

2015

Strengthening the skills pipeline
for environmental sustainability



Summit Report

30 March 2015

Lead sponsors of NESS 2015:





Acknowledgements

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Contents

Contents

1. Introduction.....	4
1.1. Overview.....	4
1.2. Attendance	5
1.3. History	6
1.4. Purpose	7
2. Programme & Outcomes.....	9
1.5. Opening Address & Panel Discussion.....	10
1.6. Progress Updates	12
1.7. Parallel Session 1: Mentoring and WIL Forum	14
1.8. Parallel Session 2: Resource Mobilisation	16
1.9. Parallel Session 3: Role of Local Government	18
1.10. Parallel Session 4: Fundisa for Change Research Symposium	19
1.11. Parallel Session 5: Green Skills Research.....	21
1.12. Parallel Session 6: Green Career Guidance	23
3. Evaluation.....	25
4. Recommendations	30
1.13. Conclusions.....	30
1.14. Summary Actions to Take Forward.....	31

Introduction

1. Introduction

1.1. Overview

The third National Environmental Skills Summit (NESS 2015) took place on 3-5 March 2015 in Midrand at the Vulindlela Academy of the Development Bank of Southern Africa (DBSA). The event was organised by a Committee consisting mostly of volunteers under the auspices of the National Environmental Skills Planning Forum. Hosting the Summit were the following partners:

- Department of Environmental Affairs (DEA)
- Department of Science and Technology (DST)
- GreenMatter and SANBI, and
- The GreenFund at the DBSA.



The feedback received both during the event and in a post-event online survey, was overwhelmingly positive. Examples of recorded comments are:

- *A great event - well done!*
- *It was excellent, splendid.*
- *I had a great learning experience.*
- *Great overall experience.*
- *Very helpful indeed.*
- *I thoroughly enjoyed [the day I attended] and only wish I had had time and a mechanism to get up to speed with what had happened on Days 1 and 2. I should have been following the tweets and the presentations as they were uploaded.*

This report will share more detailed feedback including suggestions for improvement (Sections 3 and 4) and the details of the session outcomes (Section 2) as well as a summary of actions identified (Section 4). In keeping with previous Summits, the outcomes and intended follow up actions will require the involvement of the role players in the sector. DEA's Sector Education, Training and Development directorate has offered to take up the intended actions in its 2015-2016 workplan, in order to support partners in their achievement.

1.2. Attendance



Over the course of the three days, 155 delegates attended NESS 2015. In comparison to previous Summits, the attendance was smaller (restricted by the venue size but also affected by a large number of registered individuals not attending on the day). However, the representation reflected a growing relevance in terms of the objectives of NESS. That is, NESS is increasingly being attended by individuals in positions allowing them to make decisions about and take up the Summit outcomes.

Although some working sessions missed key agencies in particular SETAs, there was generally a good spread of delegates from government agencies such as DEA (several branches), DST and DHET including the National Skills Fund; parastatals (such as SANBI and SANParks); local governments from the Eastern Cape, Free State, Mpumalanga and elsewhere, and provincial agencies including environment and educational authorities from Gauteng, Limpopo, North West, Northern Cape and KZN. The Endangered Wildlife Trust, Wildlands, Dusi uMngeni Conservation Trust (DUCT) and Delta Education were among the



participating NGOs and CBOs. Ten universities were among the participating education providers, and the Sector Education and Training Authorities present included the Mining Qualifications Authority (MQA), CATHSSETA and Local Government (LGSETA). A small number of donors participated, including GIZ and the Lewis Foundation, and professional bodies included the Association for Impact Assessment. Business and industry participated (e.g. Woolworths, Exxaro) along with organised labour (COSATU) and several consulting firms, start-ups and entrepreneurs in the fields of education, environment and employment creation, as well as post-graduate students and interns. From the international community the International Labour Organization (ILO) made a well-received input.

Before reporting on the outcomes of NESS 2015, it is useful to review the history and purpose of the event.

1.3. History

In 2010, South Africa produced a number of human capital development strategies to address the need for environmental skills. These included the Environmental Sector Skills Plan (DEA), the National Biodiversity Human Capital Development Strategy (SANBI) and the Global Change Grand Challenge HCD Strategy (DST), as well as several skills strategies in the water sector. The agencies implementing these and other skills strategies (such as the Waste Innovation Road Map) saw the need for a national mechanism to bring together relevant parties across sectors and spheres of society, to inform, support and ensure implementation, and regularly review progress, in what is still an emerging and uncoordinated field of practice. The idea of a Summit was adopted, as a platform for looking back and celebrating progress, and for looking ahead at remaining challenges and identifying mechanisms and partners to address them.

The first National Environmental Skills Summit (NESS) took place in March 2011 at the Innovation Hub in Pretoria. Attended by 180 delegates, it addressed 8 topics viz: Promoting the sector; green jobs; workplace skills planning; environmental education; the nature of the skills supply; graduate learners and recent graduates; transformation; and the monitoring and evaluation of HCD strategies. A key outcome was a challenge to the environmental sector to create more opportunities for environmental work. As a direct result of this



challenge, the *Groen Sebenza* Jobs Fund project was initiated and subsequently created employment for more than 900 graduates and matriculants in biodiversity related jobs.

