The objective of the assembly/session is to raise awareness of Green Jobs and careers and where to find out more information, videos and activities.

Schools will play a long-term role in teaching Green Skills and in informing and encouraging young people to enter careers that contribute to the net zero transition.

Schools need to help students understand that all jobs will be impacted by climate change, and everyone must consider the impact of their job in terms of Sustainability. Businesses and organisations are preparing for every job to be 'Green'.

# **Assembly session notes for Careers Leads and Teachers**

Slide 1: Green Careers in my future? Creating a Sustainable Future Welcome your students.

#### Introduction:

Green Careers and Green Jobs are terms you will hear more and more over the next few years.

In this assembly/session we are going to find out more - why are Green Careers and Jobs an area of growth? Why are they important to a creating a sustainable future? What do we mean by Green Jobs?

#### Slide 2: Green Jobs - Why?

## Read the quote:

"The challenges and impact of climate change are becoming ever more visible in our daily lives - flooding, droughts, wildfires, extremes of weather, impacts on health, agriculture and the environment." (Question: Could ask the students to give those challenges and impacts?)

As the quote shows, people have been aware of the need to change and adapt to climate change for many years.

In response the transition to a low carbon economy has accelerated addressing these challenges. The number of low carbon businesses and their supply chains are expected to grow, the government has set an ambitious target for two million Green Jobs in the UK by 2030.

You need to be aware that Green Jobs and skills are a growing field and will continue to grow for the foreseeable future. We don't know what jobs and careers will be created over the coming years. You live in a time of great opportunities with rapid developments in many industries will continue to redefine which skills are most in demand and which jobs are on the market.

Question: what types of skills and jobs do you think will be around in 2050?

### Slide 3: Your future job and career

All jobs will be 'green' jobs in the future to ensure we adapt and mitigate the impacts of climate change and create a sustainable future.

"Green Jobs will not be niche. We anticipate that sustainability and climate change will touch every career."

Department for Education, UK Government (2022)

But let's think about Direct Green Jobs – those which are in sectors that have a direct positive impact on the planet.

Such as those in: (**NB: select which questions you use depending on your audience's knowledge and interest.)** 

**Agriculture** – in the future technologies such as robots, temperature and moisture sensors, aerial images, AI and GPS technology will be used to monitor and support sustainable agriculture. Big changes to the crops we grow and which parts of the country we grow them in will happen in the future.

At present 33% of potatoes for chips and crisps are grown in the East of England – they are a water hungry crop and with changes to rainfall patterns they may have to be grown elsewhere in the country.

(Question: What crops will we grow in East Anglia in the future? – perhaps peppers, olives, grapes, - like crops grown in the Mediterranean)

**Construction** – use of AI to streamline and improve constructions schedules, augmented Reality, modular construction, exoskeletons for construction workers, autonomous vehicles, 3D Printing, eco- friendly materials – for flooring, for paint, for walls and ceiling, etc, robotics, and innovative materials are some of the changes slowly happening.

**Recycling and waste reductions** – smart bins fitted with sensor and connected to central systems to optimise routes and reduce unnecessary collections, improved plastic recycling, and recycling of metals from laptops, phones, etc.

(Question - Who recycles now? What other products could be recycled in the future? (-Metal stripped from phones, laptops, washing machines, etc – recycled and reused.) There is a growing need to recycle copper – do you know that a facility to do this is being built in Peterborough?

**Energy efficiency** -Insulation, Lighting, Monitoring and Control Systems

**Renewable energy** - Wind power, Solar PV, Hydropower, Nuclear, Carbon Capture and Storage, Renewable Heat, Heat Networks and Combined Heat and Power. Many of these systems are already in use and will become familiar to us all.

(Question -Do you think Hydrogen boilers will become common in homes in the next 5 years?)

**Transport** – low vehicle emissions – electric vehicles and infrastructure is already visible on our streets.

(Question: Are electric vehicles the answer as an alternative fuel to diesel/petrol? What developments are needed to encourage people to switch to electric? (cheaper vehicles, greater driving range, more charging points etc)

What are the negative impacts of Electric vehicles? (They are heavy and so tyres degrade fast that other vehicles, leading to micro- plastics from tyres entering the water cycle, via road run off and roads require more repairs.)

Are Bioenergy and Hydrogen Production the next steps?

**Regulatory services** -Low-carbon Financial, IT, and Advisory Services focusing on Carbon reduction.

**Environmental Conservation** - management of the world's resources, preserving ecosystems, conserving biodiversity and optimising resources use

Some of this is already happening in the next 10 to 20 years many innovations and technologies will be develop as we increase the pace to adapt and mitigate the changes in the climate to ensure the future.

