

For the Problem Solvers

Fred Dahlmann

Associate Professor of Strategy & Sustainability

25 February 2021

GreenTalk LIVE Webinar

"Sustainable Development Goals: an opportunity for business"

Personal background

- BSc Construction Engineering Management, MSc Management and PhD Corporate Environmental Strategy
- Industry experience from working in construction and as an energy analyst/consultant in London
- Teaching on a range of UG and MBA level sustainability and strategy modules
- Research into companies' strategic responses to climate change and addressing the UN SDGs
- Member of University of Warwick SDG Advisory Board (ESSAG)



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UN Sustainable Development Goals to "end poverty, protect the planet, and ensure prosperity for all"

SUSTAINABLE GALS



























- Agreed 25/09/2015 by all member states of the UN as part of the Agenda 2030
- The SDGs supersede the Millennium **Development Goals**
- They are integrated, indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.
- Built on "5 Ps": people, planet, prosperity, peace and partnership
- Apply to all developing and developed countries
- Supported by scientists, NGOs, civil sector, businesses, and other partners
- Comprehensive in its ambition
- Governance through voluntary goals, rather than mandatory rules













Business plays a critical role for achieving the Agenda 2030



BUSINESS FOR 2030

FORGING A PATH FOR BUSINESS IN THE UN 2030 DEVELOPMENT AGENDA

An initiative hosted by the United States Council for International Business





Achieving the SDGs could create 380 million jobs and help unlock at least \$12 trillion in business opportunities by 2030

"The SDGs – The world's biggest crowdsourced order book from the future!"

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	Food and Agriculture	Cities and Urban Mobility	Energy and Materials	Health and Well-being
1	Reducing food waste in value chain	Affordable housing	Circular models - Automotive	Risk pooling
2	Forest ecosystem services	Energy efficiency-buildings	Expansion of renewables	Remote patient monitoring
3	Low-income food markets	Electric and hybrid vehicles	Circular models - Appliances	Telehealth
4	Reducing consumer food waste	Public transport in urban areas	Circular models - Electronics	Advanced genomics
5	Product reformulation	Car sharing	Energy efficiency. Non-energy intensive industries	Activity services
6	Technology in large scale farms	Road safety equipment	Energy storage systems	Detection of counterfeit drugs
7	Dietary switch	Autonomous vehicles	Resource recovery	Tobacco control
8	Sustainable aquaculture	ICE vehicle fuel efficiency	End-use steel efficiency	Weight management programs
9	Technology in smallholder farms	Building resilient cities	Energy efficiency-Energy intensive industries	Better disease management
10	Micro-irrigation	Municipal water leakage	Carbon capture and storage	Electronic medical records
11	Restoring degraded land	Cultural tourism	Energy access	Better maternal and child health
12	Reducing packaging waste	Smart metering	Green chemicals	Healthcare training
13	Cattle intensification	Water & sanitation infrastructure	Additive manufacturing	Low-cost surgery
14	Urban agriculture	Office sharing	Local content in extractives	
15		Timber buildings	Shared infrastructure	
16		Durable and modular buildings	Mine rehabilitation	
17			Grid interconnection	

"60 global SGD hotspots that can grow 2-3x faster than the global economy"

The business case for engagement with the SDGs

Reduced risk from

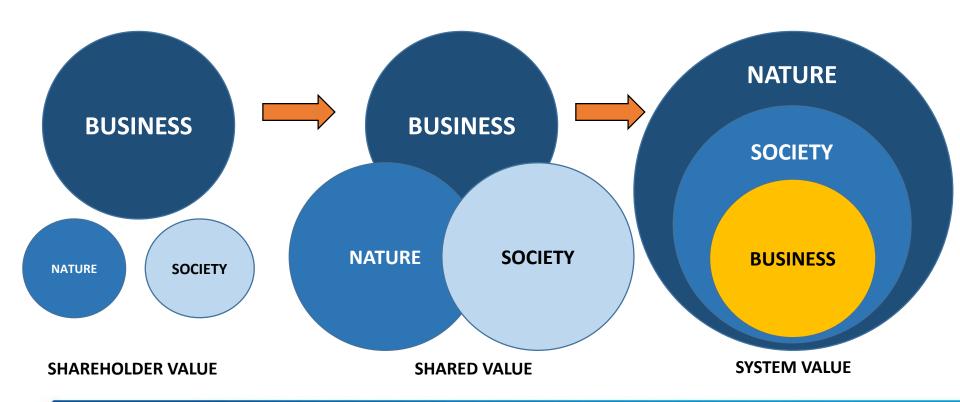
- Physical disruption
- Technological disruption
- Operational inefficiencies and lack of competitiveness
- Regulatory changes and political upheaval
- Fines and penalties
- Shifting consumer attitudes and buying behaviours
- Poor demand growth and economic instability
- Recruitment and retention
- Insurance premiums and cost of capital
- Corporate reputation
- New sustainability ratings and rankings
- No strategic vision and short-sighted implementation

Focus on six SDG Transformations?

