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The Value of Nature to the Economy



## Dorset's Environmental Economy

A report for



and



November 2015

The value of nature is not a new idea!

However, monetising the concept allows us to drive investment decisions.

Nature recovery requires more than good words and physical effort, it requires cash.

Thus, positioning politically the benefits of nature in the round is important.

## Dorset Local Enterprise Partnership is leading the development of a Local Industrial Strategy (LIS) for Dorset.

In November 2019, we shared the highlights of our initial plans. Feedback gathered helped inform a revised Industrial Strategy for Dorset – below is a summary of what has been submitted to Government.

### Dorset's economy

Dorset has a thriving economy and world-class environment with both established and growing industry expertise. To remain resilient and improve prosperity for all, we must embrace and build upon our economic, natural and cultural strengths.



795,000  
population



Economy  
£17.3bn GVA\*



31,900  
businesses



#### Established sectors

**Financial services**  
£1.6 bn GVA & 12,700 jobs

**Tourism**  
£1bn GVA & 27,000 jobs

**Environmental economy**  
£1.5bn GVA & 30,000 jobs



#### High growth sectors

**Advanced manufacturing & engineering**  
£800m GVA & 17,300 jobs

**Creative tech**  
£363m GVA & 3,800 jobs

**Agritech/aquaculture**  
£108m GVA & 700 jobs



#### University strengths

50% of UK's film, VFX or video games industry graduates are from **Bournemouth University**

**Arts University Bournemouth** has UK's highest graduate employment rate

Bournemouth International Airport  
 Poole Harbour  
 Portland Port

2 universities  
1 university college  
3 further education colleges

Jurassic Coast UNESCO World Heritage Site  
 Area of Outstanding Natural Beauty  
 Second largest natural harbour in the world  
 Heathlands

We recognise that Dorset's ageing population is an economic challenge, but welcome the opportunity to develop this as a strength