October 2012 saw the Indaba Conference Centre in Johannesburg hosting 230 delegates for NESS 2012. The event reviewed progress and further identified actions and partners to tackle challenges. Several task teams were established, one of which was to explore how FET Colleges can skill more young people to take up new, entry level environmental jobs. Another group was tasked to create more and better opportunities for students who need placements for a compulsory experiential or Work Integrated Learning year, and to better communicate available opportunities to students and staff. The lack of adequate mentoring was discussed and a system of national and regional working groups was established to better equip existing and new mentors. Delegates also signed up to join existing and new initiatives with a focus on human resources (HR) and organisational development for the environmental sector; to form a community of practice for environmental HCD research (under the leadership of Rhodes University); and to contribute to an ongoing conversation on leadership for sustainability.

The National Environmental Skills Planning Forum was asked to take on an oversight role for the actions arising from NESS; to grow and expand its mandate as appropriate; and to explore ways in which to achieve greater organisation and professionalisation in the sector, without affecting the sector's diversity and strengths. Finally, it was agreed that the discussion on unlocking the demand for green jobs that was started at NESS 2012, needed to be taken further, and the session leads were asked to submit a proposal in this regard to the Forum, with a view to involving other sectors, wider participation and a greater focus on solutions.

1.4. Purpose

The aims of an Environmental Skills Summit are to:

- Exchange information regarding human capital development;
- Lobby the national skills planning system and structures and other agencies that provide opportunities for skills development;



- Obtain synergy and co-ordination, e.g. between higher education and the workplace, and between different human capital development (HCD) processes;
- Identify and deliberate as a sector how to address HCD related problems and challenges;
- Showcase successes, and
- Contribute to the review and ongoing development of HCD strategies.

In reviewing the outcomes of NESS 2015, these aims have to be kept in mind. The reader will note how issues introduced in 2011 and 2012, and actions set in motion, have been taken forward, or not, by NESS 2015.

"Investment in skills, technology and institutional capacity is critical to support the development of a more sustainable society and the transition to a low-carbon economy. Focused, institutionalised capacity building and management structures are needed."

(National Development Plan, 2013)

Programme & Outcomes



2. Programme & Outcomes

The programme for NESS 2015 was based on a careful consideration of the outcomes of past Summits and the work that the various task teams and working groups had been undertaking since then, in order to ensure that these Forums are not just talk-shops, but valuable opportunities to practically advance the field.

A spread of organisations that would reflect the diversity of fields and organisations in the environmental sector were asked to report on their progress since NESS 2012. An effort was made to bring in the business community, which had not participated extensively in previous Summits. The working sessions chosen for the programme were based on initiatives that had started at previous Summits, with the exception of the career guidance session, which was introduced in response to a gap identified in 2012. The ongoing 'green jobs' conversation was taken further in the round table discussion and in several other sessions, in particular the session on the role of local government.

1.5. Opening Address & Panel Discussion

The opening address was presented by the CEO of SANBI, Tanya Abrahamse, who was asked at short notice to stand in for the Minister of Environmental Affairs. Dr Abrahamse reflected that while the landscape involving environmental skills planning was complex and technical, NESS is ultimately about people - people who need confidence that they can get decent work in the environmental sector. It is about “making the case for environmental skills [because] skilling our people, is the gold that will help us survive as a planet”. The environmental sector was critically important; it has the potential to overcome the crippling, unjust and dangerous inequality in South Africa. The challenge in the sector is a supply-demand misalignment – “we simply cannot join the dots”. In closing her address, Dr Abrahamse quoted Mandela who said that the task “seems impossible, until it is done”.



The Panel discussion on Day 1 was facilitated by professional facilitator and capacity development specialist Dumisani Magadlala of the DBSA who also quoted Madiba in saying to delegates: “It is in your hands!” Titled ***Voices of Youth, Voices of Hope***, the panel featured young professionals Shanna Nienaber (DST), Anelile Gibixego (Jeffares and Green) and *Groen Sebenza* intern Yonela Ciliwe (WWF-SA), speaking about their work and what a green job means to them and to the country. They were joined by thought leaders Khwezi Mabasa (Cosatu), Thando Daryl Mclean (independent) and Charity Mbileni (NM Envirotech Solutions) who gave their views on how South Africa can create more such green jobs.

Dr Mbileni shared her own experience as green entrepreneur and facilitator of green business establishment in rural and township communities through the Climate Change

Incubator at the Innovation Hub. Mabasa challenged delegates to think of the green economy not as outside the mainstream economy, but as a complete overhaul of the existing economy, in order to address both inequality and environmental degradation in an integrated manner. He advised environmentalists to be relevant by speaking to the basic nexus of water-energy-food. He saw the expansion of renewable energy while emphasizing social ownership and youth cooperatives as a key job creation strategy; “If we produce 50% of our energy from renewable energy we can create 500,000 jobs”; promoting small-scale organic farming can create 20,000 jobs, and so on.