#### Slide 4: Green Jobs in depth

Here are a few Direct Green Jobs – from farm managers to meteorologists, plumbers to civil engineers. Think back to the previous slide there are many Direct Green Industries and businesses.

Now let's think about Indirect Green Jobs - jobs that contribute to the greening of economic activity but do not involve any new specific green skills or tasks. E.g.: A hairdresser thinking about how sustainable the products they use are, can they reduce the heating and lighting use in their saloons.

Lorry drivers taking wind turbine parts to site – are they driving efficiently? Do they use electric vehicles?

Teachers too – teaching about green carers and sustainable futures and the skills you need for your future.

(Let the students select one or two jobs and ask them to consider how they will be affected – what will need to be considered?)

This can be explored further using Organisation case studies - Green Careers Hub

As we race to face the challenges and opportunities of our changing climate all jobs will become Green Jobs – as we will all be thinking how to live and work sustainable. All jobs are Green Jobs - Every job role, every organisation and business – we all have a role to play to ensure a sustainable future

You need to understand that all jobs will be impacted by climate change, and everyone must consider the impact of their job in terms of Sustainability. Business and organisations are preparing for every job to be 'Green'.

### Slide 5: Skills for your future

What skills will you need to enable you to thrive in the world of work?

Transformative skills that enable you as individuals and the organizations you work for to adapt to change, foster innovation, and effectively respond to the changing world.

**System Thinking:** Many issues and problems facing the world today, such as the global climate crisis, are caused by a web of interconnected circular relationships and to understand and solve these problems we need systems thinking. Recognising that we are all part of the systems in which we function and that we each influence those systems and are in turn influenced by them. Seeing the bigger picture. This contrasts with seeing the world as a series of linear, causal relationships (x causes y).

**Critical thinking** is the analysis of available facts, evidence, observations and arguments in order to form a judgement by the application of rational, sceptical and unbiased analyses and evaluation.

Critical Thinking and System Thinking are often used in planning, decision-making, and problem-solving. They can complement each and be used together to get better outcomes. Critical thinking tends focus on immediate and short-term issues and System thinking focuses on long term goals and seeing the bigger picture.

**Coalition Building** -brings together different groups to achieve a common goal. It happens most frequently when different individuals or organizations share similar goals, values, or interests. By combining resources, the collective effort becomes more powerful than each entity acting on its own.

Collaboration and negotiation, adaptability, creativity and innovative, self-motivated, and valuing diversity.

Digital literacy, active learning, emotional literacy and organisational skills.

Many of these skills you will already use in your daily life, both in school and at home linked to your hobbies, sports, work experience and part- time work.

#### Slide 6: Routes to the future

There are many routes into the workplace, and you need to decide what will be the best route for you.

**Apprenticeships** are combining practical training in a job with study. As an apprentice you will be an employee earning, working alongside experienced staff, gaining job specific skills alongside time for training and study.

There are various levels of apprenticeship Level 2 (GCSE), level 3 (A level) Foundation level and degree level.

**Degree level apprenticeships** are an excellent way of going to university and are a mix of terms at university and terms in the workplace – and if you apply via a business you will leave with a degree, often a job and no traditional university debt.

**Internships** are short placements – 4 weeks to a few months. They can be accessed in the summer school holidays for 4 weeks between years 12/13 and can be a blend of remote and office based. (<u>Students | Career Ready</u>). Other Internships are offered directly by individual companies and can last up to 6 months these often target university leavers.

**Degrees** completed at university. A wide range of courses allowing you to focus on specific subjects.

Don't forget **Entry level jobs** – jobs for people with little training or experience. They are often targeted at recent school leavers and recent graduates.

While you are in school take advantage of every business interaction whether it is at careers fairs or visitors in lessons. Ask lots of questions about their career route, what skills do they use? – even if you aren't interested in their job or sector – as you may get some useful tips.

Work experience is a great way of gaining experience. It enables you to test out some jobs, and sectors and even if you decide that isn't for you – it helps you work out what is for you.

Part time jobs – great for developing skills and gaining confidence and experience.

#### Slide 7:

### Read the quote:

From innovative sustainable technologies and renewable energy to revolutions in transportation systems and industrial activity, young people must be equipped with skills and knowledge to shape a cleaner, greener, more climate resilient future,"

UN Secretary General Antonio Guterres August 2023

## Are you ready for your future?

After today's assembly/session think about what interest you, - joining the work force might seem years away – so you have time to ask questions and gather information.

You are a generation who will see fast paced changes and innovations in all sectors. Exciting opportunities for all of you.

(Explain this session is just to introduce Green Jobs and there will be follow up sessions to allow everyone to find out more)