area, namely to focus on: 1) maximising job creation; 2) minimising carbon emissions; 3) Identifying the primary agencies involved in achieving the first two objectives and 4) Indicating how the first two objectives are to be met. These objectives were to be as quantitative and concrete as possible. In order to better proceed in its research and actions, the campaign clarified it understanding of the climate job as follow:

By climate jobs we do not mean "green jobs". Green jobs can include a very wide variety of work related to conservation, greening the environment, and reducing pollution. Climate jobs are those that specifically contribute to reducing the emission of greenhouse gasses that lead to global warming. Climate jobs would involve : the building of solar and wind power stations; jobs related to the building of a public transport network that would take cars and trucks off the road; renovating and insulating buildings; and transforming industrial agriculture. Significant jobs would be created in the related areas of research, education and training, to ensure the country has the skills to undertake the transition to a low carbon economy. (Concept note of the One Million Climate Job Campaign, 2011: 9)

This clarification was made in order to avoid confusion and bad interpretations of the vision of the campaign. In fact, green jobs refer to:

Work in agricultural, manufacturing, research and development (R&D), administration, and service activities that contribute substantially to preserving or restoring environmental quality. Specifically but not exclusively, this includes jobs that help to protect ecosystems and biodiversity, reduce energy, material use and water consumption through high efficiency strategies, decarbonising the economy, and minimising or altogether avoiding generation of waste and pollution. (UNEP-ILO- IOE-ITUC, 2008: 3)

Based on this definition and understanding of climate jobs, quantified sectorial possibilities and opportunities of jobs creation were determined by the various research groups

### **III.2- THE OMCJC AND SECTORIAL JOB CREATION**

The One Million Climate Jobs Campaign of South Africa, just like any other movement fighting for just transition aims at creating conditions that basically combine and reconcile the labour, the economic and the environmental protection aspirations of the populations, in order to safeguard the integrity of Mother Earth following both and intra-generational and inter-generational approaches. And, as Jeff Rudin rightly puts it:

Protecting Mother Earth and its life forms from further damage requires something altogether different. One possible beginning is to question the societal need of each particular product and its priority amongst competing products. This necessitates a critical assessment of each product and its promotion and distribution throughout its entire lifecycle in terms of its employment, resource depletion, social, greenhouse gas and other environmental impacts. (Rudin, 2011: 1)

It is based on this multi-dimensional and critical assessment that the campaign, to be more effective and useful for science and for the decision making, carried out a multi-sectorial assessment that could help create employment in each sector while taking into account the national economic development, the socio-environmental justice and the protection of the environment.

### AGRICULTURE AND FOOD

In South Africa, just like in the other countries of the global south in general and the world as a whole, it is very important to understand the trends in agricultural production and trade, in relation to climate change and population growth, and this is vital for national planning and the development of adaptation and mitigation strategies, in a context dominated by climate change threat and debates (Dube et al., 2013: 2). In fact, South Africa continues to have a significant portion of its population living under great poverty and equally malnourished. While poor nutrition was previously largely found in rural areas (Department of Agriculture, 2002); of late there has been a significant increase of food insecurity and malnourishment in urban areas (Frayne et al., 2009), and this occurred as a consequence of rural to urban migration and depressed job markets on one side and, on the other side, the situation is exacerbated by the negative impacts of HIV/AIDS on the ability of the active population to produce food. In fact, South Africa has an HIV rate of about 16%, reaching 29% among the 20-49 year age group (Dube et al., 2013). This situation, despite the significant investments in agricultural production activities lowers the productivity of the agricultural sector in the country.

Also, agricultural production being dependent on the availability of land that has sufficient water, soil resources and an adequate growing season, unfortunately, only a small portion (12%) of the total area of South Africa is suitable for crop production, and this portion is concentrated in the east and central parts of the country (MacVicar, 1974). Because of that, and the high concentration of agrarian lands in the hand of big agro-business corporations, livestock farming (including game), is the main agricultural activity in the more arid areas for most of South Africa. There are important areas for wheat and fruit production in the Western Cape and Northern provinces, often under irrigation (Dube et al., 2013: 14). That is the reason why, in South Africa, it is of great importance and urgency "to involve more people in productive activities, what only as mere workers being told what to do. but as agents who can make and implement decisions about what and how to produce, using their own and collective creativity" (AIDC and One Million Climate Jobs Campaign, 2013: 22). This can only happen if they have access to the land, as owner rather than employees subjected to the will of capital, represented here by the large agro-business corporations. Moreover, according to the argument developed by Durning (1990), with the Land Act of 1913 Whites came to possess 87% of the land and blacks could only 'own' an area that consisted of 13% of the South Africa. White farmers got the pick of the most productive areas and blacks could only situate their farms on marginal land. Such segregationist approach in the occupation and exploitation of lands led to the reduction of their capability and productivity through various mechanisms such as forcing blacks to use already marginal lands, causing overcrowding and resource scarcity, decreasing the amount of available labour to help support farms own by white proprietors and townships, and creating widespread poverty, so as to maintain blacks at a level that could make them a cheap labour force for the whites. Under such conditions, both during and after the apartheid, the land issue became a central question in South Africa. The fact that whites dispossessed African and black people their land and off their lands ended up having tremendous social and environmental consequences; in fact beside creating social fractures and perpetrating a situation of continuous and institutionalised social injustice, the land dispossession contributed in stripping Africans and black people from their ancestral identity: the land that were dispossessed off were lands inherited from the ancestors and place of identification for them, and taking off the land or sending them out of the lands was a way to cutting the ancestral links and rendering their cultural ties more fragile. Moreover, beside these social and cultural injustices, the land disposition of African and black people in South Africa had great environmental impacts. The accumulation of black people in reserves and slams was a factor not only creating pressures on limited spaces and resources, but also and above all the promiscuous lifestyle resulting from the high density of population in slams is a perfect condition for limited hygiene and enhanced pollution. That is why, we can easily state that by depriving

African and black people of their lands and parking them to in slams and reserve, white did not only institutionalise a situation of social and cultural injustice, but also, the created conditions for pollution, pressure on resources and environmental destruction. Today, the land redistribution question has to be considered not only as a question of access to the national patrimony for black people and to the means of production, but also and above all as a correction of a social and cultural injustice on one side, and on the other side, as a contribution to the reduction of the level of pollution and protection of the environment. That is the essence of the land redistribution mechanisms and policies strongly supported by some researchers and activists in South Africa. According to the tenors of this approach, land redistribution<sup>12</sup> will lead to a better development of small-scale production, leading to the creation of more employment in the agricultural sector, what Michael Aliber et al. (2009) refer to a 'missing middle' in the South African agrarian structure. In fact, creating a more diverse and distributed production structure where many more people are actively involved in economic activity rather than passive consumers of corporate or government goods and services requires support and growth for many more smaller producers in the missing middle. The development of such diverse and distributed production structure will ineluctably lead to the creation of many jobs in the agriculture sector in the country.

Another practice of great necessity is the agroforestry. In fact, integrating forests and agricultural production is of extreme value in absorbing the carbon, since trees play an important role as carbon sink, and can as well produce food, fuel and forage (AIDC and One Million Climate Jobs Campaign, 2013). Agroforestry will not only provide jobs in the production and distribution sectors, but also in the research and formation sectors. In fact, in order for it to be better developed and implemented, research on new agroforestry techniques will have to be carried, and the population of practitioners will have to be trained in applying those techniques. In this line, "the Industrial Development Corporation (IDC) estimates that, in general, the activities that support soil carbon sequestration can produce up to 240,000 jobs in management alone." (AIDC and One Million Climate Jobs Campaign, 2013: 24).

<sup>12</sup> It is important to mention that since the 1913 Native land Act, subsequently renamed Bantu Land Act, 1913 and Black Land Act, 1913; Act No. 27, the land issue became a serious issue in South Africa both during and after the Apartheid period. In fact, according to the Act, the natives were forbidden to buy or own lands in any other places apart from reserves and, by so doing, the Act served as the main segregation instrument used by the regime to deprive black from land and be able to use them as workforce for the white lands' owners.

On the other side, "The Industrial Policy Action Plan 2 (IPAP2) shows agriculture has the fifth highest employment multiplier of any sector of the economy, with food at 10 and wood at 11 out of 42 sectors (DTI, 2011: 35). The plan identifies organic agriculture as an industry with the potential to create 20,000 jobs over 5 years" (Department of Trade and Industry, 2011: 125). Concerning the distribution line, Dube et al. note that:

South Africa has a dense road network, thus travel time to major urban areas is generally low. This provides significant opportunity for the expansion of food supply industries. Travel time to cities with over 25,000 people is generally short. Movements of goods to major urban centre, particularly in the food producing areas of the east, central and northern parts of the country, make it feasible to develop an agriculture value chain that is viable and can assist in meeting the demands for food. South Africa has a very strong air transportation and ports system that further provide opportunities in international trade. (Dube et al., 2013: 16).

Based on the above opportunities, statistics and the good transportation network, the shift to a more diverse and sustainable agriculture, based on a suitable land redistribution policies, laws and mechanisms in the country, will not only be of great profit to the national economy, but also and above all, it will be beneficial for the protection of the environment and the creation of thousands of jobs for South Africans.

### **CONSTRUCTION**

The relation between the construction sector and the current global climate crisis can, and should be viewed from the four perspectives of vulnerability, resilience, adaptation and mitigation. In fact, as far as the vulnerability dimension is concerned, there is a need evaluating the level of current infrastructures with regards to changing environment. Many of the public buildings around the world and many infrastructures that today represent the cultural and historical achievements and patrimony of the universe were built without properly taking into consideration the current situation and, as such they present a level of high exposure and require proper protection measure and maintenance mechanisms. From the perspective of resilience, it is important to note that today, because of the many climate resulting catastrophes witness around the world, there is a strong need of rethinking the construction sphere so as to integrate dimension related to crisis management and the capacity of infrastructure survival after crisis. We need to ask ourselves are resilient are our current buildings and other infrastructure? How resilient are our cities and monuments after natural catastrophes? Architects and builders have to think and implement more resilient mechanisms for current infrastructures in view and in prevision of potential climate resulting crisis and catastrophes. This is a matter of survival not only for our buildings and cities, but also and above all, it is a matter of survival for our civilisation and what it inherited from past generations. In the Durban development plan for example, is expressed the need to ensure that:

Resilience is built into construction processes to reduce the probability of infrastructure failure and enhance the chances of recovery after an extreme weather event, and to ensure the relocation of existing key infrastructure and people away from flood prone/landslide areas where necessary. Additionally the need to plan new developments in less vulnerable areas, to ensure community level empowerment, to increase the human capacity and skills of the Disaster Management Unit and to develop a local disaster management plans. (Debra, 2010: 401)

Also, it is important to mention that housing and construction sector is a key area of mitigation. At this level, there is great risk that new housing will add the level of our emissions by increasing the use of energy both for the production and transportation of building materials, the use of machine during construction processes and the use of energy both in new household and public building or infrastructures such as road, parks and other leisure, recreational sites, means of communication structures among others. Nevertheless in the same line, the provision of safe, robust housing has to be part of our strategy for enhancing resilience against climate change, and as a basic part of alleviating poverty. As the One Million Climate Jobs Campaign states it, this should be based on a climate friendly construction approach, since it will not only lead to the protection of the environment, but also to the creation of more jobs, as it is about 25% more labour intensive than conventional construction methods. By so doing, we can create about 250,000 jobs, in South Africa, by providing energy-efficient, good-quality, low-cost housing using climate-friendly methods and technologies. In fact:

## CLIMATE FRIENDLY HOUSING AND CONSTRUCTION INVOLVES:

- Labour-intensive work;
- Maximisation and training of local labour;
- No machines on site unless absolutely necessary;
- Maximum use of on-site and/or recycled materials;
- Roofing designed to capture rain water;

- Biogas digesters that produce methane from biomass and animal and human solid waste for energy;
- Energy efficiency in design. (One Million Climate Jobs Campaign, 2011b: 31)

Besides that, in the effort of developing adaptation mechanisms for the populations and their living environments, new jobs will be created in the construction sector as a consequence of infrastructure investments, such as the building of coastal defences, flood protection, drainage containment and road adaptation among others. In short, buildings, infrastructure and homes will have to be better adapted to climate change, and political decisions that promote these strategies will lead to new job opportunities (International Labour Organisation, 2010: 134). According to the same report of the International Labour Organisation, in the Netherlands, there are enormous potential for the construction and installation sectors, and suppliers of equipment such as micro-CHP (combined heat and power), insulation materials, heat pumps, etc. An estimated 5,000 extra jobs will be created.