Focusing on the state, Mclean in turn proposed that jobs can be created if state departments carefully unpack the environmental dimensions of their respective mandates, and then adequately provide the human resources and budgets to deliver on these mandates. He called for an inter-governmental forum that includes Treasury, DCOG and DEA, to start this process of helping state entities unpack their environmental mandates, put in place the necessary staff with appropriate job descriptions, and fund these positions.



Delegates had an opportunity to join the conversation. An interesting question to the young professionals was whether they had done anything to share the benefits of their green work, with communities back home. Ciliwe gave examples of Math and Science education and career guidance that she and other interns were bringing to township learners in the Western Cape, and Nienaber spoke of volunteering as Chair of the Young Water Professionals Network.

Delegates raised the fact of the unemployed youth who were not on the panel, and the discussions provided an inspiring and sobering note on which to consider how important the deliberations and outcomes of the Summit were.



Points and recommendations made in the plenary discussions included:

- The debate about supply and demand has moved on – we now think we have both skills and demand, and the challenge lies in bringing them together. The environmental sector has few if any demand side strategies, it is better on the supply side.
- We need to consider the role of power and that demand might be unlocked not only by focusing on economics, but also on issues of society and equality.
- Stronger consideration is needed for SMMEs and non-graduates.
- SETAs are slowly moving to include environmental skills in their SSPs, but the extent to which this is happening in actual training is minimal because Annual Performance Plans are approved through Boards where environment is not represented.
- There is a need for more speed in these deliberations, and DEA has a big role to drive awareness and ensure that this conversation reaches all the corners of the country.
- The power issues need to be addressed through people taking leadership. Leadership development is important, but as organic leaders.
- Consider the ways in which the sector communicates and promotes itself. Tackle one story and publicise it extensively; also scale up initiatives. For example, mining at Lephalale in Limpopo can be used as a case study of green skills and jobs.

1.6. Progress Updates

Over the course of the three days, 10 national entities had an opportunity to reflect on their progress in implementation. The DST presented progress made in the development and implementation of the national Waste and Water Innovation Road maps: The latter was in the process of being reviewed by the Department of Water and Sanitation, and the first students were enrolled for new courses developed as part of the Waste Innovation Road Map. A remaining challenge was the inadequate amount of Research and Development (R&D) spend in the country, including reduced R&D spend by the private sector.

The Cleaner Production Centre shared news of two energy efficiency qualifications being developed for the manufacturing industry in particular, and the challenge of setting up a body to help ensure standards, quality and comprehensive coverage in the emerging field. Delegates received a taste of developments at universities, through a presentation on the extensive range of environmental courses offered at UNISA, and the practical sustainability actions being undertaken on the campus.



Business is another stakeholder who has embarked on a journey towards sustainability and a business analysis reported on the progress that one company, Woolworths, has made in this regard. She reflected not only on green skills development for suppliers like small scale organic farmers, but also on the multi-disciplinary skills required by the business professional working in this field.

DEA reported on the considerable number of projects that have been initiated with the support of the Green Fund through the DBSA since this mechanism to drive skills for the green economy has been set up by government. While the expenditure and the number of projects being supported was impressive, delegates also had some probing questions on the choice and spread of projects being supported.

Progress achieved by the Wildlife and Environment Society (WESSA) in partnership with the LGSETA showed that there is growing interest among local government officials and staff in strengthening environmental skills linked to service delivery, and demonstrated the value of longer-term partnerships between sector organisations and SETAs. GreenMatter and SANBI reported on their progress in developing skills for biodiversity, including the Fellowship programme which has supported more than 60 emerging and established professionals since 2012; the production of a Human Resource Development Toolkit; new career guidance initiatives; the training of 206 teachers in the *Fundisa* programme; employment of 900+ pioneers in 44 organisations with 400 mentors in *Groen Sebenza*; as well as the challenge of *Groen Sebenza* pioneers who have not yet been appointed in permanent positions. In another update, progress in the studies in Rhodes University's green skills research programme with CATHSSETA was shared, as well as a pioneering study to identify green skills for Mining, by Rhodes and the MQA.





Partnerships emerged as a key ingredient in much of the progress reported, and this was also the case in the launch of the Biodiversity and Water Entrepreneurship Initiative at an evening function, featuring partners DST, GreenMatter and SANBI among others.

Other outcomes from plenary discussions include:

- Training innovations demonstrated including the use of power mapping, which helped organisations like WESSA to be more strategic in their training; and the value of sharing, showcasing and publishing stories of change.
- A growing alignment between needs and responses; conference chair Sibusiso Manzini demonstrated this by comparing needs identified by DST, and the initiatives introduced in the implementation of the Biodiversity Human Capital Development Strategy.
- A high level partnership possibility emerging is that between the NRF, DST, GreenMatter and DHET, and Dr Manzini proposed a task team meeting of representatives of these agencies, to explore how to implement it.
- An increase in the scale, scope and momentum of green skills planning and development since the 2012 Summit, pointing to the need for more regular Summits, to more adequately reflect, track and benefit this work.