- EDUCATION, GENDER, AND INEQUALITY SDGS 1, 5, 7-10, 12-15, 17
- 2. HEALTH, WELLBEING, AND DEMOGRAPHY SDGS 1, 2, 3, 4, 5, 8, 10
- 3. ENERGY DECARBONIZATION AND SUSTAINABLE INDUSTRY SDGS 1-16
- 4. SUSTAINABLE FOOD, LAND, WATER, AND OCEANS SDGS 1-3, 5, 6, 8, 10-15
- 5. SUSTAINABLE CITIES AND COMMUNITIES SDGS 1-16
- 6. DIGITAL REVOLUTION FOR SUSTAINABLE DEVELOPMENT SDGS 1-4, 7-13, 17



Rethinking how we do and value business



Warwick Business School Future Fit, 2018 wbs.ac.uk

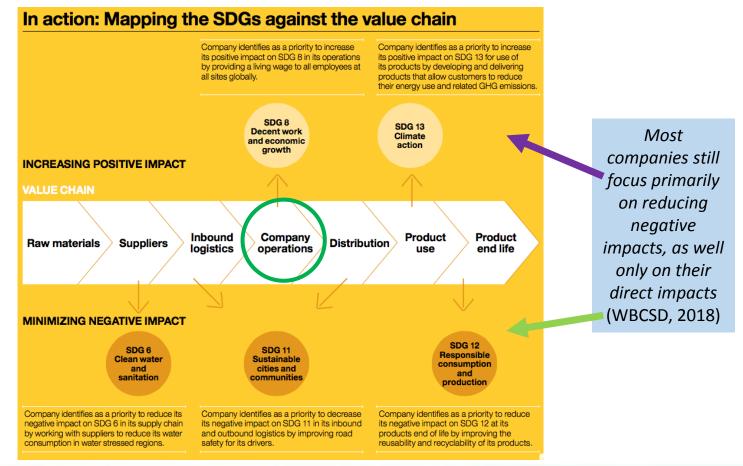
Sustainability must be fully embedded within corporate strategy in order to be effective



How should businesses integrate the SDGs?



Value chain mapping helps identifying impact areas



UN Global Compact proposes ten SDG Business Benchmarks

- 100% of employees across the organization earn a living wage
- Gender balance across all levels of management
- Net-positive water impact in water-stressed basins
- Zero waste to landfill and incineration
- 5. Zero discharge of hazardous pollutants and chemicals

- 6. 100% sustainable material inputs that are renewable, recyclable or reusable
- 7. Science-based emissions reduction in line with a 1.5°C pathway
- 8. 100% resource recovery, with all materials and products recovered and recycled or reused at end of use
- 9. Land degradation neutrality including zero deforestation
- 10. Zero incidences of bribery

Ensure you're aware of and ideally have used the sprawling list of sustainability concepts and tools



oncepts

- UN SDGs
- The Anthropocene
- Circular economy
- Doughnut economics
- Biomimicry
- Sustainable business models
- Theory of change
- Purpose driven business