## **ENERGY PRODUCTION**

The question of energy transition is central to the fight against climate change. In fact, if we want to dream for suitable mitigation mechanisms and actions, we have to change the want we produce and consume in our current society and adopt less energy intensive approaches on one side and, on other side, rely on the use of clean energies. Such energy transition cannot be negotiated as we cannot rely on biotechnologies to fight climate change. That is why a firm political and corporate will to turn the back to the current dirty development and production and adopt ways that are more respectful of the environment. and mindful of the current of future generations. For such important shift to be operational, there is a great need for governments as well as corporation to do urgent and great investments in in research and development, so that a focus can be put on the creation and implementation of new renewable energy sources and mechanisms, ranging from the production of bio-degradable materials to the use of biofuels both in the manufacturing and transport systems, the use of alternatives and renewable energy for the production of electricity and heating systems, and an intensive oriented agriculture for the production of raw material to be used for the production of biofuel among others. Such investments will automatically lead to an increase of current jobs demand, and the creation of new jobs requiring new skills and expertise. According to the European Commission (2005) estimates demonstrate that an improvement in energy efficiency of 1 per cent per year will lead to 200,000 new jobs EU-wide in construction and installation of renewable energy sources. And equally, "in the specific case of the Netherlands improvement in energy efficiency of 2.1 per cent per year following the Green4sure scenario should therefore lead to 18,000 new FTE (full-time equivalent) jobs in the Netherlands by 2030" (International Labour Organisation, 2010: 217-218). In other contexts like Denmark, we can view that at the moment, 20,000 people are employed in wind turbine manufacturing, and Denmark is the world leader in this sector (International Labour Organisation, 2010). Following the same line, according to an important research carried out by the Danish trade union 3F and the Ecological Council, it is demonstrated that:

In Denmark nearly 50,000 extra jobs could be created, with a duration of three to ten years. Construction of biogas plants (2,700 jobs), offshore wind farms (2,500 jobs) or light rail (1,600 jobs) represents short-term gains in employment. Private heat pumps (11,000 jobs), renovation of poorly insulated housing (9,600) or energy savings in buildings by local authorities (8,500 jobs) can create employment for a longer period of about 10-20 years. (United Federation of Danish Workers 3F, 2009)

According to the One Million Climate Jobs Campaign (2011b) Given the highly energy intensive development pattern on which the economy of South Africa, is built, if the country focuses in the electricity sector and starts supplying half of its electricity from renewable energy within ten years, and struggles for 50% of households to install solar water heating systems by 2020, while equally focusing on the construction of 150,000 residential digesters, it could create more than 150,000, only in the energy transition sector.

## MANUFACTURING IN THE RENEWABLE ENERGY SECTOR

It is important to notice that, etymologically, the concept of manufacturing originates from the combination of two Latin words, namely *Manus* and *Facere*. On its own, *manus* refers to hand, and to some extend to manual; while *facere* brings about the verbs "to do", "to perform" or "to work". Based on this etymological approach, Manufacture basically and originally refers to the activities done manually, or any production work directly done by human hands, without the intervention of machines. Nevertheless, with the evolution of the concepts, manufacturing came to referring to any "process of converting raw materials, components, or parts into finished goods that meet a customer's expectations or specifications. Manufacturing commonly employs a man-machine setup with division of labour in a large scale production."<sup>13</sup> The term may equally refer to a range of human activity, from handicraft to high tech and, it generally applies to industrial production, in which raw materials are transformed into finished goods on a large scale<sup>14</sup>, but can also be transformed into materials that will still be transformed before reaching the final state. Based on the above said, we can say that even though the concept has gone through important mutations and evolutions, the manual aspect and the direct intervention of man in the production or transformation of goods, remain one of the key elements of manufacturing. That is why, in the process of just transition, investing in manufacturing while stressing of sustainability will be of great importance in ever sectors. as it stimulates environment protection, economic growth and social justice through the provision of sustainable and clean jobs, if it based on the use of renewable energies. In fact, if we expand renewable energy, we will need extensive manufacturing capacity and mining for iron, steel, cement and rare earths among others (One Million Climate Jobs Campaign, 2011b). In the same line, According to a research carried out by the Centre of Full Employment and Equity at University of Newcastle in Australia, it has identified a net gain of between 10,000 to 15,000 new jobs if the Hunter six coal-fired power stations were phased out and local energy needs were met by renewable energy (Bill et al., 2008). In the context of South Africa specifically, according to the New Growth Path targets 300.000 additional direct jobs by 2020 to green the economy, with 80,000 in manufacturing (Republic of South Africa, Office of the Presidency, 2010). According to the Campaign against climate change, if we have to consider the just transition dimension, most of these jobs includes:

manufacturing wind turbines, marine turbines, solar power, power lines, building materials, boilers, heat pumps, low carbon appliances, electric buses, electric cars, rolling stock, and the parts and materials for all these industries. There will also be work, however, in redesigning and renovating factories so they are more efficient, and in building new, more efficient machines and factories (Campaign Against Climate Change, 2009: 36)

For this transition to be effective, socially just and environmentally profitable, the manufacturing sector needs to pass through a deep metamorphosis. The investments in this sector have to focus not only on the economic costs, but above all and most importantly on the

<sup>13</sup> For further understanding, refer to http://www.businessdictionary.com/definition/manufacturing.html Consulted of 19/10/2015

<sup>14</sup> For further understanding, refer to https://en.wikipedia.org/wiki/Manufacturing Consulted of 19/10/2015

environment and social costs. That is why it has, on one side, to be focused on the use of renewable energies and, on the other side to enhance the use of manual labour at the expense of automated systems; even though automated system are economically and financially profitable in terms of outputs, it is negative in term of social costs as it reduces the job positions, therefore limiting chances for recruitments, by using machines to carry out duties that could be done by humans. It is equally destructive in environmental terms as it is energy intensive in the process of production, and emits more greenhouse gases that are negative for our environment.

## MINING

The impact of mining on the environment is huge and long lasting. In fact, the nature of mining processes creates a potential negative impact on the environment both during the mining operations and for years after the mine is closed. This situation is aggravated by the fact that mining create a great situation of social injustice and exploitation of the local populations and: generally after the mines have closed. lands remained completely degraded, while populations continue to be exposed to radiations and other mining derived diseases, without any assistance from the former exploiting corporation or governments. The South African case is quite notorious in this sense, given the importance of the mining sector in the economy of the countries. and the various social conflicts that are often generated by the social fracture between the miners and the mining corporation concerned only with their profits at the expense of the wellbeing of the populations, and this with the silent complicity of the government and its various agencies. In the South Africa, electricity generation is responsible for about 40% of the country's emissions. 93 per cent of electricity is generated from coal-fired power plants, which need mines and minerals beneficiation industries. Less than a fifth of electricity generated is used in homes, and even within the residential sector there is extreme energy injustice. So, even though they are the most exposed to the adverse effects of the mining sector, workers benefit the least from the output of mining in all aspects, including the electricity and energy sector. In such context there is a great need of codes and regulations that impose and follow the implementation of the environmental impact assessment, the development of environmental management plans, the mine closure planning, and the environmental monitoring during operation and after closure. Monitoring and evaluation should be done through a specialised state agency under the Ministries of Mineral Resources and of Environmental Affairs and Tourism (African National Congress, 2012). For the conception and implementation of these codes and regulations efforts needs to be concentrated on research, technology development and training that reinforces our minerals backward linkages cluster, and mitigates environmental damage to the absolute minimum. This activity can lead to the creation of 140,000 additional jobs by 2020, and 200,000 by 2030 in South Africa (Republic of South Africa, Office of the Presidency, 2010). This transformative action from the mining sector in South Africa, just like in many other countries of the global south that rely heavily on this sector for their economy, is a matter of social justice and national security. Given the constant social conflicts and miners movements witness in many countries of the global south in general and in South Africa in particular, there is a need for the governments to focus on this sector while conceiving climate protection policies.

## TOURISM AND HOSPITALITY

The relation between tourism and climate change is a multi-dimensional one, and to better understand these links, it is good to analyse them from the double perspective of the impacts of the tourism sector in the occurrence and enhancement of the climate crisis on one side, and on the other side the impact of climate change on touristic activities and infrastructures. From the first perspective, according to the 2008 estimates of the World Tourism Organisation and the United Nations Environment Programme, we can notice that:

- Tourism is responsible of about 5% of global CO2 emissions. In terms of radiative forcing, tourism contributes to 4.6% of global warming.
- The transport sector (highly used by tourists for their displacements) including air, car and rail, generates the largest proportion, with 75% of all emissions. In terms of carbon emissions, air causes 54-75% while coach and rail 13%. Air travel is considered the main tourism contributor to global warming: It's responsible for 40% of the total carbon emissions caused by this sector, and 54-75 of radiative forcing
- The accommodation sector accounts for approximately 20% of emissions from tourism. This involves heating, air-conditioning and the maintenance of bars, restaurants, pools and so on. Clearly, this varies according to the location and size of the accommodation, as well as the type of establishments—hotels having greater energy consumption than pensions or camping sites.

- Furthermore, activities such as museums, theme parks, events or shopping also contribute to certain amounts of emissions (approx. 3.5%) (World Tourism Organisation and the United Nations Environment Programme, 2008).

Beside those non-exhaustive impacts of the tourism industry on the global climate, there are on the other side the reverse effects. In fact from being victimised by touristic related activities, the global climate in return turns the tourism industry into a victim of its adverse effects. Such effects include among other the direct damage on "tourism infrastructures and tourism-linked natural resources (coral reefs and beaches). loss of attractiveness of the region as a destination and increased insurance costs for properties in vulnerable areas" (International Labour Organisation, 2014: 4). Faced with this situation, it is more than ever important and urgent to save both the tourism industry and the global environment in general, while securing the economy and creating jobs. That is why, in its multiple attempts to adapt to the new social and economic landscape, the tourism industry has framed the concept of eco-tourism. Eco-tourism has demonstrated an important potential for jobs creation jobs both for the skilled and unskilled categories of the society. In South Africa for example, it combines the diverse natural beauty of the country with the protection of its natural resources in a manner that fosters and develops communities living on or near these tourist destinations. Equally, according to the International Labour Organisation, jobs created in the tourism sector and that protect the environment and fight against global warming can include:

Enterprise development and employment creation programmes linked to coastal-protection, water-infrastructure development and the strengthening of natural barriers to coastal erosion (coral-reef, mangroves) can be part of the response. Dialogue with fishing communities to collaborate in the protection of marine biodiversity could as well be explored, since this is very important for tourists. Finally, greening workplaces could help to reduce other stressors (water pollution, waste and other polluting emissions) that exacerbate climate impacts (International Labour Organisation, 2014: 9)

Nevertheless, such action leading to the creation of new jobs cannot be limited to the protection and safeguarding of touristic sites. Tourism also offers direct benefits through hotels and catering establishments where many jobs do not require technical knowledge for example kitchen assistants, luggage attendants and porters, lift attendants, security guards, cleaners and laundry assistants (Khathi, 2001), and the eco-tourism has to look in that direction too, so as to created many more jobs in the tourism related hospitality sector as well. In fact, it is has been seen that in South Africa Tourism can generate up to 220,000 decent jobs in South Africa (COSATU, 2012) and the government acknowledged that high level services can create over 250,000 jobs directly just in tourism and business services, with many more possible in the cultural industries (Republic of South Africa, Office of the Presidency, 2010). Based on the above data, we can easily conclude that beside being a threat to the economy in general and to the industry sector in particular, climate change appear at the same time to be a great chance that can provide opportunities for tourism industry related ecosystems restoration, environmental protection and jobs creation in the world as a whole and in South Africa in particular.