1.7. Parallel Session 1: Mentoring and WIL Forum

A mentoring and work integrated learning (WIL) initiative was launched at NESS 2012, under the leadership of WWF-SA and within the GreenMatter programme. It aims to improve the availability and quality of WIL placements for students in biodiversity. This session was the second National WIL Forum held as part of this initiative. A Summary Report: Strengthening WIL- from 2013 to 2015 was presented by Dr Joseph Kioko of the Cape Peninsula University of Technology of the Project Management Committee on behalf of the project lead, Dr Glenda Raven. Additionally, three sector mentors shared progress made with the strengthening of mentoring capacity: A new course for mentor trainers has been developed and trialled, to equip course participants to run mentoring training in their own or others' organisations. Delegates were invited to participate in deliberations to consolidate the gains of these initiatives and to define further actions to strengthen sector mentoring in general, and WIL for the student intern.



The decisions made in this session were as follows:

- **Continue forum meetings:** The regional workshops held in 2014 were seen as valuable opportunities to connect universities of technology and potential employers and placement hosts, and three more regional workshops will therefore be held in 2015 (by August). The responsible parties are lecturers Joseph Kioko (South), Dhiren Govender (East) and Xolani Funda (North); special attention will be given to encourage participation from UNISA. The next national forum will be held in January 2016. Responsible parties: WiL Project Management Committee chaired by Glenda Raven.
- **Utilise the completed WiL Quality Guidelines:** It was noted that while there had been a request for these guidelines at the last National Forum, no organisation seemed keen to comment on or use them now that they have been produced. Regional workshops will be held to inform their roll out. Responsible parties as above. Timeframe: June 2015
- **Continue mentor training:** Conclude the roll-out of the current course for mentor trainers, who should then implement the learning in their organisations through change projects; also explore the demand for further courses. Responsible parties: Current course participants and the coordinators Glenda Raven (WWF-SA), Claire Herbst (WESSA), Farrah Feldman (NCC), Eureka Rosenberg (GreenMatter) and Jimmy Khanyile (DEA Oceans and Coasts). Timeframe: By October 2015.
- **Engage the national system:** Engage DHET on a policy framework to better fund WiL nationally; this includes participation in DHET's WIL workshop later in March. Also



engage people high enough in the SETA chain to unblock the blockages in funding flows, including approved funding which is not flowing to intended beneficiaries.

Responsible parties: Kioko and Raven. Timeframe: March 2015. [Note: Kioko and Raven have subsequently attended the DHET workshop. Feedback is not yet available]

1.8. Parallel Session 2: Resource Mobilisation

Achieving a transition to a Green Economy requires a strategic, well-coordinated stream of resources to be flowing into the skills system. This was the focus of a working session convened by Dr Najma Mohamed of the DBSA and Shanna Nienaber of DST.

The session objectives were to: Identify the type of resources being dedicated to green skills; Unpack the synergies and potential gaps between different role players; Understand where different role players can channel resources along the skills pipeline; Recognise the challenges associated with mobilising resources for green skills development; and brainstorm how to unblock these at a system level. Thus this session complemented Parallel Session 1. A panel of presenters from various agencies including GIZ, DST, DBSA and GreenMatter, gave inputs, after which a facilitated World Café session drew out the insight of participants.





The session concluded as follows:

- Resource mobilisation for green skills development requires **streamlined and coordinated** efforts to articulate and embed sustainable development within the strategic national frameworks which guide resource allocations (particularly in the public sector).
- Enable effective and targeted use of (limited) funds by developing a **skills prioritisation map** to move towards greening the South African economy.
- Improve partners' understanding of the skills funding landscape and **facilitate access to funding opportunities** e.g. by developing a database of funding opportunities and key resource people and providing guidance on the level in the pipeline at which different organisations can unlock resources.
- Strengthen partners' **capacity to develop proposals** that can that unlock the funding they need for green skills development (as well as the skills to evaluate proposals).
- Develop a case based on **understanding the full cost of not investing in green skills**, or the savings we make by investing in green skills – this is vital to mobilise the right and adequate resources.
- **Engage with business and industry** to understand how to unlock funding from the private sector, where to invest, and most importantly, present a clear business case for private sector investment in green skills.
- Develop the right indicators, backed up with the right data i.e. labour market intelligence, to **have the information and evidence** to tell our story.

1.9. Parallel Session 3: Role of Local Government

This session was convened by WESSA's Mike Ward and Nomfundiso Giqwa of DEA. It reviewed the challenges and opportunities facing local government in terms of environmental skills, jobs and capacity development, with a specific focus on working with local government through the *Youth Environmental Services* (YES) and *Groen Sebenza* programmes. Both programmes are scheduled to end in 2015 so the session was seen as a timely opportunity to develop insights that could inform continuations/ expansions/ adaptations of these initiatives. Building on the insights from these reviews, the session then looked at greater alignment between skills development and the skills required by local government. Presentations were made by, among others, DEA and SANBI and associated interns; Tlokwe, Midvaal and NMMU municipalities; LGSETA; ICLEI; and training providers WESSA, Delta Education and NCC Environmental Services.



