

---

## Acronyms and abbreviations

---

& – and  
£ – British pound  
€ – euro  
\$ – dollar  
3BL – triple bottom line  
ABCD process – backcasting methodology  
ABEC – Australian Building Energy Council  
ABI – Association of British Insurers  
ACF – Australian Conservation Foundation  
ACIRRT – Australian Centre for Industrial Relations Research and Training  
ACT – Australian Capital Territory  
AD – Anno Domini (used before dates after the supposed year Christ was born)  
ADB – Asian Development Bank  
ADF – augmented Dicky-Fuller test  
AEGIS – Australian Expert Group in Industry Studies  
AGO – Australian Greenhouse Office  
AMM – abandoned mine methane  
ANC – African National Congress  
ARC – Australian Research Council  
ARCH – autoregressive conditional heteroskedasticity  
B&C – building and construction  
BASIX – Building Sustainability Index  
BAT – best available technology  
BC – before Christ  
BC – British Columbia, Canada  
3BL – triple bottom line  
bcm – billion cubic metres  
BEES – Building for Environmental and Economic Sustainability (software)  
BEP – best environmental practice  
bn – billion  
BP – British Petroleum  
BS – British standard  
BSc – Bachelor of Science  
BSR – Business for Social Responsibility  
BTX – benzene/toluene/xylene  
C – carbon  
CAFE – Corporate Average Fuel Economy  
CAS – Chemical Abstracts Service  
CBA – cost-benefit analysis  
CCA – chromated copper arsenate  
CCGT – combined cycle gas turbine

CCX – Chicago Climate Exchange  
Cd – cadmium  
CD – construction and demolition  
CECP – Centre of Excellence in Cleaner Production  
CEO – chief executive officer  
CFB – circulating fluidized beds  
CFC – chlorofluorocarbon  
CH<sub>4</sub> – methane  
CHP – combined heat and power  
CICA – Canadian Institute of Chartered Accountants  
Cl – chlorine  
CMA – Chemical Manufacturers Association  
CMI – Cockerill Mechanical Industries  
CMM – coal mine methane  
CO<sub>2</sub> – carbon dioxide  
CSD – Commission on Sustainable Development  
CSIRO – Commonwealth Scientific and Industrial Research Organisation  
CSR – corporate social responsibility  
CTA – constructive technology assessment  
CUB – Carlton & United Breweries  
DALY – disability-adjusted life years  
DBSA – Development Bank of Southern Africa  
DEFRA – Department for Environment, Food and Rural Affairs, UK  
DESA – Department of Economic and Social Affairs  
DfE – Design for Environment  
DMC – domestic material consumption  
DMI – direct material input  
DNR – Department of Natural Resources  
DPO – domestic processed output  
DRAFT – Direction Régionale de l’Agriculture et de la Forêt, France  
DRIRE – Directions Régionales de l’Industrie, de la Recherche et de l’Environnement, France  
DTI – Department of Trade and Industry, UK  
DTIE – Division of Technology, Industry and Economics  
DTO – Sustainable Technology Development Programme  
EC – European Commission  
ECCE – European Council of Civil Engineers  
ECE – Economic Commission for Europe  
EDF – Electricité de France  
EDR – Earth Day Resources  
EEA – external environmental accounting  
EEVA – environmental economic value added  
EGARCH – exponential generalized autoregressive conditional heteroskedasticity  
EIA – environmental impact assessment  
EMA – environmental management accounting  
EMAS – Eco-Management and Audit Scheme