## TRANSPORTS

The transportation sector is a significant contributor to global carbon emissions. In fact, divided into air, land and water sub-categories and affecting both individual as well as States and capitalist corporations, the use of transport means is one of the most difficult to control because of its diversified and diffused source of emissions. In fact, if the Capitalist corporations use transportations as a mean of gathering wealth, the general population daily use them to go from one point to another, without always measuring the impact of the gases it generate on the environment and on health. Moreover, with the help of the current imprisoning culture of ownership and unlimited consumption, the use of personal means of transportation has drastically increased all over the world, therefore multiplving the carbon emission sources. In short, our current transport system has enormous social and ecological costs that we individually tend to simply neglect or take for granted. In the specific case of South Africa, the transport sector in general and the private transports in particular currently account for more than 10% of the national greenhouse gas emissions and, of this, 85% is from road transport, most dominated by individual means of transportation. That is the reason why all need to make efforts both at the individual, community, national and global level if we want to reduce the emissions resulting from transports. According to the prevision of the One Million Climate Jobs Campaign (2011b: 27), we could have a near zero emissions from transports by 2040, if we:

- Start now to shift to using public transport for commuting;
- Develop and use new forms of transport that are based on non-carbon-based fuels; and
- Design our city and urban spaces so that we do not need energy-intensive forms of transport

Such small but significant shifts in how we transport ourselves and our goods could create at least 460 000 jobs in South Africa. For example, "a commitment to shift 10% of private car commuters, that is approximately 1.5 million people, to public transport would create about 70 000 jobs and reduce pollution by 24 Mt per year" (One Million Climate Jobs Campaign, 2011b: 27). Additionally, according to the same report of the campaign, if 200,000 more people commit to use taxis for their daily movements, there would be an additional 18,000 jobs created nationally and, if 500,000 more people make use of buses to go to work and schools, there would be an additional 3,500 buses and 42,000 more workers in bus operations, vehicle maintenance and parts supply, as well as in bus building. In the same line, if 800,000 more people used Metrorail trains, there would be a need an additional 113 train sets and about 10,000 new jobs generated in the country (One Million Climate Jobs Campaign, 2011b)

Apart from these thousands of jobs that will be directly generated by the transport sector, there are a very large number of new jobs that must be created to:

- greatly expand the rail passenger and general freight network;
- manufacture new rail-rolling stock, buses and taxis;
- maintain or adapt existing transport fleets, either to be more energy efficient or to accommodate cleaner or alternative fuels;
- construct bus rapid transit lanes;
- promote coastal shipping and make operational interventions to reduces hipping emissions;
- manufacture bicycles and construct cycle lanes;
- construct safe pedestrian walk-ways and green spaces to promote pedestrian mobility (One Million Climate Jobs Campaign, 2011b: 28)

That is why, in this regard, the close implication of the State is central in conceiving, implementing and controlling mechanism for the proper and safer shift to a less polluting transportation sector<sup>15</sup>. For

<sup>15</sup> In South Africa for example, the *African Taxi Transportation* is the biggest in South Africa. As a black owned and black controlled enterprise, the government fears this industry because of its voting power amongst others. So it remains unregulated in post-apartheid for electoral and political reasons, as it was the case in in apartheid times for segregation reasons. Taxis, just like the Kombis, carry and transport South African workers more than any other mean of transportation, and this sector need to be regulated.

this shift to be effective, the populations need to be form and assisted in the necessary change of behaviour and energy consumption patterns; they need to learn not only to use more public transportations, but also and above all to use transportation only is case of strict necessity. The emissions resulting from our luxurious lifestyle need to be reduced, and the wastes of energy and fuels need to be reduced to the greatest minimum.

### WATER AND SANITATION

The effects of Global warming on the quality and availability of water is already noticeable around the world, and will continue to aggravate if nothing is done to properly address the root-cause of the issue, which is the current climate crisis. These effects are not only limited to water stress and scarcity, but also and above all to the emergence and the fast development of water-borne diseases and other prevalent diseases associated with climate fluctuations, ranging from "heart and lung disease due to heat waves, to increased spread of infectious diseases, and malnutrition due to crop failures" (Sanders and Reynolds, 2011: 1). This situation, particularly felt in developing and least developed countries, is already known to be the cause of thousands of lives loss. According to the World Health Organisation, equally quoted by Patz et al., global warming and precipitation trends caused by human induced climate change of the past 30 years is known to already cause 150,000 lives annually (Patz et al., 2005: World Health Organisation Consulted, 2002). Equally, according to the statistics of the Global Humanitarian Forum (a Kofi Annan think-tank) as late as 2009, estimated that 300,000 deaths were due to global climate change. and this number would rise to 500,000 by the year 2030 (Vidal, 2009). In the particular case of South Africa, we can realise that the country is chronically water stressed, with only 500 m<sup>3</sup> to 1000 m<sup>3</sup> available per person per vear (Fails, 2011).

Beside these great impacts of climate change on Water and health that need to be controlled, another other important aspect to be controlled in the impact of the health sector on the occurrence and enhancement of the crisis. In fact, the energy used on hospitals and the disposal mechanisms have important carbon footprint, and are quite polluting and negative for the safeguard of our environment. In 2004, for example, the carbon footprint of the National Health Service in the UK (NHSUK) was 18.61 million tons (MtCO2) per year, representing 25% of England's public sector emissions, and the case should not be quite different in South Africa, as both the 'external' and the 'internal' components of health system emissions in South Africa's private sector can be reasonably assumed to be comparable to that of the UK (Sanders and Reynolds, 2011). Based on the above observation; it is obvious that health sector based emissions needs to be reduced, and personnel need to be formed and prepared to assist climate patients at the community levels. In this regards, South Africa will need a total of approximately 700,000 to 1.300.000 community caregivers to act in this changing environment context, most of them employed on a part-time basis (Sanders and Reynolds, 2011). Equally measures have to be taken to secure the water supply for the populations without distinction of race, age, gender, social status, financial power or geographical position. Putting in place such measures and mechanisms will automatically lead to the creation of new and thousands of jobs around the world on water and ecosystem management as well as community healthcare. Coming back to the South African context, according to the One Million Climate Jobs Campaign:

We can help to secure our water supply through restoring damaged water resources such as rivers and wetlands, and protecting them. Ecosystem restoration projects can create up to 400,000 jobs. The benefits of ecosystem restoration include: improving water quality and meeting human needs for ecosystem services; generating new income streams for poor communities; improving carrying capacity for wildlife and livestock; conservation of topsoil; and recharging groundwater (One Million Climate Jobs Campaign, 2011b: 33)

With the creation of those thousands of jobs, we will secure access to water to millions of people, but we will also enhance their access to health services, have the possibility of developing more the community health system and, at the same time contribute more to the ecosystem protection and restoration.

#### WASTE MANAGEMENT

In the current context dominated by environmental degradation due to multi-source pollution of our living milieus, including the disposal of our wastes, it is more than urgent to think new forms of waste management that is more sustainable and respectful of the resource and of the environment. In fact, the current most used methods of waste disposal are landfilling and incinerations. If these two methods are themselves very polluting in that sense this sense that they continue to reject chemicals into the air, soil and sometimes water. Faced with this situation, there is a need of urgent and important reforms both in chemicals and solid waste management. Those reforms have to include the implementation and policing of the return-to producer rule for hazardous waste and recyclable waste. Waste should be separated at source, and there should be engagement with people already earning their livelihoods from the waste chain (One Million Climate Jobs Campaign, 2011c). The new approach in the waste management. rather than focusing on old, expensive and polluting techniques have to focus on recycling. Recycling is of great environmental, social and economic value, as it does avoid the release of polluting particles and chemical into the air, soil and water, helps economise the new of new resources but re-using recycled ones, and contribute to poverty alleviation by creating new and important jobs for the poor and unskilled categories of the society, since jobs in the recycling chain represent a source of income for workers who usually have low levels of education or poor backgrounds. When specific cases are scrutinised, we realise that, in the United States for example, the municipal solid waste amount to 180 million tons per year, that is approximately 3.5 pounds of garbage per person each day. In this context, the landfilling method of waste disposal that was traditionally used is becoming more and more expensive because of closures and stricter operating requirements; that is why recycling has become a widespread alternative. Equally, studies on the job creation shows that in Maine, the recycling sector created almost 2000 new jobs with the average annual payment almost comparable with the State average in 1992. At the same time, the Massachusetts' recycling industry was generating a benefit of 588 million dollars for the state economy, and supporting more than 10.000 jobs (Halstead, 1994)

On the other hand, when we consider the European context, we realise that half of the 86 million tons of household waste in the continent is recyclable, and the other half represents a mistake of industrial design that only needs to be fixed. Whether the choice is on recycling or on fixing, we are in presence of a huge possibility of jobs creation. Those jobs can be created in waste collection, in re-use centres, in repair shops, in recycling, in composting, in designing better products, in producing high quality products with recycled materials among other. All of these are jobs that cannot be delocalised and that we are destroying with every tone we send to landfills or incinerators.<sup>16</sup> Going from the same logic, according to a study carried out by the European Commission in 2012, the "full implementation of EU waste legislation would save €72 billion a year, increase the annual turnover of the EU waste management and recycling sector by €42 billion and create over 400.000 jobs by 2020" (European Commission, 2012). South Africa is another important case that can be considered in this regards. In the country, the waste sector was identified by the government authori-

<sup>16</sup> For further details and analysis, consult "Zero Waste creates many JOBS!" Available at: http://www.zerowasteeurope.eu/2012/01/zero-waste-creates-many-jobs/

ties as one of the critical sectors, with the potential to contribute substantially to the generation of jobs within the national green economy aspirations. Nevertheless, noting the lack of municipalities to face the challenges of good and clean management of wastes, the "Youth Jobs in Waste programme" put in place in 2013 made an estimate of 3,577 jobs that will be created by placing young people in municipalities, to serve as *Landfill Site Assistants, Waste Collection Administrators* and *Environmental Awareness Educators*. As such, Young people in each of the South Africa's nine provinces will benefit from this programme following the below distribution:

- KwaZulu-Natal 728 jobs created
- Eastern Cape 566 jobs created
- Western Cape 366 jobs created
- Limpopo 350 jobs created
- North West 326 jobs created
- Northern Cape 273 jobs created
- Mpumalanga 262 jobs created
- Gauteng 326 jobs created
- And in the Free State province, 380 young people will benefit from the programme. (Department of Environmental Affairs Republic of South Africa, 2013)

Based on the statistic in these three contexts, we can easily view how by focusing on the transition from landfilling and incineration to recycling, Governments have the possibility of creation thousands of jobs that are environmentally protective, economically sustainable and socially constructive.

Such multi-levels and multi-dimensional research carried out by the One Million Climate Jobs Campaign of South Africa in preparation to the activists' demonstrations carried out both during the COP in Durban, and after the COP at the national level, is presented in a very synthetic and summarised way in the table 1 presented below. The quantitative aspects of the research clearly demonstrates that, more than mere discursive protests against the current social order, the campaign presents a political option that, if followed, can lead to the achievement of palpable and measurable results in term of jobs creation, with great impact on ecosystems protection, landscapes restoration and climate change mitigation and adaptation.

INITIATIVE	JOB CREATION
Renewable energy	
South Africa supplying half its electricity from renewable energy within ten years; 50% of households having installed solar water heating systems by 2020; construction of 150,000 residential digesters	Over 150,000
Ecological restoration	
Public works programmes such as working for Water, Landscape, Working for Coast. Working for Wetlands. Working for Fire, and Working for Waste	Up to 400,000
Construction and building industry	
Retrofitting regulation; inner city; municipal housing unit	Up to 70,000
Health	
Employment of community caregivers	Up to 1,300,000 (the majority part- time)
Rainwater harvesting (RWH)	
Introducing RWH to 10% of the South African population (jobs in design, Building, installation, maintenance and education; link with small-scale agriculture, etc.)	65,000
Transport	
Increasing use of public transport: expansion of rail general freight with 18%; promotion of a South African owned and controlled shipping industry, etc.	460,000
Manufacturing (in relation to RE)	
Manufacturing of climate mitigation and adaptation products for domestic households; climate adaptation products in water reaching 50% of households; sales, maintenance and transport of the above products	38,000
Eco-housing and sanitation	
Construction of 200 000 RDP houses a year using eco-housing methods; and recycling of recovered materials for floors	8,700
Waste	
Zero waste economy	Over 400,000
Tourism	
Half of tourist lodges in SA sourcing their food through community agricultural projects; energy and water efficiency retro-fitting in hostels; waste management initiatives in the accommodation sector; and investment in programmes such as EPWP and projects undertaken by open Africa	65,000

Source: (One Million Climate Jobs Campaign. 2011: 8)<sup>17</sup>

<sup>17</sup> According to the same source, the numbers indicated on this table "exclude all job estimates from the research papers, which are formulated as 'significant number

#### FINANCING JUST TRANSITION AND CLIMATE JOBS

Financial matters are central both to the current global decision making process and the transition to the low carbon economy in the global, national and well as sub-national levels. In the twenty first session of the United Nations climate negotiations that took place in Paris at the end of 2015, with the aim of putting in place a global legal binding instrument to replace the Kyoto protocol, the question of how to finance a global transition from fossil fuels to clean energy was tipped to be one of the most critical and difficult issue to resolve, as the previous Conference of Parties have accustomed us to. At the global level, as Berlin (2015) rightly puts it, this matter of finances basically concerns three dimensions:

First, how should developed countries mobilise \$100 billion a year by 2020 for mitigating and adapting to the adverse effects of climate change, largely through the Green Climate Fund (GCF) agreed upon during the Cancun round of UN negotiations. Second, what the balance should be between public and private sector funding in reaching the \$100 billion a year goal. Third, to what extent should public funding be based on finance mechanisms versus grants?

These difficulties related to the funding of the global climate fight in general and the transition to low carbon economy in particular is to a great extend the consequence of the huge amounts of funds that need to be invested. According to the Intergovernmental Panel on Climate Change reports, quoted by Fay et al. (2015: 14) the annual investment needed for the low-emission-generating technologies such as renewable, nuclear, and fossil fuels with carbon capture and storage, between 2010 and 2029 ranges from 31 billion dollars to 360 billion dollars on one side and, on the other side an investment ranging from 1 billion dollars to 641 billion dollars per year in energy-efficiency investments in the building, transport, and industry sectors over the same period. Nevertheless, despite those difficulties, hopes are still permitted. In fact, according to a study by the UN and Bloomberg New Energy Finance, public and private investors spent approximately \$270 billion on renewable energy projects in 2014 (Berlin, 2015). Some estimates, such as those presented CERES, are even higher and more optimistic, with an investment of 310 billion US dollars (Lub-

of jobs', 'jobs per million rand invested', 'jobs per MW installed' and the like. Only when the papers had explicit numbers of job creation were they included. Some of the initiatives are overlapping, but it has been attempted not to do any doublecounting of job estimates. For simplicity, all job numbers have been rounded off to whole hundreds."

ber, 2015). Such estimates, despite their differences demonstrate that mobilising fund for the investments in the clean energy is still possible and alternatives in this regards have to be studied and implemented at every level of the society.