The outcomes of the session were as follows:

- **Prepare for engagement with COGTA and other appropriate forums** (e.g. SALGA) to build a business case for employing green skills in local government. Responsible parties: Daryl Mclean, Solly Mosidi and Joram Mkosana (setting up engagement); Mike Ward with development of presentation. Timeframe: 3-6 months
- **Initiate dialogue with Unions**, identifying and presenting areas of shared interest (reskilling/upskilling and uptake of jobs in local government). Responsible parties: Khwezi Mabasa (COSATU) with Daryl Mclean. Timeframe: 3-6 months



- **The NESPF needs to revitalise its communication strategy and allocate specific work streams**, one of which needs to engage with relevant SETA's in shaping and sharing the direction of occupationally directed training. Responsible parties: NESPF (approached by Eureka Rosenberg) Timeframe: Approach by end March 2015.
- **Make a submission into the revision of the NSDS** (noting HRD strategy). Responsible parties: NESPF, Ntokozo (communicating updates). Timeframe: Ongoing, awaiting feedback from Ntokozo (LGSETA)
- **Provide feedback to LGSETA on proposed environmental technician qualification**. Responsible parties: Training providers (Delta, NCC, WESSA) and NESPF. Timeframe: One month (by end March 2015).

1.10. Parallel Session 4: Fundisa for Change Research Symposium

Prof Chris Reddy of Stellenbosch delivered a keynote address that led into the *Fundisa for Change* Symposium, on the ways in which environmental knowledge feature in the school curriculum, and the implications for teacher education. He noted that this is not just about factual knowledge, but also involves practical (teaching) skills in a new knowledge area, which requires learners and educators to engage differently with content knowledge that is often contested and has a strong ethical dimension.

This was followed by an NRF supported symposium in which Fundisa partners presented case examples of how they work with a range of new environmental knowledge areas in their teacher education practice. Presenters included teacher educators and researchers from Fort Hare, Rhodes, Wits, UKZN, UCT, UNISA and North West Universities.

Questions being explored included how environmental knowledge gets re-packaged – from scientists to official documents to officials in the Department of Basic Education (DBE), from the DBE to teacher training and textbooks, and from teachers to classrooms? Curriculum disciplines have been masquerading as neutral, un-located, disembodied and universal – where does indigenous knowledge system fit in such a system? In the CAPS IKS is included, highlighting the role of community and 'pluralism' with school learning.



The outcomes of this session were:

- **Ten research questions for further development and investigation** were identified, including: What do we consider as *new* knowledge? And is *environmental* knowledge? Fundisa needs a review tool for the materials and to look carefully at *how* they are being used, what other materials are being used, and what influences the way they are utilised. How is the course is taught and how does this influence capabilities? What are the *conversion factors* that enable teachers to make the best use of the training? How does environmental education in general influence capabilities? How do research findings get back to the role players/stakeholders? In what way is our work contributing to the lives of children in the classrooms and their communities?
- **20 practical challenges and opportunities** for the *Fundisa* programme were identified, some of which are also useful research questions. This includes a greater focus on assessment, participation in the department's forthcoming subject committees, a database to keep track of *Fundisa* related research; how to use professional learning communities to support teachers post-course and work towards SACE accreditation and CPTD points; finding provincial partners; and funding the programme as a whole once start-up funding is no longer available.
- **Undertakings to promote and strengthen the work are:** Look for opportunities to fund students to do the research outlined above; publish in the 2016 special edition of the *Southern African Journal of Environmental Education*; present at the 2015 Swaziland conference of EEASA (the Environmental Education Association of Southern Africa) and the SAERA (South African Education Research Association) conference in Bloemfontein; network at international conferences as a representative of the *Fundisa* community; bring *Fundisa* teachers to and present at the 2016 EEASA conference in Gauteng, to use the platform and share *Fundisa* research with the DBE and other partners; set up an email contact list or some other way of communicating.

1.11. Parallel Session 5: Green Skills Research

This session took further the discussion on research coordination started at NESS 2012. Coordinated by Sibusiso Manzini (GreenMatter) and Vuyo Mofu (MQA), it aimed to achieve a better understanding of the policy landscape in which green skills research is undertaken; derive fresh insights into and perspectives on the supply and demand of green skills; identify existing or new platforms, processes or mechanisms that can be used to achieve the benefits of collaboration and coordination for green skills research; and agree on actions that must be undertaken before NESS 2017. Inputs were provided on research needs as identified by a national strategy convened by a state department (DST's Global Change Grand Challenge), industry (Exxaro), a conservation NGO (EWT), and an international perspective on green skills research from the ILO. Eureka Rosenberg outlined two new initiatives that will be led by Rhodes University under the auspices of the Environmental Skills Planning Forum, to enhance new knowledge field development (funded by the NRF) and the building of a green skills planning and development system, including coordination capacity (a Green Fund project).