EMS – Environmental Management System  
EPA – Environmental Protection Agency  
EPR – Extended Producer Responsibility  
ERFA – environmentally related financial accounting  
ESD – ecologically sustainable development  
ESM – environmental systems modelling  
EST – environmentally sound technology  
ETIS – Environmental Technology Innovation Scheme  
ETM – environmental technology management  
EU – European Union  
EUETS – European Union’s Emissions Trading Scheme  
EVA – economic value added  
FASB – Financial Accounting Standards Board  
FICA – Federal Insurance Contributions Act  
GAAP – generally accepted accounting principles  
GARCH – generalized autoregressive conditional heteroskedasticity  
GCC – gasification combined cycle  
GDP – Gross Domestic Product  
GE – General Electric  
GEO – Global Environment Outlook  
GERD – general expenditure on research and development  
GHG – greenhouse gas  
GIS – geographical information system  
GJR – Glosten, Jagannathan and Runkle  
GNP – Gross National Product  
GPI – Genuine Progress Indicator  
GRI – Global Reporting Initiative  
GSP – Gross State Product  
GST – Gross State Product  
GTL – gas to liquid  
GWP – global warming potential  
ha – hectare  
HIA – Housing Industry Association  
HR – human resources  
HRM – human resource management  
HRSG – heat recovery steam generator  
IAS – International Accounting Standards  
IASB – International Accounting Standards Board  
ICC – International Chamber of Commerce  
IEA – International Energy Agency  
IGCC – integrated gasification combined cycle  
IGO – intergovernmental organization  
IISD – International Institute for Sustainable Development  
IMP – intelligent materials pooling  
IPCC – Inter-governmental Panel on Climate Change  
IPPC – Integrated Pollution Prevention and Control

IR – industrial relations  
ISO – International Organization for Standardization  
IT – information technology  
IWM – integrated waste management  
kg – kilogram  
km – kilometre  
kWh – kilowatt-hour  
LBIO – literature-based innovation output  
LCA – lifecycle assessment  
LCD – lifecycle development  
LCI – lifecycle inventory  
LCIA – lifecycle impact assessment  
LEED – Leadership in Energy and Environmental Design (rating system)  
LIBS – laser-induced breakdown spectroscopy  
LIFE – the Financial Instrument for the Environment programme  
LM – Lagrange multiplier  
LOHAS – lifestyles of health and sustainability  
LPG – liquid petroleum gas  
m<sup>2</sup> – square metre  
MAC – marginal abatement cost  
MAS – Mongolian Academy of Sciences  
MBDC – McDonough Braungart Design Chemistry  
MD – marginal damage  
MEA – monoethanolamine  
MEEA – monetary external environmental accounting and reporting  
MEMA – monetary environmental management accounting  
MFP – multifactor productivity  
MJ – megajoule  
MRF – material reclamation facility  
Mt – million tonnes  
MW – megawatt  
MWhr – megawatt-hour  
N/A – not applicable  
NatHERS – Housing Industry Association’s Partnership Advancing the Housing Environment  
NBEET – National Board of Employment, Education and Training, Australia  
NCAT – National Center for Appropriate Technology, Australia  
NDA – National Department of Agriculture, South Africa  
NEPA – National Environmental Policy Act, USA  
NESEA – Northeast Sustainable Energy Association  
NETTLAP – Network for Environmental Training at the Tertiary Level in Asia and the Pacific  
NGO – non-governmental organization  
NHS – National Health Service  
NHTZ – New High Technology Zone  
Ni – nickel