With regards to the source of funding, in the case of the European Union, it is believed that the funding for the Just Transition Fund can "either come from the Emissions Trading System (EU ETS) or various parts of the Multi-annual Financial Framework (MFF) and other public and/or private funds (Kumar, 2014: 4). It is guite obvious that this multi-origin funding for just transition is a great step forwards. Nevertheless, the fact of relying among others on the emission trading system is questionable, given the failure of such approach in the current global climate regime. We cannot rely on the capitalist market to provide a solution to the crisis that the capitalist mode of exploitation. production and consumption created and is continuously aggravating. To believe in the market to solve the climate crisis is either being naïve or in bad faith. That is why the best way of financing just transition has to be based on government provisions and private funding. Conscious of such importance of funding deriving from the private sector, the Appalachia Funders Network and the Rockefeller Family Fund put in place the Just Transition Fund, in April 2015, with the aim of acting as a "philanthropic vehicle designed to allow national and regional foundations to strategically and nimbly invest in energy and economic transition issues to assist coal-impacted communities" (The Appalachia Funders Network and the Rockefeller Family Fund, 2015). In the pursuance of it mission, in June 2015 the fund announced its first round of awards and provided 436,500 thousand dollars to 19 organisations working in coalfield and power plan transition, and is planning to do more in the upcoming years. Coming to the South African context, the best example comes from the research carried out by the OMCJC, and that show in a very synthetic way the various mechanisms and sources from which the government can gather the necessary funding to finance the just transition project, create millions of climate jobs and maintain an acceptable and sustainable employment rate in the country. Such funding can be generated from a multitude of sources as table 2 shows.

INITIATIVE	FUNDING ALTERNATIVES
Idle corporate bank deposits (10% extraordinary tax on corporate bank deposits presently not reinvested; or alternatively borrowed at low interest)	R48 billion or more, depending on political will
Alternative 1: Progressive taxation on high incomes (An increase of the tax rates – from 38 to 40% for the part of income that lies above R400,000-R750,000, from 40 to 45% for the part income that lies between R750,000 and R1 million and from 40 to 50% for the part of income lying above R1 million a year)	R13.5 billion
Alternative 2: Progressive taxation on high incomes (A transition tax of 5% for the part income above R150,000 per year)	R20 billion
Financial transaction tax (Extending the tax of one quarter of a per cent that already exists on stock trading to the bond market)	R48 billion, assuming trading remains at the same level
Carbon tax (at R165/t CO2 instead of proposed R75/t CO2)	R82 billion
Halting Capital Flight	During the last decade, 'unregistered capital flows' from South Africa amounted to over R100 billion and more every year
Reallocating investments to renewables and questioning the ferrochrome and aluminium industry electricity demand hike	According to Eskom, the current coal power plans amounts to R450-500 billion, interests on loans not included. Cancelling half of these plans, and the hunt for foreign loans, would save hundreds of billions of rand in spending and tens of billions of rand in interests on loans
Restructuring Eskom's Tariffs (A 10c per kWh levy on the largest 'Key Industrial Consumers')	R8.5 billion per year in income
Pension funds and prescribed assets (Declaring 10% of the PIC funds and 5% of the private retirement fund industry assets to be prescribed as assets that must fight climate change)	R140 billion in loans
Using the accumulated and yearly under spending of the money paid by workers to the Unemployment Insurance Fund (UIF)	R6-9 billion is under-spent per year. In addition, today's surplus of R40 billion accumulated under spending could be released form UIF as a kick-start of climate jobs
TOTALS: Yearly funding (using the lower numbers in the table above):	Total annual potential new funding: More than R250 billion
Additional funds available, like the UIF surplus, as well as borrowing, prescribed assets and reallocation of investments to	Additional resources: More than R400 billion

Table 2: Alternative Funding Sources for the Just Transition in South Africa

Source: (One Million Climate Jobs Campaign. 2011: 43)

Such examples coming from the USA and from South Africa are practical cases that clearly demonstrate that the private sector needs to resolutely engage in the provision of fund for the just transition to low carbon economy in the first case and, in the second case that it must be primarily governments that allocate the resources and implement programmes to halt climate change (One Million Climate Jobs Campaign, 2011b); for this, they have to gather money from various sources and through various mechanism as Table 2 above demonstrates it. These examples need to be properly developed and adapted to other contexts in particular and to the world at large.

#### **III.3- THE OMCJC: COMMUNICATION AND ACTIVISM**

Beside the huge and fruitful research that the OMCJC carried out to support its demands for a just transition to a low carbon economy in South Africa, another great activity was centred on communication and activism. In fact going round the country, campaigners tried to convince the greatest number of people they could, collecting their signatures to give more weight to the campaign, using medias to make themselves more visible and above all, participating in a very remarkable way to the global day for the environment during the Conference of the Parties in Durban. These visibility activities were not the proper of the South African campaign. An analysis of other countries also illustrates the importance of coherent communication in the success of social movements' activities. In Sweden, for example, a consistent narrative around climate change which combines environmental responsibility and business opportunity, has led to high levels of public understanding and support for ambitious strategy. What is required is not one communications campaign, but an on-going effort over years and even decades (Curtin, 2014: 25). Activism and campaigning are the keys to success as far as trying to influence the political decision making processes from a bottom-up approach is concerned, but they cannot work without a large scale and long term communication strategy. That is why, according to the Canadian Labour Congress, just transition, to be more effective, will have to be associated in the public mind with the labour movement, like the right to know and the protest against the "corporate welfare bums" [...] Communication strategy will have to look at the targets—who we want to reach—The engagement of community groups will be one focus, as well as environmentalists and the wider society, governments included (Canadian Labour Congress, 2000). In fact, as the same document continues its argument, the best response is to increase political campaigning, with the environmental movement and before governments, so as to ensure that transition is delivered along with the rest of the environmental program. Otherwise it will be workers and their communities who will bear a disproportionate share of the burden of environmental degradation and continue to profit the least from benefits resulting from environmental exploitation or climate protection. Based on such conviction, the OMCJC, right from the beginning gave a very great share to environmental defence movements on one side and, on the other side to the workers' movements, the workers themselves, their wellbeing and their interests. This vision of the campaign, even though it was first develop in South Africa and for South Africa, has a global view and aspiration, and that may clearly justify the fact that it was officially launched and officially started its open activism in the context of the global negotiations on climate change held in the country under the banner of the United Nations, with the presence of the great majority of world leaders and delegates of all the countries of the world.

## THIRD PART THE OMCJC: FROM NATIONAL TO GLOBAL

#### I. THE OMCJC ON THE WAY TO THE COP

Basically organised in three main phases, the campaign prepared at the national level was conceived to be officially launched during to COP 17 in Durban, with the aim of equally influencing the global climate decision making process and meeting taking place during those days in South Africa. The material organisation was phased out as follow:

#### PHASE 1: FEBRUARY TO AUGUST 2011: UNDERTAKING THE RESEARCH

The aim of this first and fundamental part of the campaign was to prepare the field by carrying out sound and concrete research to be used as ground for the following steps. The methodology used was a participatory one, involving relevant trade unions, informal sectors and social movements in each particular sector. Four immediate research objectives were set for each research group and research area, as mentioned previously. Besides that, objectives were to be met in ten research areas of the campaign which were basically: Agriculture and food, construction, energy production, financing climate jobs, manufacturing, mining, tourism and hospitality, transports, waste management, water and sanitation (Briand, 2011). For each of those areas, a team was constituted under the leadership of a lead researcher and, according to the campaign, the efforts for just transition had to pass through all these areas.

#### PHASE 2: AUGUST TO NOVEMBER 2011: ADVOCACY AND EDUCATION

It is important to mention that education and training activities are key elements for the success of the One Million Climate Jobs Campaign of South Africa. In fact, during the period dating from August to November 2011, a lot of advocacy, trainings and educative activities were carried out in support of the campaign. According to Thembeka and other campaign leaders that we interviewed, "to proceed successfully in this, booklets and pamphlets were produced to disseminate some of these ideas". This was in straight line with the previously set goals of the campaign, as stated by AIDC:

A key part of the Campaign will be the capacity of activists to articulate the demands of the Campaign. This would involve enhancing their capacity to engage with the issues of climate change and strategies for creating climate jobs in the designated sectors. Tools of political economy will also have to be enhanced in order to give activists the means to convey the causes of mass unemployment and to situate climate change in the broader ecological crisis.<sup>1</sup>

The importance of these training activities lies in the fact that many of the actors had a limited knowledge of global warming, as Jeff Rudin defended during one of our interviews, "most of the people to be involved have still probably not head of climate change and even if they have, they have immediately removed it from their struggles, just to survive these days." Bringing them to understand the double challenge of climate change and job creation and the articulation in the perspective of the One Million Climate Jobs Campaign, was a key factor that could determine the failure or the success of the campaign. A lot of activities were then carried out in this regards prior to the popular mobilisation.

# PHASE 3: DECEMBER 2011: POPULAR MOBILISATION AND LAUNCHING OF THE CAMPAIGN

The official mobilisation and launching of the campaign took place during the 17th Conference of the parties to the United Nations Framework Convention on Climate Change held in Durban in 2011, and known as COP 17. The popular mobilisation part was done on the 3rd of December, and was part of the Global Day of Action 2011.

<sup>1</sup> For more analysis, refer to http://www.aidc.org.za/about-us Consulted on 28-02-2015

In fact, On Saturday 3rd December, about 10,000 people gathered in Durban to demand climate justice and united action against climate change. The march followed a route passing through the site of the United Nations climate change negotiations venue, and converged on the way with faith community members. The campaign was equally attended by people from many different organisations, including the Democratic Left Front, Rural Women's Assembly, trade unions and other organisations representing workers, small farmers and the unemployed among others. In short, the Campaign mobilised thousands of South Africans around credible and well-researched proposals for creating one million jobs that reduce South Africa's greenhouse gas emissions and in the process raises the awareness of many ordinary South African of the threat of climate change, and the aim was to force the government to respond to its proposals.<sup>2</sup>

On the 4th December, more than 400 people attended a conference on Climate Jobs that was held still in Durban, as the first step towards building an international movement for climate jobs. This conference marked the official beginning of the South African campaign supported among others by the COSATU trade union federation as well as many unions and environmental groups.<sup>3</sup> All this took place under the leadership of the Alternative Information Development Centre. Following its success during the COP17, the campaign took a more permanent form and, as Thembeka stated when he was interviewed, has so far been carrying out several training activities to enhance the capacities of trade-unions such as COSATU, ENATU as well as some local organisations. Equally, it is important to mention that the South African campaign has received and continues to receive the support of prominent national and international personalities. On this front, the organisers of the campaign can better clarify the various supports they received and that gave another dimension to their fight:

On the international front, the man who first sounded alarm bells to the broader public about Climate Change in the 1980's Bill McKibben, as well as award-winning Nigerian eco-activist Nnimmo Bassey have endorsed our campaign. Also on the international stage, but from South African stock, is the Executive Director of Greenpeace International, Kumi Naidoo, one of the most prominent and visible climate activists in the world, who will also champion our cause. We also supported by a well-recognised sociologist

<sup>2</sup> For further analysis, refer to http://www.aidc.org.za/about-us Consulted on 28/02/2015

<sup>3</sup> Cf. http://www.globalclimatecampaign.org/index.php?cmd=Main.ShowCountry &id=46&language=fr Consulted on 01/03/2015

and activist, John Bellamy Foster who has published extensively in the field of ecology and climate change. Nationally, we benefit from the guidance of Anglican Archbishop emeritus Njononkulu Ndungane and Prof. Jonathan Jansen and others dedicated to the realisation of human rights, equity development, such as Prof. Hlengiwe Mkhize, Nozizwe Madlala-Routledge and Advocate Dumisa Ntsebeza; as well as the sterling work done by development and environment specialist, Prof. Mark Swilling and anti-fracking leader Jonathan Deal.