The following actions were proposed:

- **Produce a baseline** of existing initiatives, to profile where we are at in order to understand where we go next, and to serve as a portal for sharing research undertaken. Include engagement with the Labour Market Intelligence Programme (LMIP) and contribute to and draw on the DHET national database of research; also include details on green skills research opportunities, funding and supervisors. Action leads: Rhodes University team. As part of this initiative -



- **Find or develop a repository** to make available the incredible amount of work that has already been done. Explore with GreenMatter and/or Rhodes as coordinator of both projects introduced, to house the repository. Action leads: Rhodes University team.
- Conduct research to establish the demand in such a way that it helps to generate green work. SETA to access employers to unlock (or rather, generate) work opportunities.
- **Participate in the SIPS Skills Development Forum.** Urgent: Engage with DBSA (Tertia Louw) who leads the Forum. This action has been followed up post-Summit and DEA (Thomas Mathiba) has undertaken to engage DHET (Adrienne Bird) to advise on environmental representation in the Forum. Action lead: Thomas Mathiba (with potentially Mumsie Gumede, Rhodes, serving on the Forum.)
- **SETAs must explore if they need an inter-SETA forum to coordinate green skills research;** their mandate currently is “to establish credible mechanisms for research”. Start with the SETAs already involved, e.g. CATHSSETA, MQA, LGSETA, EWSETA, rather than to try and convene all before taking action. Action lead: Vuyo Mofu, MQA
- **Extend green skills research capacity** by using SETA funding, NRF Research Funding, new post-doctoral research initiative from the NRF. Action leads: June-Rose and Najma to distribute notices of opportunities.
- **Develop green skills research as an emerging knowledge field** through the mechanisms identified including: Academic journals, symposia and the proposed web-based publication. Chapter 1 must lay the conceptual framework and provide all the definitions (see below). Action leads: Rhodes University team.
- **Define key concepts (like green jobs, skills).** This can be done as part of the New Knowledge Field publication (taking note of work done by DBSA, CSIR, ILO and others in defining these terms). Action leads: Rhodes University team and Thando (CATHSSETA) who can provide orientation from a SETA perspective.
- **Use the media including mainstream business media** as a mechanism to diffuse research findings on and the need for green skills into the main stream agenda. To this end, and to build the field, develop a Media, Stakeholder Engagement and Communications Strategy for green skills work including research.

- **Engage the following stakeholders and processes:** The revision of the National Skills Development Strategy (NSDS IV), HRD Strategy review, SETAs directly; SIPS Skills Development Forum and Task Teams; DHET's Labour Market Intelligence System – share and participate; Sectoral agencies and institutions such as IASA who would like to participate; mainstream media and business media (see above).

1.12. Parallel Session 6: Green Career Guidance

This working session addressed a gap identified at previous Summits, and as it was the first NESS discussion on career guidance, it was to some extent of an exploratory nature. However, the session convenors (Elize Hatting, Thomas Mathiba and Vivian Malema, with support from Daryl Mclean and Presha Ramsarup among others) were careful to draw on consultations and research, that took place in other contexts, and evaluations of some current projects underway, to provide background to the delegates attending, many of whom were new to the field of green career guidance. They also conducted a pre-Summit survey. The session in the format of a World Café provided a strategic platform for conversations on the integration of green careers information into national structures to support youth in schools, higher education and technical and vocational training. The objectives of the session were to identify ways to: Share available resources and information with university students; technical and vocational students and school-going youth; keep the information current; and optimally use existing structures and partners.



A full report on the session including the results of the pre-Summit survey was prepared by Elize Hattingh (Green Talent). The session participants and facilitators committed to the following actions:



- **Build Green Career Guidance Awareness:** Vivian Malema (SANBI) will report back to NESF within 6 months with a proposed project on building Green Career Guidance awareness campaigns. Vivian indicated that there is a need for powerful branding for the environmental sector.
- **Online working group platform:** Elize Hatting (Green Talent) will lead the setting up of an online platform that will be used by a Green Career Guidance Task Team to report on activities and continue discussions on the challenges, suggestions for improvement, opportunities to collaborate and scale. This platform will become a coordinating agency between the different Career Guidance levels (High school, post school and work place). Representatives of each level will become moderators of the online platform and feed in information, as follows: Lucky and Baleka (the “High school group”); Nthabiseng, Glenda and Presha (moderate “post school education”); Isaac and Vivian (“In the Workplace”). The online platform may have specific discussion deliverables but will also allow and encourage open-ended thinking. Lucky Litelu will table an active citizenship model for career guidance and he will moderate this discussions. A discussion on continuous mentorship will be moderated by Presha. The platform will be functional by 1 April 2015. The first discussions will start in April 2015.

Note: The online forum has been set up (on www.greenmatter.co.za) and members have been invited to join the group and discuss its modus operandi.

- **Develop a Green Career Guidance Framework:** Thomas will lead the development of a Draft Green Career Guidance Framework that will include a list of environmental occupations and career paths (existing and emerging). He will be supported by Izack and Elize. He will then coordinate a process to through the provincial and national EE forums to present the framework. The duration for this will be over the following 5 months and the first draft will be ready by August 2015.
- **Access National Structures:** A member of the Green Career Task Team will attend the National Environmental Skills Forum to report back on the online discussions. Daryl will provide process guidance to moderators, and when key outcomes are ready, Thomas may take it through formal processes for Ministerial approval.

Evaluation

3. Evaluation

Delegates were given an opportunity to give feedback via an online survey (Survey Monkey). This is an important evaluation mechanism for the organisers, as it helps to shape the next event. It is therefore a pity that only 28 delegates responded, but the feedback was nonetheless generally consistent and helpful. The main findings are provided below.