NIP – National Insulation Programme  
NO<sub>x</sub> – nitrogen oxides  
NPD – New Product Design  
NRDC – National Research and Development Corporation, India  
NSED – National Strategy for Ecologically Sustainable Development  
NSW – New South Wales, Australia  
OECD – Organisation for Economic Co-operation and Development  
OH&S – occupational health and safety  
OPEC – Organization of the Petroleum Exporting Countries  
OTA – Office of Technology Assessment, USA  
P – phosphorous  
PACE – pollution abatement costs and expenditures  
PATHE – Partnership Advancing the Housing Environment  
Pb – lead  
PBEP – Performance Bretagne Environnement Plus  
PCB – polychlorinated biphenyl  
PDCA model – plan-do-check-act model  
PEEA – physical external environmental accounting and reporting  
PEMA – physical environmental management accounting  
PET – polyethylene terephthalate  
PFBC – pressurized fluidized bed combustion  
PLA – polylactic acid  
PP – Phillips-Perron  
ppm – parts per million  
PR – public relations  
PSI – Product Stewardship Institute  
PSRC – Photovoltaics Special Research Centre  
PTO – Patent and Trademark Office  
PV – photovoltaics  
PVC – photovoltaic cells  
PVC – polyvinyl chloride  
QMLE – quasi-maximum likelihood estimator  
R&D – research and development  
REACH – registration, evaluation and authorization of chemicals  
REPA – resource and environmental profile analysis  
RFCD – research fields, courses and disciplines  
RMI – Rocky Mountain Institute  
RoHS – restrictions on hazardous substances  
ROS – Raster Output Scanner  
RSA – Royal Society for the Arts  
RSMS – Restricted Substance Management Standard  
S&T – science and technology  
SABRC – State Agency Buy Recycled Campaign, California  
SEAAAR – social and ethical accounting, auditing and reporting  
SEC – US Securities and Exchange Commission  
SEDA – Sustainable Energy Development Authority

SEO – socio-economic objective  
SME – small and medium-sized enterprise  
SNM – strategic niche management  
SO<sub>2</sub> – sulphur dioxide  
SoEAC – State of the Environment Advisory Council  
SOx – sulphur oxides  
SRI – socially responsible investment  
SSCD – Stationary Source Compliance Division  
ST – STMicroelectronics  
SUV – sport utility vehicle  
t – tonne or ton  
TBL – triple bottom line  
TDO – total domestic output  
TIFAC – Technology Information, Forecasting and Assessment Council, India  
TMC – total material consumption  
TMR – total material requirement  
TNEP – The Natural Edge Project  
TORs – terms of reference  
TQM – total quality management  
TsKTI – Central Boiler and Turbine Institute, Russia  
TUD – Technical University of Delft  
TWh – Tera Watts/hours. 1 TWh = 10<sup>12</sup> Wh  
UK – United Kingdom  
UN – United Nations  
UNCED – United Nations Conference on Environment and Development  
UNDESA – United Nations Department of Economic and Social Affairs  
UNDP – United Nations Development Programme  
UNDTIE – United Nations Environment Programme, Division of Technology,  
Industry, and Economics  
UNEP – United Nations Environment Programme  
UNEP FI – United Nations Environment Programme Finance Initiative  
UNESCO – United Nations Educational, Scientific and Cultural Organization  
UNFCCC – United Nations Framework Convention on Climate Change  
UNGA – United Nations General Assembly  
UoB – University of Bonn  
UPT – Technical Service Unit  
US/USA – United States of America  
US\$ – United States dollar  
USEPA – US Environmental Protection Agency  
UTS – University of Technology Sydney  
USSR – Union of Soviet Socialist Republics  
VCBM – virgin coalbed methane  
VISs – voluntary initiatives for sustainability  
VISITs – voluntary initiatives for sustainability in tourism  
VISTs – voluntary initiatives for sustainable tourism  
VOC – volatile organic compound

VSM – voluntary simplicity movement  
WA – Western Australia  
WASIG – Western Australian Sustainable Industry Group  
WB – World Bank  
WBCSD – World Business Council for Sustainable Development  
WEEE – waste electrical and electronic equipment  
WHC – Westside Health Center, USA  
WIR – Wet Investeringsregeling  
WRI – World Resources Institute  
WSSD – World Summit on Sustainable Development  
WTO – World Tourism Organization  
WW – wastewater  
WWF – Worldwide Fund for Nature, formerly World Wildlife Fund  
YLL – years of life lost  
ZERI – Zero Emissions Research and Initiatives  
ZEW – Zentrum für Europäische Wirtschaftsforschung/Center for European Economic Research