In short, we can say that the OMCJC did not die after the seventeenth session of the conference of the parties to the United Nations framework convention on climate change held in Durban, South Africa from November 30<sup>th</sup> to December 11<sup>th</sup>, 2007; Session that witnessed the official birth of the South African campaign. In fact, after COP 17, the campaign continued to carry its activities with several other campaigns and caravans to sensitive the populations on the ideals and the need for just transition on one side and on the other side, to continue to force the government hand in taking environmental, social, political and economic decisions in line with the ideal of the just transition in general and creation of climate jobs in particular. Among the most important post Durban events organised by the campaign, we can cite among others seminars and projects such as:

- The One Million Climate Jobs brainstorm meeting which was organised on November 27th, 2013. This meeting cheered by Professor James IRLAM, senior lecturer at University of Cape Town- department of health science, mainly focused on the current and future impacts of climate change on human health both within South Africa and beyond.
- Renewable energy festival which took place on December 7th, 2013. This festival was centred around several exhibitions of renewable energy technologies, debates on climate change and alternative forms of energy, cultural activities (concerts, drama, art,) and it main goal was to popularise a socially owned renewable energy industry as a viable alternative energy strategy. Several different organisations, trade-unions, environmental groups among others were invited and hosted self-organised activities in order to promote debate and ultimately create awareness on climate change and working class solutions based on the ideals of the just transition project.
- The climate change adaptation and the role of women organised on July 24th, 2014. This meeting was specifically centred on some of the socially and economically pressing climate

change adaptation issues affecting women such as food security, energy security, water, health among others. The main presenters were coming from civil society organisations, community based and parastatal structures.

- The Safe, green, sustainable South Africa schools project. The aim of this project which started in 2013 is to see that all schools in South Africa "become places that are safe, green and sustainable, and which provide learners of all ages with spaces and facilities that can far better meet their needs than the current situation. [That is why to be more specific and concrete, the OMCJC through this project struggles to] comprehensively retrofit all government schools, not only for greening and climate change purposes but also to humanise the schools for the learners and teachers, and to transform them into the community hubs they should be by linking them with the surrounding neighbourhoods and communities."<sup>4</sup>

Beside those activities with organisations, the activists of the campaign have been working hard to collect signatures nationally by going from house to house, mobilise and educate communities about the impacts of climate change, the unemployment crisis and the alternative solutions proposed by the OMCJC. So far, more than 10,000 signatures have been collected, and will be handed over to the Parliament as the voices of South Africans during the national climate jobs march to be held in Cape Town.<sup>5</sup>

#### II. THE OMCJC: LEARNING FROM THE SOUTH, CHALLENGES AND SUCCESS STORIES

The OMCJC of South Africa appears today as a paradigmatic example of an alternative thinking, in opposition to the current views of the global climate policies and actions mostly dominated by market logics and carbon trading approaches in trying to solve the global climate crisis. The campaign, based on the conviction that we cannot rely on the market to solve the climate crisis and that we cannot continue to oppose climate protection and jobs security, shows a way forward. It equally goes beyond the current regime dominated by State actors to show that the decision making arena has to be more inclusive and just.

<sup>4</sup> For greater understanding of the project, refer to http://climatejobs.org.za/safegreen-sustainable-south-africa-schools/

<sup>5</sup> For more details, refer to http://climatejobs.org.za/million-climate-jobs-national-petition/ Consulted on 01/03/2015

Nevertheless, despite its great successes and the continuous sympathy and attachment it receives from the population and other important international and national personalities, the One Million Climate Jobs Campaign of South Africa continues to face some difficulties and challenges on a daily basis. The provision of lasting solutions to these challenges will certainly give new inputs and strengths to the campaign.

#### **II.1- CHALLENGES OF THE OMCJC**

#### POPULAR SUPPORT

One of the main challenges faced by the campaign, as James IRLAMS clearly said during our interview with him, is the failure to realise popular support and getting access to stakeholders. And as he continues the campaign needs greater visibility in the media to increase its popularity and calls on the attention of people on the OMCJC and its benefits for them. Another important element pointed out by all the interviewees was the aspect related to the visibility of the campaign. The limited visibility results basically from the insufficient presence in Medias both in and out of South Africa. Obviously a lot of research. campaigns, trainings and advocacy activities are carried out on the daily basis by the campaign, but they cannot be fully visible if the campaigners do not sell themselves and activities in renowned and well-followed Medias. In fact the campaign organisers put and continue to put much effort on the communication aspects, but from all indication these seem limited in time and space. The campaign seems to be mostly a matter among participating organisations and their members. The visibility at the grassroots level is not yet properly secured and the general populations of South Africa appear not to know much about it. For a movement that aims at making the working class and the population more active in the decision making process, limiting the presentation and the involvement of the preparation of the campaign and its subsequent activities to a limited group is not proper, as it does not secure participatory dynamics. As a logical consequence of that, the campaign lacks a solid grassroots basis and popular support. The failure of all the current attempts to face the global climate crisis and jobs scarcity is basically related to the non-participatory dynamics that surround the decision making process at every level of the society. So, to bring governments and other stakeholders to build public policies and public action that are fruitful, it is necessary to count on the popular support. Top-down policy and fighting mechanisms, no matter how scientific they are, cannot be efficacious, effective and efficient, as their implementation will always lack the involvement of one of the most important pillars necessary for the success of any social or political project. In order to be more effective in its current and future activities, the One Million Climate Jobs Campaign has to be more present in Medias, think and implement participatory processes both in the conception and implementation of its activities. In short, it will have to go beyond institutional reliance to create a grassroots basis for its survival. After all, it is fighting for just transition for the sake of the general populations and not only for the benefit of participating organisations. That is why, in order to improve in its field of action and enhance the possibility of success of its future events. the One Million Climate Jobs Campaign has to increase its visibility through the Medias; It has to create more TV and radio programs, and write more journalistic and easily accessible articles in the most used channels so that the most common citizens can have access. It equally needs to put in place participatory processes and create fora where the population can meet and share their ideas on just transition and climate change mitigation and adaptation policies while focusing on their participation in the political decision making processes. It is only by creating and maintaining this grassroots and popular basis that the campaign can secure its survival and it efficacy in a world which is more and more complex, and in which the populations are more and more aware of their power and rights and want to be increasingly involved in the management of their affairs at every level.

#### FINANCIAL AND ADMINISTRATIVE INDEPENDENCY

Any human enterprise, in order to succeed, needs a certain level of financial, material and institutional resources and security. In fact, the financial and administrative self-reliance of any institution are the first and most important guarantees of its survival and its independence and objectivity in the pursuance of its goals and the implementation of its projects and activities. When an institution relies on other entities both on financial and administrative matters, there is always a danger that the supporting entity can easily interfere in its activities at any moment. There is also always a danger that at any time the funding partners can stop provision either in virtue of internal policies changes, priorities re-orientations, changes in the management or budgetary limitations among others. That is why it is very important and even vital for any institution which wants to survive to build its own administration and secure or create its own sustainable sources of funding. Unfortunately for the OMCJC, these conditions are not yet met at the moment. In fact, one of the most important issues faced by the campaign is financial in nature. According to Jeff Rudin declarations during our conversation with him, "the funding

for the campaign is very limited as it is self-funding, and does not have important financial resources to be able to run properly independently is the most pressing issue." Moreover, as Thembeka declared during our interview, "it is entirely dependent on the Alternative Information Development Centre (AIDC). As he continues, its future will be that it takes its own independency both financially, structurally and administratively from AIDC." The survival of the campaign definitely depends on such independency and, to do that the OMCJC has to start looking for alternative source of funding, create activities that can generate funding on one side and, on the other side it has to structurally organise itself and function on its own. Campaigning for just transition to low carbon economy is so important and cannot be left to the sole management of a single Organisation. All the member organisations have to come to an agreement and put in place an independent body with independent and suitable sources of funding to manage the campaign in a lasting way.

#### **POPULAR EDUCATION**

The question of disinformation and misinformation around the global climate crisis is a matter of great concern nowadays. Nevertheless we cannot relate the inaction of states to this situation because of the precautionary principle. In fact, under the Article 3.3 of the United Nations framework convention on climate change (UNFCCC) ratified by almost all the States of the world, where there are serious obstacles and irreversible damages, the lack of full scientific certainty should not be used as an excuse to avoid taking strong precautionary measures to confront the climate crisis. Thus, if in doubt, the convention advices and recommends to take measures rather than being inactive. Inaction could prove more destructive in the long run, while precautionary measures, even based on scientific uncertainty, have the merit of avoiding potential future climate dangers. So, based on this conviction shared by states, we can easily claim that the cause of inaction is to be found elsewhere: basically in the conflict between large corporate interests and those of the environment and the populations. That is why, to counteract the influence of those carbon intensive corporate that influence the decisions of States actors, it is important for the populations in general not only to call, but also and above all to force States to action at every level of the society. In order to do this, the populations have to fully be aware of the current and future environmental and climate dangers to which they are exposed. Unfortunately, they are not always well formed and informed on these matters and, because of the current generalised poverty under which the majority of the world population is subjected, they easily attach more importance

to their day to day survival. The OMCJC is not saved from this danger. and that leads to a certain lack of popular support. As Jeff Rudin rightly put during our interview with him "the main difficulty faced by the campaign is that the people it wants to involve have still probably not head of climate change and even if they have, they have immediately removed it from the struggle just to survive these days." That is why, to have a greater impact and adherence from the populations the campaign needs to be able to show in a concrete way the links between climate change and jobs and how we can create jobs in such context. By so doing it aligns itself with the interest of the populations and can then secure their participation and sense of belonging. Going from that, we can draw the conclusion according to which conclude with if the campaigners succeed in rightly forming and informing masses on the issue of climate change, the challenges of climate justice and jobs creation, that will be of great impact for the campaign as it will lead to a new age of popularity, and will give it a new legitimacy and strength. This will make of the campaign a unique and great example of success from which we can profitably learn from.

#### **II.2- SUCCESS STORIES**

During our interview with IRLAM he revealed that through "the ministry of public works, energy and industries the government has created 6,000 jobs so far that are environmental friendly." Moreover, as Thembeka pointed out when he was being interviewed, the campaign succeeded to "attract together a number of organisations and people. It has hosted a renewable energy festival with WWF and the goal is to raise awareness about renewable energy as alternative energy problem facing the country."

#### SCIENCE AT THE SERVICE OF POLITICAL DECISION-MAKING PROCESSES

The need for the production of a useful science able to guide decision makers towards taking more informed decisions in environmental matters in general and climate change and jobs creation in particular is more and more becoming a pressing issue in our current society. Many environmental research organisations aim at producing knowledge than can be used by policy makers, as the growing number of policy briefs produced as policies oriented results of researches can easily demonstrate. In fact, nowadays all researches seem to have a political agenda that is manifested through the desire to produce documents that can be easily integrated and used by policies makers. Nevertheless, most of the productions are too general, and are produced by individuals or by projects led by single organisations that willingly or unwillingly, consciously and most of the time unconsciously, allow their proper ideologies to transpire through reports and briefs. Equally most of the produced documents are in a language not always easilv accessible for non-specialists. The strength and originality of the One Million Climate Jobs Campaign of South Africa resides in the fact that it takes into account several aspects: it produces useful research with relevant policy orientations to face both climate change and jobs creation in a synergetic way and, at the same time it mobilises all the categories of social actors, and puts in place mechanisms to influence the decision making processes. According to Jeff Rudin that we interviewed the campaign does "research to tell the public what climate change is and where the jobs can be found in the context of climate change. The campaign mobilises as many people as possible, and this serves to create the conditions that force the government to create a million jobs needed to solve unemployment and the climate change crises." This triple dimension of the activities of the campaign makes it a good example that needs to be properly studied and presented for adaptation and implementation in other contexts of the global South, generally characterised by jobs scarcity and great vulnerability to climate change in particular, and to the world at large, in its global effort to overcome both challenges. This case study is, according to an expression so dear to Boaventura de Souza Santos (2012), a real example of an "epistemology of the South, an alternative thinking of alternatives" (Santos, 2013) in a context where the dominant capitalist models and the State-centred international alternatives seem to hinder all the other options. Therefore, beside presenting the environmental crisis in general and climate crisis in particular as a direct result of the current capitalist model of production and consumption, the just transition recommends an alternative path for clean and just development, even though the climate crisis is still not unanimously recognised as a capitalist crisis, that is, a crisis arising from and perpetuated by the rule of capital, and hence incapable of resolution within the capitalist framework (Wallis, 2010). Conscious of the need of creating such alternative to the current destructive capitalist model that has led us to global warming and that continuous to prevent the conception of suitable global response to climate change through its important lobbying against energy transition and through it powerful climate disinformation, the OMCJC brings an alternative in terms of production of consensual, multi-dimensional, multi-actors and multisectorial useful science with clear and guantified outcome in terms of jobs creation. It does not declare that jobs should be created, it shows how they should be created and maintained; it does not only state that just transition should be financed, it shows how it has to be financed.