Q. Please rate the following aspects of NESS 2015:

	Poor	Fair	Good	Excellent	Total
Relevance of the overall programme to the South African context	0.00% 0	0.00% 0	38.46% 10	61.54% 16	26
Quality of plenary speakers and presenters on Day 1	0.00% 0	0.00% 0	38.10% 8	61.90% 13	21
Quality of discussions and dialogue	0.00% 0	0.00% 0	62.50% 15	37.50% 9	24

Responses were overwhelmingly positive, quality and relevance were rated either *Excellent* or *Good*. Some of the qualitative and explanatory comments were:

- *The introductory session; Voices of Youth, Voices of Hope, was excellent*
- *Loved the Voices of Youth session, very enlightening*
- *Time was too short*
- *Some of the points raised around the notion of the green economy and projected green job targets, should have been ideally been discussed on its own.*

Q: Please rate the following for Day 2:

	Poor	Fair	Good	Excellent	Total
Quality of DAY 2 plenary presentations/speakers (DST & WESSA)	0.00% 0	0.00% 0	33.33% 6	66.67% 12	18
Quality of parallel working session facilitation	0.00% 0	5.56% 1	55.56% 10	38.89% 7	18
Relevance of parallel working session content	0.00% 0	0.00% 0	41.18% 7	58.82% 10	17
Quality of the discussions in the parallel working sessions	0.00% 0	5.56% 1	50.00% 9	44.44% 8	18
Relevance of participants in relation to parallel working session objectives	5.88% 1	17.65% 3	41.18% 7	35.29% 6	17
Quality of the outcomes of the parallel working session	5.88% 1	11.76% 2	47.06% 8	35.29% 6	17

The plenary presentations were rated very highly (more than 66% rated it as *Excellent*). The parallel working sessions received more mixed reviews although they were still generally rated either *Good* or *Excellent*. Although more than 90% of feedback on the quality of discussions in the parallel working sessions were either *Good* or *Excellent*, two areas that could have improved more were the *relevance of participants* in relation to the objectives of the parallel working sessions, and the *outcomes* of the sessions. Some of the qualitative and explanatory comments were:

- *There was a need to engage the private sector*
- *I found the 2nd day the most useful. Good mixture of plenary and working sessions.*
- *The session was very informative and out of this world. It brought me up to speed with what's happening in Local Government, some of the things I didn't know at all.*
- *The WiL forum was unfortunately not as well attended, but discussions were vibrant around various issues, as raised by the presenters.*
- *Great session, pity the SETA's weren't present. We really needed them there. This forum has come a long way and has achieved quite a bit. Lots still needs to be done though in terms of getting stakeholders really involved and kept captivated*
- *Great session. The parallel working session could have focussed more strategically on some of the qualitative aspects of WIL as well as strategic aspects (notably resource mobilisation, consistency across partner/host institutions). Clear outcomes though. Great work being done by WWF.*

- *Local government had some excellent inputs but delegates were a bit slow to come through with suggested actions.*

The methodology seemed to work well, with adequate opportunities for delegate input, as the following two comments suggest:

- *It was the first time I was involved in a group task. But after the first round everyone was comfortable with sharing ideas and no one was overpowered.*
- *This was very well put together and Sibusiso did an excellent job of managing the time and allowing sufficient conversation.*

Q: Please rate the following for Day 3:

	Poor	Fair	Good	Excellent	Total
Quality of DAY 3 plenary presentations/speakers (CSIR & Stellenbosch University)	4.76% 1	23.81% 5	42.86% 9	28.57% 6	21
Quality of parallel working session facilitation	0.00% 0	20.00% 4	40.00% 8	40.00% 8	20
Relevance of parallel working session content	0.00% 0	10.00% 2	35.00% 7	55.00% 11	20
Quality of the discussions in the parallel working sessions	0.00% 0	20.00% 4	45.00% 9	35.00% 7	20
Relevance of participants in relation to parallel working session objectives	5.26% 1	15.79% 3	36.84% 7	42.11% 8	19
Quality of the outcomes of the parallel working session/s	5.00% 1	15.00% 3	40.00% 8	40.00% 8	20

The plenary sessions on the last day were not as highly rated as on Days 1 and 2. While the rating of the parallel sessions was mixed, the relevance and quality of facilitation were generally regarded as either *Good* or *Excellent*, with the relevance of participants and the quality of the outcomes again being the aspects that were not as highly rated. These are the most difficult aspects to control, so it is therefore highly motivating to see that 80% of the respondents regarded the session outcomes as *Good* or *Excellent*.

Some of the explanatory comments were:

- *This was great. It was a real eye-opener for someone who is more of an environmental specialist, to see the challenges of a different aspect of research within the environmental sector.*
- *I was happy with the content and quality of the morning's sessions. The ILO presentation in particular was excellent.*
- *Many people left after lunch. It was really difficult to get an action plan from the amount of people left in our group.*
- *We struggled to get to tangible actions, relevance of participants might have been an issue*

Q: Please rate the overall organisation of the event:

	Poor	Fair	Good	Excellent	Total	Weighted Average
Overall organisation of the event	0.00% 0	4.35% 1	43.48% 10	52.17% 12	23	3.48
Communication and information provided about NESS 2015	0.00% 0	13.04% 3	26.09% 6	60.87% 14	23	3.48
Venue suitability	0.00% 0	8.70% 2	39.13% 9	52.17% 12	23	3.43
Quality of service at NESS 2015 (such as catering, security, registration)	4.35% 1	0.00% 0	30.43% 7	65.22% 15	23	3.57
Access to Gautrain shuttle service	0.00% 0	0.00% 0	46.67% 7	53.33% 8	15	3.53

More than half of respondents rated the overall organisation of the event *Excellent*, and 75% rated it as either *Good* or *Excellent*.