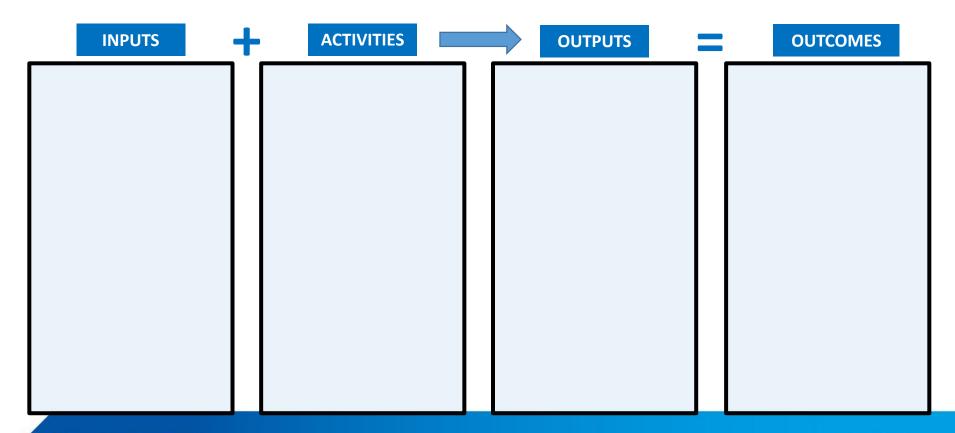


Tools

- SDG Compass
- Value Chain Mapping
- Materiality Matrix
- Future Fit
- Logic model
- Backcasting
- Stakeholder engagement matrix
- http://shift.tools
- https://www.embeddingproject.org

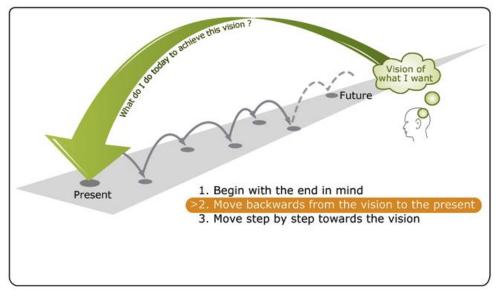


Use a logic model as a roadmap for your engagement and implementation



Use "backcasting" to imagine a successful or desirable outcome in the future and unleash creativity

- Avoid getting "locked-in" to the present and projecting problems into the future (BAU)
- Instead, recognize and capitalize on the socially constructed nature of reality
- If we can imagine a better future, how do we go about achieving it?
- Key challenge is devising and agreeing on the desirable future in the first instance!
- Employ "rigorous speculation"



Natural Step, 2020

The benchmark for performance is shifting



- Companies are under widespread pressure to engage with a multitude of sustainability challenges
- The business case for engagement hinges on more than simply "...because it's profitable"
- The UN SDGs provide a common framework for policy and business
- Their implementation requires significant changes in strategy, finance and corporate governance
- An overarching organisational purpose serves to inspire internal and external stakeholders

Thank you and good luck!



Further information and guidance

- UK Sustainable Development Goals Network: https://www.ukssd.co.uk/
- Business for 2030: http://www.businessfor2030.org
- UN Global Compact and SDGs: https://www.unglobalcompact.org/sdgs/about
- Corporate Knights Global 100 Sustainable Companies: https://www.corporateknights.com/reports/2021-global-100/
- World Benchmarking Alliance: https://sdg2000.worldbenchmarkingalliance.org/
- WBA 7 Systems Transformations: https://www.worldbenchmarkingalliance.org/seven-systems-transformations
- SDG Hub: https://sdghub.com/
- Global Opportunities Explorer: http://www.globalopportunityexplorer.org/
- Unleash Solutions: https://unleash.org/solutions-catalogue/
- Solutions & Co for Climate change and Circular Economy: http://www.solutionsandco.org/discover
- Project Drawdown Climate change solutions: https://drawdown.org/solutions/table-of-solutions
- Ask Nature: https://asknature.org/
- Future Fit: https://futurefitbusiness.org/explore-the-benchmark/
- Net Positive Futures: http://netpositivefutures.co.uk/

Further reading

- BSDC (2017). Better Business, Better World. Business & Sustainable Development Commission. http://businesscommission.org or https://www.unglobalcompact.org/library/5051
- Elkington, J. (2020) "Green Swans". New York: Fast Company Press
- Sachs, J. (2015) "Ages of Sustainable Development". New York: Columbia University Press
- SDG Index (2019) "Sustainable Development Report 2019 Transformations to achieve the Sustainable
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- UN GC (2015) "The SDG Compass". UN Global Compact. https://www.unglobalcompact.org/library/3101
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COVENTRY & WARWICKSHIRE PROGRAMME



Organisations that are going green

Sara Ballinger, Business Energy Advisor

T: 024 7697 2046 W: coventry.gov.uk/greenbusiness







Phase 2- (2019-2021)

- Energy and resource efficiency grants
- Free energy and resource efficiency audits to help identify energy, water and waste savings
- Continued free membership to the Green Business Network
- Access to other specialist support to enable growth and innovation
- Free events, workshops, webinars and 1:1 support

Extension – (June 2023)

- Confirmation that additional £1.14m grant funding
- Additional £118k revenue grants
- Provided by Coventry City Council & Coventry University Enterprises