#### RELATION JOBS-PROTECTION OF THE ENVIRONMENT: FROM OPPOSI-TION TO COMPLEMENTARITY:

There are clear and strong links between unemployment, climate change and capitalism. Such links can be understood in terms of causality and mutual exclusion and survival. The current climate crisis and job scarcity are nothing else than direct consequences of the capitalist mode of exploitation, transformation, consumption, disposal and accumulation. In fact by being highly carbon intensive the capitalist development model has led to the current environmental and climate crisis we are enduring. Equally by being focused only on the profit and accumulation of capital for the capitalist minority, such system has put in place mechanism that has resulted not only in the economic and financial crisis, but also on jobs crisis. The systems automation and the use of machine in all sectors contribute to reduce the cost of production, maximise the profits for the capital, but on the other side it has significant social effects, and it reduces the job positions and even eliminates some position from the production chain, enhancing therefore the job scarcity crisis around the world. On the other hand, it is important to note that the link between capitalism climate change and jobs can be that of subsistence. In this sense, capitalism can be a good galvaniser for the green jobs creation, as they can as well be mutually exclusive and, in this respect there is not reconciliation between jobs creation and protection of the environment in the capitalist context. Unfortunately, most research shows that this relation has always been presented in the oppositional way just in this last dimension mentioned previously. Barca for example shows such opposition in the context of working class environmentalism in Italy, USA and Brazil, where job blackmail is used by corporations in order not to take environmental protection measures, under the pretext that it will lead to job loss (Barca, 2012). Unfortunately, in the South African context, the labour movement has historically neglected environmental issues. This is largely because of the widespread understanding that environmental protection threatened jobs (Cock, 2007), and as Rudin pointed it out during the interview: "So far the is no proper research anywhere that suggest what will happen if coal was left in the ground, if we need to move to a low carbon economy. The reason why there is no transition of low carbon economy is because of the link of business interest." In fact, the transition to a low carbon or green economy has massive implications for labour; that is the reason why the One Million climate job campaign presents five steps to create and secure 'one million climate jobs'. These are to:

1) produce electricity from wind and solar power; 2) invest in social infrastructure such as public transport, housing and publicly available waterworks; 3) utilise agro-ecology which is labour intensive, low in carbon emissions and respectful of traditional African practices by protecting biodiversity; 4) protect South Africa's natural resources from outside influence and corruption to meet the basic needs of all people; and 5) provide basic services such as water, electricity and sanitation to redress the legacies of apartheid and build on the resilience of South Africans to withstand the effects of climate change.<sup>6</sup>

From the experience of the OMCJC of South Africa, we can learn that the protection of the environment does not automatically threaten jobs as it has historically been believed. On the contrary, faced with the double challenge of Joblessness and climate crisis, we have no other option than capitalising on just transition to a low carbon economy by creating clean, decent and sustainable jobs. All the stakeholders have the responsibility of making such change happen without delay.

#### THE POWER OF NETWORKING

One of the most important achievements of the One Million Climate Jobs Campaign remains the building of an influential environmental sensitive and defence network on Non-Sovereign actors, aiming at pushing the South African government to act in line with the objectives of the just transition to low carbon economy. The Campaign knows that no matter how good its research, and how good it is at presenting its case to government, the government will not act, even if it tries to listen. However, "if the unemployed and the workers who can't afford electricity or water and the homeless are mobilised and if they join forces with the many different organisations and individuals who are active on climate change issues, then there is a chance that the government might be forced to do something" (OMCJC, 2013). In the Australian context for example many labour unions have embraced the concept of social movement unionism that links the labour movement into broader political coalitions on issues of public concern. Social movement unionism engages unions in issues beyond the workplace, organising union members to work with other civil society organisations to support each other in what are seen as mutually beneficial goals (Brofenbrenner and Juravich, 1998; Reiss, 2005; Tattersall, 2005). In fact, A just transition process targeting global warming

<sup>6</sup> Austin-Evelyn K. "Civil Society at the UN Climate Change Conference: African Activism at COP17". Available at http://www.climate-justice-now.org/civil-society-at-the-un-climate-change-conference-african-activism-at-cop17/ Consulted on 01/03/2015

offers scope for transforming the traditional agenda of labour unions, bringing them into collaborations with environmental organisations, governments and other civil society organisations campaigns that link workplaces and communities into collective social action on issues of ecological sustainability and related social development (UNEP, WHO and ILO, 2007). The most significant success of the OMCJC is to have succeeded to bring together organisation of various natures and interests to build a network with the aim of influencing the decision making and forcing the South African government to engage in the path of just transition by creating millions of climate jobs. This network appear like a paradigmatic example from which lessons can be learned for the establishment of a global network of movements and organisations for the inclusion of just transition in general and climate justice in particular in the global climate change political agenda and responses.

### CONCLUSION

Our modern world is currently facing multiple challenges which in most cases result from human activities. Among this challenges, we can cite firstly the security challenge which is the perfect consequence of the discontentment, resentment, despair and sense of revenge and violence the global inhuman capitalism has nurtured and continue to entertain among the marginalised of the market economy; secondly the joblessness challenge resulting from the growing automation of systems, the search for unlimited profits by corporations, the uncontrolled banking system and its multiple financial and economic failures affecting the markets and all what derive from, and the incapacity of States in sustainably providing solutions be creating new jobs among others. Thirdly the environmental challenge in general and the global climate crisis in particular resulting for the unsustainable mode of exploitation of natural resources, on production of usable goods, of consumption and waste to which the capitalist mode has led the world. In short we can say that all these crisis are the result of multiple rupture: rupture of man with himself leading to the denial of his communicational, loving nature and the use of pairs as simple means to reach economic and accumulation goals; rupture with Nature leading to the non-respect of natural orders, the irresponsible use of the commons and the misuse of intra-generational and intergenerational resources; rupture with the social contract leading to the

non-respect of others and the occurrence of multiple conflicts, being them for the access to resources and space, because of religious fanaticism and extremism, or from social and political differences and intolerance; Rupture with the meta-principles that have historically ruled the world and oriented people leading to the total relativism and the lack of references in today's societies. As Pope Francis defended in his encyclical *Laudate si* (2015), the environmental crisis cannot be separated from the moral and social crisis, and we cannot save the environment if we do not save man, we cannot save the planet without first solving our crisis of lack of reference; Climate change has to be tackled from the holistic perspective by including among others social justice and joblessness issues.

This paper therefore studies ways of addressing the environmental and the joblessness challenges from the perspective of social justice and just transition to a low carbon economy. In order to do so, we considered the example of the One Million Climate Jobs Campaign of South Africa. At the end of our analysis we can, without any doubt, conclude that there is an urgent need for a paradigm shift from our current highly intensive resources consumption behaviours and highly carbon intensive mode of development to a clean and more sustainable mode. Such transition to a low-carbon economy will require a paradigm shift in social economic, environmental and industrial policy. "It will require considered provision for sectors sensitive to changes in energy prices. Building up new, climate-friendly industries will be needed to sustain employment and investment. To enable a just transition, provision will have to be made for emissions-intensive sectors, if they are to be phased out over time" (Winkle and Marguand, 2009: 47)

The One Million Climate Jobs Campaign of South Africa, based on such conviction, has succeeded to build up a national network of multi-nature and multi-origin actors to research, campaign and advocate for the creation of climate jobs. In order to reach that just and fair transition, the campaign proposes that South Africa should:

- Produce our electricity from wind and solar power;
- Reduce energy use through energy efficiency in industries;
- Reduce energy use in homes and buildings by constructing new buildings to be energy efficient and by retrofitting existing buildings;
- Reduce our use of oil in transport by improving and expanding our public transport system;

- Produce our food through organic small-scale agro-ecology;
- Protect our water, soil and biodiversity resources (One Million Climate Jobs, 2011: 21)

This perspective, based on a well-founded research, very structured networking, advocacy and activism makes of the South African campaign a very good example that can be contextualised and applied in other countries of the global South in general and the world at large. It is equally a case that can be scaled up and applied in the context of global climate negotiations. In fact, if such networks could be built and act at the global level, there is a great chance that they could easily influence and force decision makers in taking strong measures to fight against global warming and global unemployment, and secure a just transition to a low carbon economy.

### **BIBLIOGRAPHY**

- African National Congress (ANC). 2012 "Maximising the Developmental Impact of the People's Mineral Assets: State intervention in the Minerals Sector (SIMS)." Policy discussion document. Available at http://climatejobs.org.za/download/ research/fossil\_fuel\_and\_mining/state%20intervention%20 minerals%20sector%20anc%20discussion.pdf
- AIDC (Alternative Information Development Centre). 2013 "Climate change and climate jobs: easy answers to 56 important questions." (Cape Town: Alternative Information Development Centre).
- AIDC and One Million Climate Jobs Campaign. 2013 Agroecology and climate change in South Africa: The contribution agriculture can make to reversing global warming. Available at http://climatejobs.org. za/download/research/agro\_ecology/agroecology%20climate%20 change%20and%20jobs%20in%20sa%20final%2013.08.081.pdf
- Aliber, M., Baiphethi, M. and Jacobs, P. 2009 "Agricultural employment scenarios" in Hall R. (ed.) 2009 *Countryside? Policy options for land and agrarian reform in South Africa* (Bellville: PLAAS).
- Arowolo, S. 2015 "COP 21: Towards an inclusive climate negotiation in Paris." Available at: http://www.csag.uct.ac.za/2015/07/17/cop-21-towards-an-inclusive-climate-negotiation-in-paris/

- Austin-Evelyn, K. "Civil Society at the UN Climate Change Conference: African Activism at COP17." Available at http://www.climatejustice-now.org/civil-society-at-the-un-climate-change-conferenceafrican-activism-at-cop17/ (Consulted on 01/03/2015).
- Barbier, E. B. 2010 A Global Green New Deal: Rethinking the Economic Recovery (New York: Cambridge University Press).
- Barca, S. 2012 "On working-class environmentalism: A historical and transnational overview." *Interface: a journal for and about social movements* 4 (2): 61-80.
- Berlin, K. 2015 "How to Finance the Global Transition from Fossil Fuels to Renewable Energy." Available at http://ecowatch. com/2015/10/01/fossil-fuels-renewable-energy/
- Bill, A., Mitchell, W., Welters, R., Rutovitz, J. and Evans, G. 2008 *A Just Transition to a Renewable Energy Economy in the Hunter Region, Australia.* Policy report. (Centre of Full Employment and Equity). Available at: http://www.resourcesandenergy.nsw.gov.au/energy-consumers/solar/sustain-renew-fit-subs/sustain\_renew\_fit\_subs\_greenpeace\_australia\_pacific\_attach\_a.pdf
- Bill, A., Welters, R., Rutovitz, J., Evans, G. and Mitchell, W. 2008 A Just Transition to a Renewable Energy Economy in the Hunter Region, Australia (Newcastle: Centre of Full Employment and Equity).
- Bond (ed.) 2008 *Durban's climate gamble: Trading carbon, betting the earth* (Pretoria: Unisa Press).
- Bond, P., Rehana, D. and Graham, E. (eds.) 2009 *Climate Change, Carbon Trading and Civil Society: Negative Returns on South African Investments* (Amsterdam: Rozenberg Publishers).
- Bowles, W. 2012 "Economic and Social Crisis in Post-Apartheid South Africa." Available at http://www.globalresearch.ca/ economic-and-social-crisis-in-post-apartheid-south-africa/32505
- Brian, A. 2011 "Background to One Million Climate Jobs for South Africa" in *One Million Climate Jobs Workshop: Seminar report.* March 18, 2011. (Cape Town: AIDC Solidarity Centre).
- Brofenbrenner, K. and Juravich, T. 1998 "It takes more than house calls: organising to win with a comprehensive union building strategy" in Brofenbrenner, K., Friedman, R. W., Hurd, R. A. and Seeber R. L. (eds.) *Organising to Win: New Research on Labour Strategies* (New York: ILR Press).
- Bundy, C. 2013 "South Africa: Centenary of the 1913 Land Act" in *LINKS: International Journal of Socialist Renewal*. Available at: http://links.org.au/node/3324
- Butler, A. 2004 Contemporary South Africa (Johannesburg: Palgrave).