UK's oldest population & lowest proportion of under 50s

Dependency ratio of 1 one person working for every pensioner by 2040

A potential vacancy gap of up to half the current workforce in the next 15 years

1 Enterprise Zone

\*Gross Value Added

# ONE HEALTH: THE CHALLENGE

**60% OF HUMAN  
DISEASES ORIGINATE  
FROM ANIMALS**



**50% INCREASE  
IN THE NEED FOR MORE  
FOOD FOR GROWING  
HUMAN AND LIVESTOCK  
POPULATIONS**



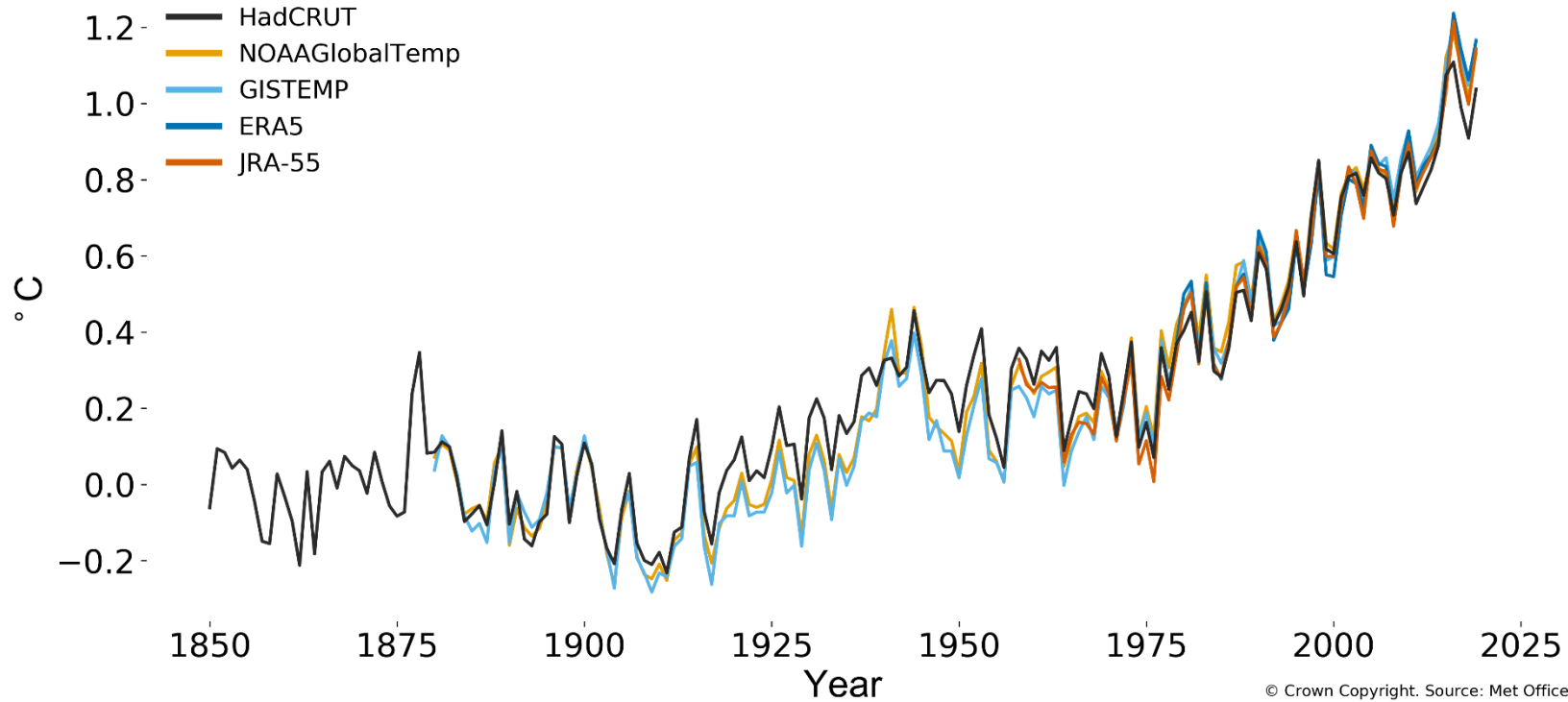
- Human interventions (globalisation) are exacerbating climate change and impacting on the microbiome and speed of the spread of diseases, impacting on land, watercourses, coasts and oceans.
- Animals, including pollinators, have seen mass extinctions and population reductions (loss of biodiversity) caused by human interactions, even though some are vital for >35% of human food production.
- Water quality (impacted on by human and natural pollutants, etc) and the ability of the soil to produce crops (issues being pathogens, drought, flood, pollutants, deforestation, fertility and disease, etc).
- Over-use of antibiotics is contributing to antimicrobial resistance (AMR) in humans and animals.

## Change is with us...

- Climate and ecological emergencies – agricultural revolution 4?
  - Carbon sequestration
  - Beyond net zero
  - Biodiversity restoration
- Pandemic aftershocks and changes to work patterns –there is no ‘post-COVID’.
- Skills for adaptation in a world of automation
- Governmental policy shift on land use is huge.