In response to a request for additional comments that will help to improve future events, the following comments were received:

- *Generally good event. Points of discussions current and relevant. Thanks plenty*
- *A great work well done. The venue was wonderful, I felt like I was in parliament...the microphones just next to the seat WOW*
- *Can there please be something else to drink other than fizzy drinks*
- *Many of us had forgotten which parallel working sessions we had booked for. It would have been a nice touch to have an itinerary of some sorts.*



- *Pre-NESS communication was a struggle, invites and messages coming from different sources.*
- *The organisation was just great!*

The turnout was very poor given the importance of this event. Perhaps a congress fee, no matter how modest will reduce the level of no shows and commitment to attend.

Recommendations

4. Recommendations

1.13. Conclusions

On the basis of the feedback in Section 3, and the Summit outcomes, including the large number of proposed actions, timeframes and action leads in Section 2, NESS 2015 was a success. The hosting partners and organisers must be commended, and the sector should feel encouraged to invest in future NESS events.

The pace of green economy related developments and the growing demand for greater participation in and coordination of environmental skills planning and development, would suggest that the next NESS be held within 18 months, i.e. by September 2016.

The NESPF should take note of the recommendation to introduce a registration fee to reduce 'no-shows' and encourage an optimum level of appropriate participation; this should be complemented with a subsidy system through which the attendance of contributors and delegates unable to pay the registration, would be sponsored by funding partners.



1.14. Summary Actions to Take Forward

DEA's Sector Education, Training and Development directorate has undertaken to incorporate the NESS outcomes presented on the final day of the Summit in their work plan for 2015-2016. The responsibility for implementing the actions proposed and agreed to by delegates at NESS 2015 reside with a range of partners, but it is important to have relevant leads and coordinating mechanisms; the National Environmental Skills Planning Forum chaired by DEA provides such a mechanism.

1. The National Environmental Skills Planning Forum should strengthen its ability to oversee implementation by appointing work streams, made up of the action leads identified in the various NESS sessions, and others.
2. Host the next NESS by September 2016 to review the progress made, remove remaining obstacles and provide impetus where necessary to the NESS 2015 actions.
3. Produce a Communications, Media and Stakeholder Engagement Strategy with dedicated capacity for the NESPF and the NESS outcomes. Such a strategy will support and relate to a number of other NESS outcomes including:
 - Making the case for green skills with COGTA (Working Session 3)
 - Making the case for green skills with Unions Working Session 3)
 - Extending awareness of green career guidance (Working Session 6)
 - Making available the findings of green skills research (Working Session 5)
 - Promoting the teacher development work of *Fundisa for Change* (Working Session 4)
4. Such a communications and stakeholder engagement plan and capacity and its outcomes must *inter alia* support initiatives to unlock funding e.g. for *Fundisa*, for Work Integrated Learning (Working Session 1) and for green skills development in general (Working Session 2).
5. It may also be important in supporting (and drawing on) other Forums for communication within streams of work. At NESS 2015 several groups undertook to set up discussion forums or electronic networks for staying in touch and taking their work forward collectively (e.g. *Fundisa*, Career Guidance) and keeping others abreast of what is



happening (e.g. available and new research) and what opportunities (e.g. placements) there may be, through accessible databases and digital platforms (Working Session 5 on Research and Working Session 1 on WiL).

6. In addition to communication platforms to serve themselves, several groups were also looking for opportunities to integrate their work into national structures. These included the WiL group (through DHET and SETAs), the Career Guidance group (through a national framework to be taken up by DEA), the *Fundisa* partners (aiming for SACE accreditation) and the Local Government group (hoping to access COGTA and others).
7. *Fundisa* partners identified a number of opportunities where they will promote the growing body of work in green skills development for teachers, including several upcoming conferences (EEASA, SAREA) and publications (*SAJEE*).
8. Delegates encouraged Rhodes University to play a coordinating role regarding green skills research in collaboration with other national initiatives, to lead conceptual clarification (e.g. definition of terms) and to share information with the community of researchers and research users through interactive publications and databases.
9. Alignment between supply and demand and between skills needs and responses is becoming more possible and should be sought through a combination of skills intelligence and partnerships. The following partner forums were proposed:
10. An inter-governmental forum involving Treasury, DEA and DCOG (Department of Cooperative Governance) to unpack the environmental mandates of state entities and plan for more adequate human resources allocations to deliver on those mandates, and the budgets to fund them (outcome of the panel discussion).
11. A forum involving GreenMatter, DHET, DST and the NRF, to explore shared interests and synergies (outcome of a review of progress updates).
12. A meeting of interested SETAs (most relevant) to explore the possible need for an Inter-SETA forum to coordinate green skills research (Working Session 5).