- Campaign against climate change. "Mission Statement: Campaign Aims and Objectives." Available at http://www.campaigncc.org/ aboutus/missionstatement
- 2009 One million climate jobs NOW! A report by the Campaign against Climate Change trade union group to the Communication Workers Union, Public and Commercial Services union, the Transport Salaried Staff Association and the University and College Union. Available at http://www.campaigncc.org/sites/data/files/ Docs/one\_million\_climate\_jobs\_2014.pdf
- Canadian Labour Congress. 2000 *Just Transition during Environmental Change*. Available at http://www.canadianlabour. ca/news-room/publications/just-transition-workers-duringenvironmental-change
- Change partnership. "Implementing the 'Just Transition': Redesigning regional industrial regeneration to build an inclusive, sustainable and safe future." Available at http://www. changepartnership.org/campaigns/campaignsjusttransition/ (Consulted on 07/10/2015).
- Cline, D. 2015 "Post-apartheid South Africa still struggling." Available at http://chronicle.augusta.com/content/blog-post/damoncline/2014-04-22/post-apartheid-south-africa-still-struggling
- Cock, J. 2007 "Sustainable Development or Environmental Justice: questions for the South African labour movement from the Steel Valley Struggle." *Labour, Capital and Society*, 40 (1&2).
- 2011 "Contesting a 'just transition to a low carbon economy" (Global Labour Column). Available at http://column.global-labour-university.org/
- 2012 "The Challenge of Ecological Transformation in Post-Apartheid South Africa: The Re-emergence of Environmental Justice Movements" in Marcelle, C. D. and Luke, S. Contesting transformation: Popular resistance in Twenty-first-Century South Africa (London, PlutoPress). Pp. 183-200.
- 2014 The 'Green Economy': "A just and Sustainable Development Path or a 'Wolf in Sheep's Clothing'?." Available at http://www. wits.ac.za/files/3pf1r\_762213001404218311.pdf
- Congress of South African Trade Unions (COSATU). 2012 "A just transition to a low-carbon and climate resilient economy: COSATU policy on climate change; A call to action." Available at http://www.cosatu.org.za/docs/policy/2012/climatechange.pdf
- Davis. 2013 "Hundred years on, the Natives Land Act's legacy is with us still." *Daily Maverick. (South Africa).* Available at http://www. dailymaverick.co.za/article/2013-06-19-hundred-years-on-thenatives-land-acts-legacy-is-with-us-still/#.V2Dv9r0aIfS

- Debra, R. 2010 "Prioritising climate change adaptation and local level resilience in Durban, South Africa." *Environment and Urbanisation* 22 (2): 397-413. Available online at: http://eau. sagepub.com/content/22/2/397
- Department of Agriculture. 2002 *The integrated food security strategy-South Africa*. Available at www.nda.agric.za/doaDev/sideMenu/ foodSecurity/policies.pdf
- Department of environmental affairs- Republic of South Africa. 2013 "Youth Jobs in Waste programme." Available at https://www. environment.gov.za/projectsprogrammes/youthjobs\_inwaste
- Department of Trade and Industry. 2011 *Industrial Policy Action Plan 2011/12-2013/14: Economic sectors and employment cluster* (Department of Trade and Industry). Available at https://www. environment.gov.za/sites/default/files/docs/ipap.pdf
- Dilling, L. and Lemos, M. C. 2011 "Creating usable science: Opportunities and constraints for climate knowledge use and their implications for science policy." *Global Environmental Change* 21: 680-689.
- Dube, S., Scholes, R. J., Nelson, G. C., Masin-D'Croz, D. and Palazzo, A. 2013 South African Food Security and Climate Change: Agriculture Futures (Discussion Paper). Available at http://www. economics-ejournal.org/economics/discussionpapers/2013-12
- Durning, A. 1990 *Apartheid's Environmental Toll*. Worldwatch Institute Paper 95. Available at http://www.rci.rutgers. edu/~hallman/PDF/Apartheid2.pdf
- Durrheim, K. 2011 "Race Trouble: Race, Identity, and Inequality in Post-Apartheid South Africa." *Theory and Psychology* 22: 5.
- Empson, M. 2010 "British trade unionists demand One Million Climate Jobs." Available at http://climateandcapitalism.com/2010/11/07/ british-militants-demand-one-million-climate-jobs/
- European Commission. 2005 *Doing more with less. Green paper on energy efficiency.* Available at http://ec.europa.eu/energy/ efficiency/doc/2005\_06\_green\_paper\_book\_en.pdf
- 2012 "Waste- A short cut to job creation and lower costs." Available at http://europa.eu/rapid/press-release\_IP-12-18\_ en.htm?locale=en
- European Federation of Public Service Unions. 2015. "Climate change, Just Transition and Jobs." Available at: http://epsu.org/a/11643
- European Trade Union Institute. 2009 *Benchmarking Working Europe* 2009 (Brussels: ITUI).

- Evans, G. 2008 *A just transition*. Available at http://cpd.org.au/article/ a-just-transition
- Fails, L. 2011 "Ecological Restoration." Available at http:// climatejobs.org.za/download/research/campaign\_research/ Ecological%20Restoration%20by%20Laura%20Fails.pdf
- Fay, M., Hallegatte, S., Vogt-Schilb, A., Rozenberg, J., Narloch, U. and Kerr, T. 2015 *Decarbonising Development: Three Steps to a Zero-Carbon Future* (Washington DC: Climate Change and Development Series. International Bank for Reconstruction and Development / the World Bank). Available at: www.worldbank. org/decarbonizingdevelopment
- Fraser, N. 1995 "From redistribution to recognition? Dilemmas of justice in a 'Post-Socialist' age." *New Left Review* I (212): 68-93.
- 2005 "Reframing justice in a globalising world." New Left Review II (36): 69-88.
- Frayne, B., Battersby-Lennard, J., Fincham, R. and Haysom, G. 2009 Urban Food Security in South Africa: Case study of Cape Town, Msunduzi and Johannesburg. Development Planning Division Working Paper Series No.15 (Midrand: DBSA).
- Goldmark, P. 2013 "Goldmark: Unemployment and climate change both addressed by one plan." Available at: http://www.newsday. com/opinion/columnists/peter-goldmark/unemploymentand-climate-change-both-addressed-by-one-plan-petergoldmark-1.5380734
- Gough, J. 2010 "Workers' strategies to secure jobs, their uses of scale, and competing economic moralities: Rethinking the 'geography of justice'." *Political Geography* 29: 130-139.
- Gumede, W. 2005 *Thabo Mbeki & the Battle for the Soul of the ANC* (Johannesburg: Zebra Press).
- Halstead, J. 1994 "Waste management and job creation." Available at https://www.aae.wisc.edu/pubs/cenews/docs/ce215.pdf
- Harlan, S. L., Pellow, D. N., Timmons, R., Shannon, E. B., William, G. H. and Nagel, J. 2015 "Climate Justice and Inequality" in Dunlap, R. E. and Brulle, R. J. (eds.) *Climate change and Society: Sociological perspectives* (New York: Oxford University Press).
  Pp. 127-163. |accessdate= requires |url= (help)Hawkins, T. 1994 "Calmer Waters of National Consensus." *Financial Mail.* July 18, 1994. Available at: http://ggjalliance.org/sites/default/files/Bond%20Durban's%20Climate%20Gamble%20UNISA%20Press. pdf
- Hunter-Gault. 2006 *New news out of Africa* (Oxford: Oxford University Press).

- ILO and UNEP. 2012 Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy (Geneva: ILO).
- International Journal of Labour Research. 2010 *Climate change and labour: The need for a just transition* (Geneva: International Labour Office). Available at http://www.ilo.org/wcmsp5/groups/public/@ed\_dialogue/@actrav/documents/publication/wcms\_153352.pdf
- International Labour Organisation. 2012 "Global Employment Trends 2012: World faces a 600 million jobs challenge." Available at: http://www.ilo.org/global/about-the-ilo/newsroom/news/ WCMS\_171700/lang-en/index.htm
- 2014 Climate Change and Employment: Challenges and Opportunities in the Caribbean: Background document for the tripartite meeting on "Decent Work, Climate Change and Sustainable Development." Available at http://www.ilo.org/ wcmsp5/groups/public/---americas/---ro-lima/---sro-port\_of\_ spain/documents/meetingdocument/wcms\_312150.pdf
- ITF Climate Change Working Group in collaboration with Lara Skinner and Sean Sweeney, Cornell Global Labour Institute (eds.) 2010 *Transport workers and climate change: Towards sustainable, low carbon mobility* (London: International Transport Workers' Federation (ITF).
- Kenfack, C. E. 2013 "Perspectives pour une climatopolitique anthropocentrée" in Organisation Internationale de la Francophonie. *Enjeux environnementaux et économiques face* à la gouvernance mondiale (Yaoundé: Col. Regards croisés. Les Presses universitaires de Yaoundé).
- 2015 "Changements climatiques et droits humains fondamentaux : vers une climatopolitique anthropocentrée" in Mahktar Kante,
  A. (dir.) *Environnement, changement climatique et sécurité alimentaire en Afrique de l'Ouest et du Centre : compréhension des enjeux et pistes pour l'avenir* (Codesria). Pp. 37-64.
- Khathi, M. G. 2001 Investigating the Potential for Job Creation in the Tourism Industry with particular reference to Disadvantaged Communities. EPRI Research Paper 13.
- Kumar, S. 2014 "Integrating the 'Just Transition' into Europe's industrial, climate and energy framework." Available at http:// www.changepartnership.org/wp-content/uploads/2015/03/ Integrating-the-Just-Transition1.pdf
- Leibbrand, M., Finn, A. and Woolard, I. 2012 "Describing and decomposing post-apartheid income inequality in South Africa." *Development in Southern Africa* 1 (29): 19-34. doi:10.1080/0376835x.2012.645639

- Lemos, M. C., Morehouse, B., 2005 "The co-production of science and policy in integrated climate assessments." *Global Environmental Change* 15: 57-68.
- Lubber, M. 2015 "Citi's \$100 Billion Downpayment On Clean Energy Future." Available at http://www.ceres.org/press/blog-posts/citis-100-billion-downpayment-on-clean-energy-future

MacVicar, C. N. 1974 "Concerning the meaning of potential in agriculture." South African Journal of Agriculture Extension 3: 1-4.

Maharjan, S. K., Carling, J. and Sherpa, L. N. 2012 Training manual on free, prior and informed consent (FPIC) in REDD+ for indigenous peoples (Chiang Mai: Asia Indigenous Peoples Pact (AIPP) and International Work Group for Indigenous Affairs (IWGIA). AIPP Printing Press Co., Ltd.).

Martinez-Alier, J. 2012 *The Environmentalism of the poor. A study of ecological conflicts and evaluation* (Northampton: Edward Elgar).

Mbeki, G. *1694. South Africa: The Peasants' Revolt.* Available at http://www.anc.org.za/show.php?id=4489

Melville, N. 2004 *From Apartheid to Zaamheid* (Onrus River: Aardvark Press Publishing).

National Research Council. 2009a *Informing Decisions in a Changing Climate- Panel on Strategies and Methods for Climate-related Decision Support* (Washington DC: National Research Council).

— 2009b Restructuring Federal Climate Research to Meet the Challenges of Climate Change (Washington DC: National Research Council).

Netshitenzhe, J. 2012 "The state of the South African State." Available at http://www.wolpetrust.org.za/lectures/2012/thestate.pdf

- O'Driscoll, D. 2011 "Airbrushing in Just Transition." Available at http://notesfrombelow.wordpress.com/2011/05/19/airbrushing-in-just-transition/
- Olsen, L. 2010 "Supporting a just transition: The role of international labour standards." *Climate change and labour: The need for a "just transition", International Journal of Labour Research* 2 (2) (Geneva: International Labour Office).

O'Malley, P. 1994 "After Apartheid." Boston Globe, May 8, 1994.

One Million Climate Jobs Campaign. 2011a "Concept Note One Million Climate Jobs Research and advocacy project for one million State led climate jobs." *One Million Climate Jobs Workshop: Seminar report*, March 18, 2011 (Cape Town: AIDC Solidarity Centre).

- 2011b One Million Climate Jobs: A just transition to a low carbon economy to combat unemployment and climate change. Available at: http://womin.org.za/images/the-alternatives/fightingdestructive-extractivism/One%20Million%20Climate%20Jobs.pdf
- 2011c One Million Climate Jobs Campaign Seminar Report, March 18, 2011. Available at: http://climatejobs.org.za/download/ research/general/Climate%20Jobs%20March%20Workshop%20 2011.pdf
- Patz, J. A., Campbell-Lendrum, D., Holloway, T. and Foley, J. A. 2005 "Impact of regional climate change on human health." *Nature* 438: 310-317.
- Pope Francis. 2015 Laudato Si. [Encyclical Letter on care for Our Common Home.] (Libreria Editrice Vaticana). Available at: http://w2.vatican.va/content/francesco/pt/encyclicals/documents/ papa-francesco\_20150524\_enciclica-laudato-si.html
- Portuguese Bishops' Conference. 2003 *Responsabilidade Solidária pelo Bem Comum* (Pastoral Letter). Available at: http://www. agencia.ecclesia.pt/noticias/documentos/responsabilidadesolidaria-pelo-bem-comum/
- Poushter, J. 2014 "Inequality, joblessness are top threats in 2015, World Economic Forum experts say." Available at http://reports. weforum.org/outlook-global-agenda-2015/top-10-trends-of-2015/2-persistent-jobless-growth/
- Ramphele, M. 2003 "South Africa: ten years on—a view from across the Atlantic" (Legal Resources Centre). Available at www.lrc. co.za/Articles/Articles\_Detail.asp?art\_ID=74
- Räthzel, N. and Uzzell, D. (eds.) 2013 *Trade unions in the green economy: Working for the Environment* (London: Earthscan).
- Reiss, J. 2005 "Social Movement Unionism and Progressive Public Policy in New York City" in *Just Labour* 5: 36-48.
- Republic of Argentina Submission for the AWG-LCA, April 2009. Available at http://unfccc.int/files/meetings/ad\_hoc\_working\_ groups/lca/application/pdf/argentina240409.pdf
- Republic of Argentina. 2006 "Global Climate Change strategies for sustainability of labour in a changing world." Argentina Statement. Nairobi. January 2006. Available at: http://www.ambiente.gov.ar/archivos/web/trabajo/file/ Herramientas2020comunicados/C.pdf
- Rudin, J. 2011 Climate Change Impact Assessment. Available at http:// climatejobs.org.za/download/research/campaign\_research/ Climate%20Change%20Impact%20Assessment%20by%20 Jeff%20Rudin-1.pdf