 Met Office

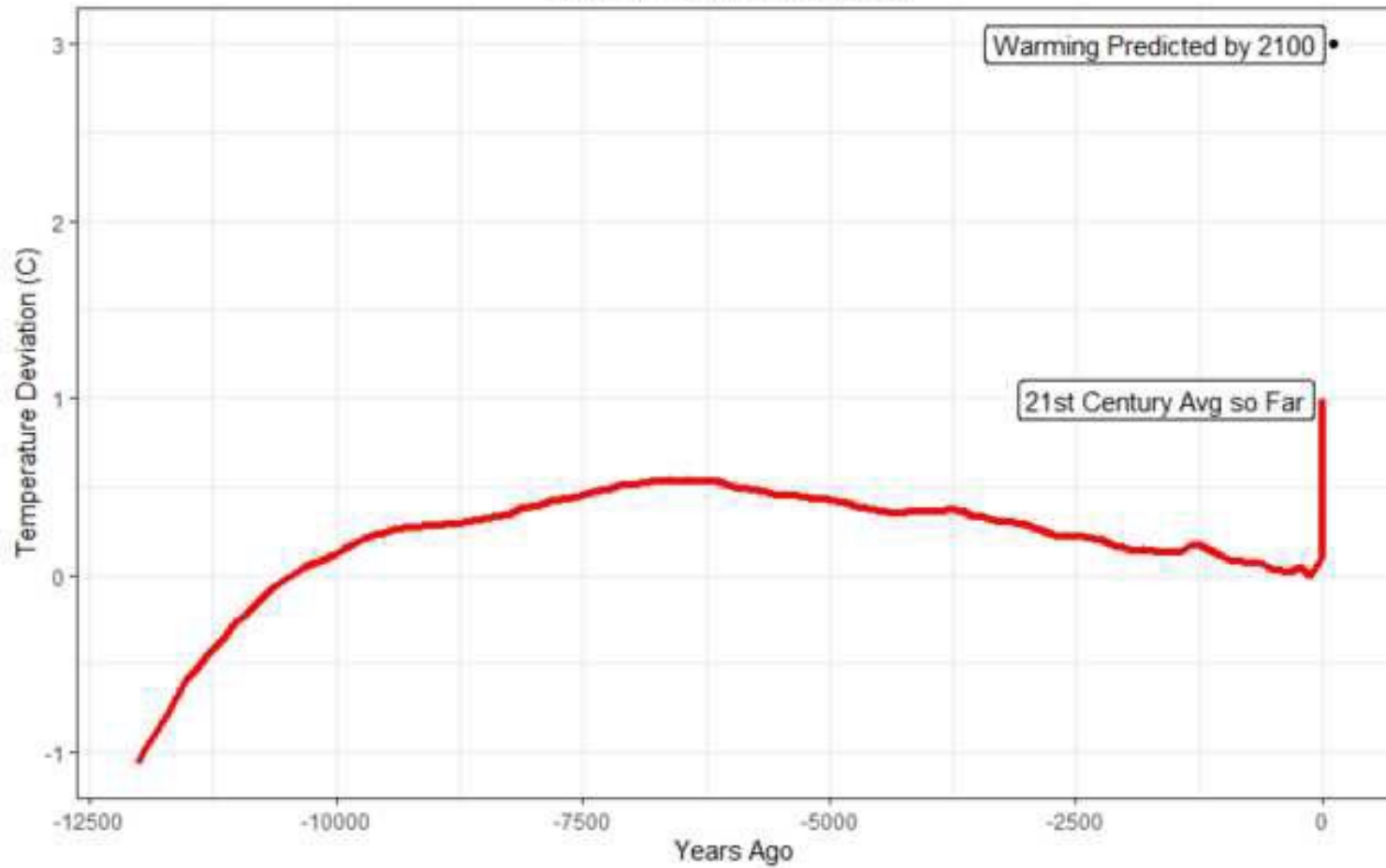
### Global mean temperature difference from 1850-1900 ( ° C)



© Crown Copyright. Source: Met Office

# Global Temperature Trend from 12,000 Years Ago to Present Day

Temperature Deviation (C) from 19th Century Average  
Data from Kaufman et al. 2020