PROGRAMME



Energy/Resource Efficiency Grants

- Capital grants to improve energy/resource efficiency (Min £1K up to £50k)
- Grants of 40%
- Must save at least 1 tonne CO2e per £1000 grant
- What can be supported?
 - Measures that save carbon
 - Typical measures include lighting LED, heating, energy efficient equipment, transformers, power factor correction, renewable technologies, ventilation, refrigeration, recycling and waste compactors, balers and crushers







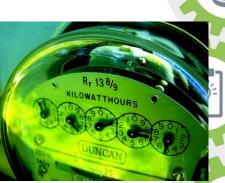


Energy/Resource Efficiency Audits

Identify potential energy/resource efficiency measures

- Audit looks at: Building fabric, energy bills, heating, lighting, equipment, process, water, waste, behavioural
- Includes estimated capital costs, energy savings & payback periods
 used to provide a business case
- > Energy/resource efficiency report













European Union

European Regional Development Fund

- Aluminium Diecasting company based in Coventry.
- Light weighting solutions in particular for EV applications.
- Partnered with Char.gy to supply charging points on lampposts for on-street charging.

Phase 1 Grant

335 Tonnes CO₂e savings / annum £130,000.00 capital investment £26,000.00 Green Business grant

- LED lighting
- Power Factor Correction
- Variable Speed Drive compressor

Phase 2 Grant

525 Tonnes CO₂e savings / annum £240,000.00 capital investment £50,000.00 Green Business grant

 De-coring machinery. Previosuly used £106,000 in gas, new process will use £13,000 electricity instead.









MIDLANDS ENGINE



Benefits to the Business:

European Union

European Regional Development Fund

- Enhanced brand image and increased competitive advantage.
- Increased productivity and reduced costs.
- Better financial and investment opportunities.
- Increased preparedness for future legislation and costs.
- Improved recruitment and retention of quality employees.
- Healthier work environment for employees.





MIDLANDS ENGINE

Datagraphic

- Document automation company based in Rugby
- > £30k energy efficiency grant
 - > 265 kW Solar PV array
 - Saving 60 tonnes CO2e / annum
 - > £24,000 in electricity costs

Other measures:

- > Reviewed procurement practices, use local services as much as possible.
- Improved recycling facilities.
- Other energy efficiency measures: LED lighting, smart heating controls, improved fabric efficiency.
- Staff environmental action days.
- Become a Climate Aware Company, offsetting our carbon emissions, whilst we work towards becoming carbon neutral.













Datagraphic

"Sustainability is at boardroom level within Datagraphic. The future of our planet depends on it; you simply have to do the right thing."

"We are also starting to see the benefits of being green when it comes to winning new business. There appears to be a positive shift within the business world towards sustainability and the planet."











3P innovation

World-class engineering and process automation company based in Warwick

- > Invested £395,000 to reduce carbon emissions
- > £69k energy efficiency grant
 - > LED energy efficient lighting throughout the building
 - New high efficiency gas fired modulating heaters that save 30% on fuel costs
 - > High performance air conditioning system
 - New air compressor achieving savings of between 20% and 30%
 - Installation of solar panels
- > Estimates saving 153.3 tonnes of CO2 emissions per year
- 290,000kWh of energy usage having been reduced



MIDLANDS ENGINE



What is it?

A support funded programme for SMEs and organisations in Coventry and Warwickshire to help business become more energy/resource efficient and make the most low carbon opportunities

Who?

- All small to medium size businesses (SMEs) in Coventry and Warwickshire
 - > Employ fewer than 250 employees
 - Have an annual turnover of not exceeding €50 million and/or an annual balance sheet not exceeding €43million
 - Have at least 50% of sales through business to business









Our Highlights

European Union

European Regional Development Fund

Helping businesses to reduce their impact on the environment through funding for energy efficiency and renewable energy powered solutions

- We have assisted 112 businesses during Phase 2 of the programme to date
- > Saving **1,200 tonnes** of CO2 emissions per year
- Allocated £1.39 million in grant funding to support these businesses during Phase 2 to date
- New jobs have been created
- 1,400 organisations have joined the Green Business Network













Remote Energy Audits

As lots of businesses in our region continue to work & communicate online, we adapted

- Energy advisor can work with your business remotely via online Teams – send us bills/photos/videos
- Download our handy guide on how a remote energy audit can work for you
- https://bit.ly/cwremaudit









European Union

European Regional

Development Fund

Membership is free and offers a range of benefits:

- Events and workshops 9 March Health, wellbeing & sustainable communities
- Monthly newsletter news, events new legislation, case studies
- Membership certificate
- Expert advice
- Enhance green credentials to secure new business
- Networking and supply chain opportunities (Inclusion in Green Business Directory)
- Currently have 1400 other organisations you can network with
- Signposting to other grants
 - Business Support
 - Innovation
 - Skills 4 Growth

COVENTRY & WARWICKSHIRE GREEN BUSINESS NETWORK











Funds for services and consultancy

European Union

European Regional
Development Fund

Revenue Grants up to £10k (40% intervention) to support the development of low carbon products and services, supporting activities including:

- Intellectual Property Protection
- Supporting new businesses to progress their innovations
- Licensing
- Prototype design and manufacture
- Product Testing
- Accreditations and Certifications

Examples of grants awarded:

- Prototype design and manufacture for hydrogen fuel cell vehicle
- Software application development for an App to enable carbon reduction by promoting car sharing











COVENTRY & WARWICKSHIRE

PROGRAMME

MIDLANDS ENGINE

Coventry University Enterprises – Delivery Partner

Funds capital expenditure

Capital Grants up to £20k (40% intervention), supporting activities including:

- Equipment to manufacture new Low Carbon products
- Equipment to support introduction of new Green services including recycling and waste processing



Free expert 1-to-1 advice and workshops on a range of sustainable building techniques and technologies

- Passivhaus design and principals
- Sustainable refurbishment and energy efficiency strategies
- Building Information Modelling (BIM)













What we do

- Confidential environmental management assistance
- Provide bespoke registers of environmental and health and safety legislation
- Confidential site specific environmental legislation compliance audits
- Support clients with their environmental management systems to maintain ISO14001:2015

E: businesssustain@coventry.gov.uk https://www.coventry.gov.uk/businesssustain



Climate Change Strategy

- The Council are currently in development of a new Climate Change Strategy. This will be a more ambitious and inclusive climate change strategy, which works for the whole City
- The Climate Change Strategy will be based on the 17 Sustainable Development Goals (SDGs)
- The City Council intends to establish an independent Commission of stakeholders to mobilise businesses, communities and voluntary organisations across the City into developing a new Citywide Climate Change and Sustainability Strategy and Action Plan



CLIMATE CHANGE & SUSTAINABILITY ACHIEVEMENTS IN 2020



GBP launched remote energy and resource efficiency audits

Business Sustain developed online environmental register

REMOTE ENERGY

LAUNCHED

Business Sustain launched remote environmental compliance and internal audits

YEAR LONG FOCUS

Have supported businesses during COVID-19 to access grant funding through various streams

Research and analysis of Regional

Energy System Operator

GREEN BUSINESS SUPPORT

Phase 2 of the GBP by end of 2020 has:

- Assisted 112 businesses
- Saved 1,200 tonnes carbon per year
- Allocated £1.39m to 86 companies
- Subscribed 1,400 organisations to

the Green Business Network

CLIMATE CHANGE & SUSTAINABILITY 2021 – WHAT'S NEXT



Development of partnerships in delivering a major step change in energy infrastructure for the city A new series of webinars are being planned for 2021

SYSTEM OPERATOR

Final design of West Midlands RESO project which will look at new energy system including low carbon energy generation, storage and management

DELIVERING A SUSTAINABLE FUTURE

Development of a new climate change strategy engaging with key stakeholders. The strategy will be at the forefront of low carbon innovation to benefit the local economy

Reducing our emissions across the City







COVENTRY & WARWICKSHIRE

As lots of businesses continue to work Programme team are now adapting to us photos or a video of the types of ite

Adapted to new ways of working he Green Business audits. You can either send

(if applicable) Units (if applicable)

Partnership

Digital transformation for environmental management e.g. air quality

Opportunity to

change the way

people use our City

in the future -

places for people not cars

Active Travel Plans changing transport behaviour

Lighting and electrical

Lightbulbs (walls, inset, ceiling)

Ceiling tubes [fluorescent tubes]

Electric/oil/gas heaters

- working in a new way 1/2 levels, includes 150 non-rail spaces for Fr
- , two lifts and open 24 hours a day
- area will be adjacent to the Building/Station Square





Creating green spaces in our City



Green **Funding Opportunitie**

Addressing fuel & food poverty









European Union
European Regional

Development Fund

Contact us

Telephone: 024 7697 2046

Email: <u>GreenBusiness@coventry.gov.uk</u>

Website: www.coventry.gov.uk/greenbusiness

Twitter: occupation

Join our LinkedIn group