- Sachs, J. 2014 "The Challenge of Deep Decarbonisation." Available at: http://unsdsn.org/news/2014/01/23/the-challenge-of-deepdecarbonisation/
- Sanders, D. and Reynolds, L. 2011 "Health System Contribution To Greenhouse Gas Emissions and Jobs." Available at http://climatejobs. org.za/download/research/campaign\_research/Health%20System%20 Contribution%20To%20Greenhouse%20Gas%20Emissions%20 And%20Jobs%20by%20Sanders%20and%20Reynolds.pdf
- Santos, B. S. 2012 "Public sphere and epistemologies of the South." *Africa development* XXXVII (1): 43-67.
- 2013 "Alternatives the egg of Columbus in search of author." Public presentation of the first report of the Observatory for Crisis and Alternatives. Held on December 11, 2013 at the Gulbenkian Foundation in Lisbon. Available at http://alice.ces. uc.pt/en/index.php/portugal/alternatives-the-egg-of-columbus-insearchof-author/#sthash.Huwdlhwh.dpuf
- Schneider, D. K. 2007 *Méthodes qualitatives en sciences sociales: Petite introduction aux méthodes qualitatives*. Available at http://tecfa.unige.ch/guides/methodo/quali/quali.book.pdf
- School of International Development. 2014 "Environment, Development and Justice." Available at http://www.devstud.org. uk/environment\_development\_and\_justice-129.html
- Statistic South Africa. 2016 Quarterly Labour Force Survey, Quarter 4. Available at http://www.statssa.gov.za/publications/P0211/ P02114thQuarter2015.pdf
- Stevis, D. and Felli, R. 2014 "Global labour unions and just transition to a green economy." *Internal Environmental Agreements: Politics, Law and Economics* 14: 4.
- Stubbs, A. (ed.) 1987 *Steve Biko 1978-77- I Write What I Like* (Oxford: Heinemann). *Also* available at http://abahlali.org/files/Biko.pdf
- Summers, L. 2014 "Persistent jobless growth", Available at http:// reports.weforum.org/outlook-global-agenda-2015/wp-content/ blogs.dir/59/mp/files/pages/files/trend-2.pdf
- Sustainlabour and UNEP. 2008 Climate Change, its Consequences on Employment and Trade Union Action. A training Manual for Workers and Trade Unions (Madrid: Sustainlabour).
- Sustainlabour. 2011 "The Madrid Dialogue took off." Available at http://www.sustainlabour.org/infocus/PressRelease\_18.04.2011.pdf
- Tattersall, A. 2005 "There is power in coalition: a framework for assessing how and when union-community coalitions are effective and enhance union power." *Labour and Industry* 16: 97-112.

- The Appalachia Funders Network and the Rockefeller Family Fund. 2015 "The Just Transition Fund." Available at http://www. appalachiafunders.org/wp-content/uploads/2015/06/JTF-Grants-Summary-August-2015.pdf
- The Economist. 2012 "Race in South Africa: Still an Issue." *The Economist*. February 4, 2012. Available at http://www.economist. com/node/21546062
- The Republic of South Africa, Office of the Presidency. 2010 *The New Growth Path*. Available at http://www.economic.gov.za/ communications/publications/new-growth-path-series
- Tshekeisho Plaatje, S. 1916 *Native Life in South Africa: Before and Since the European War and the Boer Rebellion*. Available at http://www.sahistory.org.za/sites/default/files/Native%20Life%20 in%20South%20Africa\_0.pdf
- TUC and Allan, S. 2008 A Green and Fair Future: For a Just Transition to a Low Carbon Economy. TUC Pamphlet 3. Available at http:// www.tuc.org.uk/economic-issues/touchstone-pamphlets/socialissues/environment/green-and-fair-future-just-transition?themea a=touchstone&theme=touchstone
- UNEP-ILO-IOE-ITUC. 2008 Green Jobs: Towards decent work in a sustainable, low-carbon world. Report commissioned and funded by UNEP as part of the joint UNEP- ILO- IOE- ITUC Green Jobs Initiative. Available at http://www.unep.org/PDF/ UNEPGreenjobs\_report08.pdf
- UNEP. 2008 Payments for Ecosystem Services Getting Started: A Primer. Available at http://www.unep.org/pdf/ PaymentsForEcosystemServices\_en.pdf
- 2011 "Towards a green economy: Pathways to sustainable development and poverty eradication: A synthesis for policy makers." Available at http://www.unep.org/greeneconomy/ Portals/88/documents/ger/GER\_synthesis\_en.pdf
- UNFCCC. "United Nations Framework Convention on Climate Change." Available at www.unfccc.int/essential\_background/ convention/background /items/2853.php
- United Federation of Danish Workers 3F. 2009 *Green jobs* (*Copenhagen*). Available at http://www.unep.org/labour\_ environment/pdfs/unep-labour-env-synergy.pdf
- United Nations Conference on Environment and Development. 1992 *Rio Declaration on Environment and Development*. Available at http://www.un.org/documents/ga/conf151/ aconf15126-1annex1.htm

- United Nations Environment Program, World Health Organisation, International Labour Organisation. 2007 Labour and the Environment: A Natural Synergy. Available at www.unep.org/ labour\_environment/PDFs/UNEP-labour-envsynergy.pdf
- United Nations Framework Convention On climate Change (UNFCCC). 2009 *FCCC/AWGLCA/2009/8*. Document prepared by the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA).
- Unites Nations. 2015 *The Millennium Development Goals Report 2015* (New York: United Nations). Available at: http://www.un.org/ millenniumgoals/2015\_MDG\_Report/pdf/MDG%202015%20 rev%20(July%201).pdf
- Valentin, J. M. 2009 "Copenhague, capitale de la terre: émergence de la climatopolitique." In Martelly, S. and Lacarrière, S. (dir.) Sommet de Copenhague: quand le climat devient stratégique. Available at http://www.affaires-stratégiques.info
- Varela, G. A. 2006 "Address By Guillermo Andres Varela, Coordinator Subsecretaria de Planificacion Ordenamiento y Calidad Ambiental, Republica Argentina 17 January 2006." Available at http://www.ambiente.gov.ar/archivos/web/trabajo/File/WILL%20 2006/speech\_guillermo.pdf
- Vidal, J. 2009 "Global warming causes 300,000 deaths a year, says Kofi Annan thinktank." *The Gaurdian*. Available at: http://www. guardian.co.uk/environment/2009/may/29/1
- Waldermeir, P. and Michael, H. 1994 Financial Mail, July 18, 1994.
- Wallis, V. 2010 "Beyond green capitalism." Monthly Review: An Independent Socialist Magazine 61 (09). February 2010. Available at http://monthlyreview.org/2010/02/01/beyond-green-capitalism/
- Weiss, C. H. "Improving the linkage between social research and public policy" in Lynn. L. E. (ed.) 1978 *Knowledge and Policy: The Uncertain Connection* (Washington DC: National Academy of Sciences).
- Winkle, H. and Marquand, A. 2009 "Changing development paths: From an energy-intensive to low-carbon economy in South Africa." *Climate and Development* 1: 47-65 (South Africa: Energy Research Centre. University of Cape Town). Available in www. earthscanjournals.com
- World Health Organisation. 2002 "Climate change." Available at http://www.who.int/heli/risks/climate/climatechange/en/
- World Tourism Organisation and the United Nations Environment Programme. 2008 *Climate Change and Tourism—Responding to Global Challenges* (Madrid: World Tourism Organisation). Available at http://sdt.unwto.org/sites/all/files/docpdf/climate2008.pdf

- Zegeye, A. (ed.) 2001 Special identities in the New South Africa, After Apartheid – Volume One (San Bernardino: International Academy Publishing).
- Zero Waste creates many JOBS!" Available at http://www. zerowasteeurope.eu/2012/01/zero-waste-creates-many-jobs/

#### **CONSULTED WEBSITES:**

http://climatejobs.org.za/climate-change-adaptation-and-the-role-of-women-24-july-2014/

http://climatejobs.org.za/index.php/about

http://climatejobs.org.za/one-million-climate-jobs-brainstormclimate-change-and-health/

http://climatejobs.org.za/renewable-energy-festival-7-december-2013/

http://climatejobs.org.za/safe-green-sustainable-south-africa-schools/

http://en.wikipedia.org/wiki/Just\_Transition

http://links.org.au/node/2676

http://www.aidc.org.za/media-room/press-releases/40-one-milllionclimate-jobs-press-statement

http://www.businessdictionary.com/definition/manufacturing.html http://www.southafrica.info/business/trends/empowerment/bee.

htm#objectives

https://en.wikipedia.org/wiki/Campaign\_against\_Climate\_Change https://en.wikipedia.org/wiki/Manufacturing

### ANNEXES

### **ANNEX 1**

#### **QUESTIONNAIRE GUIDE FOR THE RESEARCH**

- 1. How can the One Million Climate Jobs Campaign (OMCJC) be presented in very few words?
- 2. How did the idea of the OMCJC of South Africa emerge?
- 3. What is the originality of the OMCJC of South Africa?
- 4. What are the main activities and actions of the OMCJC?
- 5. What are the main goals of the campaign?
- 6. What are its main actors of the campaign?
- 7. What are the main interests of the actors? (Financial, strategic, cultural, defence of human rights, Workers' rights, environmental protection, environmental valuation and commodification...)
- 8. How was the campaign structurally organised?
- 9. How is networking built and maintained within the OMCJC?
- 10. What are the main strategies of (influential mechanisms put in place by) the campaign? (In terms of communication, influential networking, social movements and gatherings, Lobbying...)

- 11. What have so far been the main successes of the campaign?
- 12. What are the main difficulties faced by the OMCJC both in South Africa and in the global context?
- 13. What is the role of the campaign within the UNFCCC negotiations framework?
- 14. How do you foresee the future of the campaign?
- 15. How does the "One million climate Job campaign" relate to the "just transition to a low-carbon economy" in South Africa?

### ANNEX 2

#### PEOPLE INTERVIEWED DURING THE RESEARCH

- 1. Bells TWANE Progress Youth Movement (based at AIDC) mabhelandile@aidc.org.za
- 2. Gray MAGUIRE Project 90 by 20 graymaguire@gmail.com
- 3. Happy KHAMBULE Project 90 by 20 happy@90x2030.org.za
- 4. James IRLAM Public Health, University of Cape Town james. irlam@uct.ac.za
- 5. Jessica WILSON Environment Monitoring Group jessica@ emg.org.za
- 6. Louis NAUDE World Wildlife Fund (closely involved with the Campaign) lnaude@wwf.org.za
- 7. Louis REYNOLDS People's Health Movement (closely involved with the Campaign) thembeka@aidc.org.za
- 8. Rachel NASH Environmental Coordinator, Anglican Church of Southern Africa rmash@mweb.co.za
- Sandra VAN NIEKERK until last year, the One Million Climate Jobs Campaign convenor - based at AIDC. sandra@climatejobs.org.za
- 10. Shanda PASCOE Democracy from Below shanda.pascoe20@ gmail.com
- 11. Thabang NGCOZELA Environment Monitoring Group thabang@emg.org.za
- 12. Thembeka MAJI current AIDC's convenor for climate jobs mobilisation thembeka@aidc.org.za

- 13. Vuyiseka MAJALI SouthSouthNorth vuyiseka@southsouthnorth.org
- 14. Timbela ZAMA Progress Youth Movement (based at AIDC) zama@aidc.org.za

#### PROGRAMA SUR-SUR

The world in which we currently live is characterised by a multiplicity of challenges that we must face with urgency if we want to avoid future catastrophes. Those challenges, because of the globalisation of systems, have also become global challenges, and need global responses. One of the most important of those challenges faced by the current global community remains the environmental crisis, and more specifically the climate crisis also known as global warming. Most scientists, non-sovereign actors and policy makers are convinced that the salvation of our world definitely depends on urgent and strong actions aimed at reducing the emission of Greenhouse gases and therefore limiting climate change (Mitigation). Moreover, such actions should put in place mechanisms and policies aimed at reducing the impacts of the already occurred climate change on environmental, human and socio-political systems (Adaptation). Bevond this challenge of global concern, there is also the global challenge of unemployment enhanced by the financial and economic crisis as well as the lack of alternative employment policies in a changing environment. These two challenges are important threats not only to the world security, but above all to the sustainable development in general and development in the global South in particular.







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