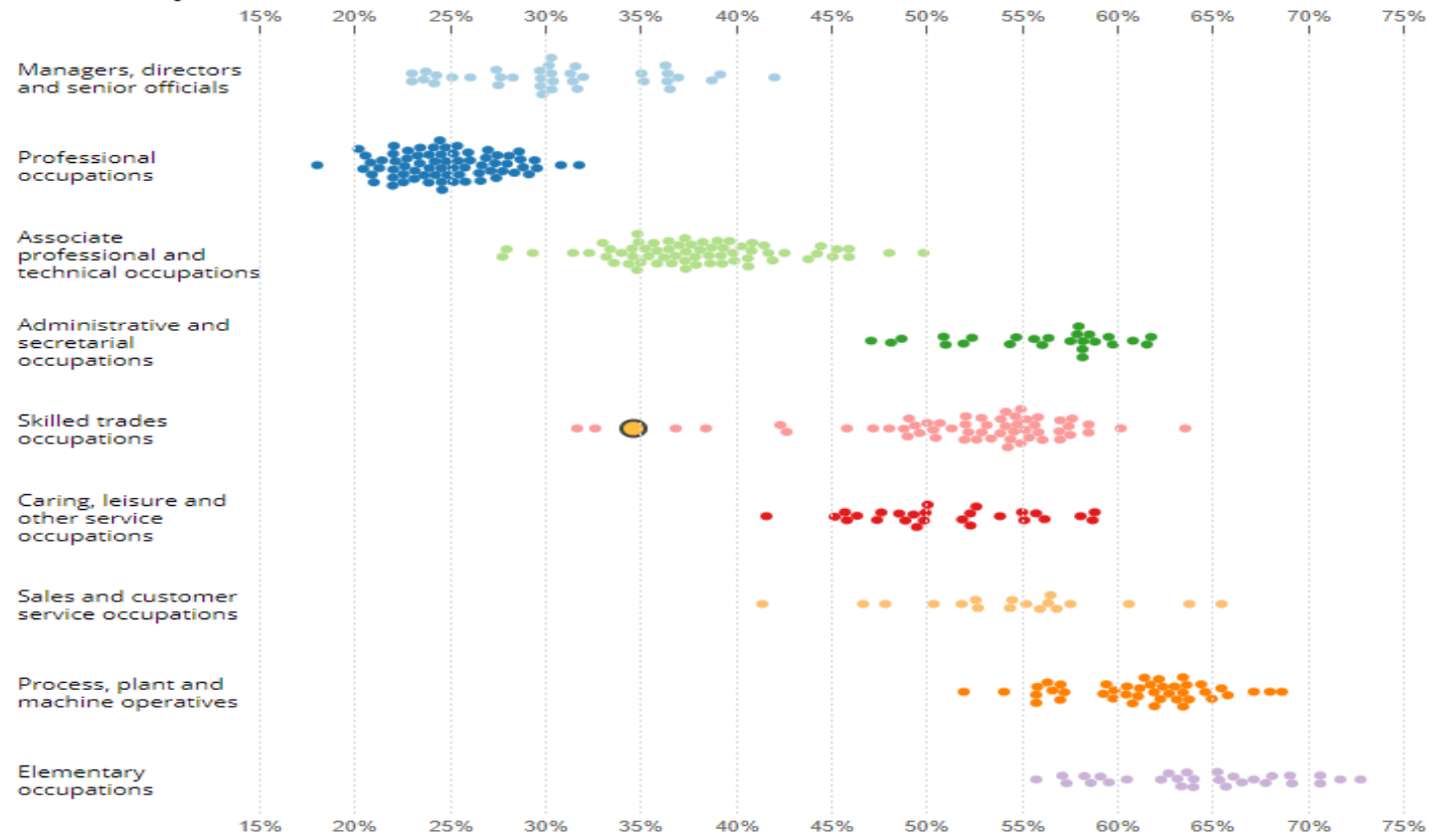


Visualization by Ben Gregory  
(benogregory@gmail.com)

The three occupations at the lowest risk of automation are medical practitioners, higher education teaching professionals, and senior professionals of educational establishments. These occupations are all considered high skilled.

Agricultural and fishing trades n.e.c. ✕ ▾

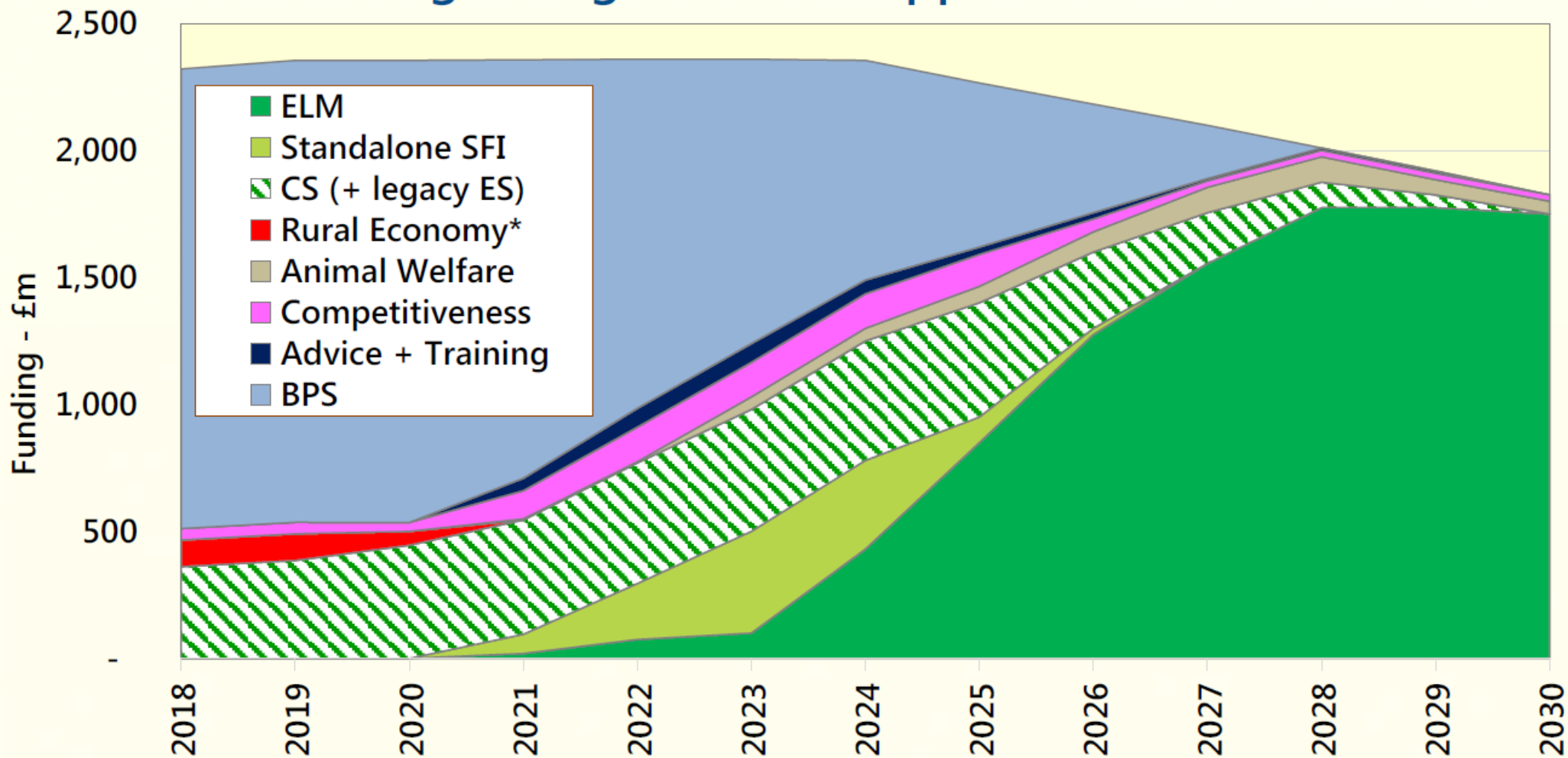
**34.60%** of jobs at risk from automation





# FUTURE FUNDING STREAMS

## Possible English Agricultural Support# – 2018 to 2030



# The Economics of Biodiversity: The Dasgupta Review



## Headline Messages



Hugely significant report – commissioned by Treasury, not DEFRA

“We have collectively failed to engage with Nature sustainably, to the extent that our demands far exceed its capacity to supply us with the goods and services we all rely on.

Our unsustainable engagement with Nature is endangering the prosperity of current and future generations.”



Dorset has a fantastic environment, but it is fragile and (like much the UK) denuded.

Symbiotic relationships are there for a reason – strength comes from collaboration.

The opportunity to increase both natural recovery alongside human benefit is there – it requires the use of the correct moral compass, supported by the correct investments.