

# ‘UN 지속가능발전목표(SDGs)의 국가협치에 대한 의의와 대응과제’ 토론회

- 일 시: 2016년 6월 13일(월) 14:00~18:00
- 장 소: 서울 프레스센터 20층 국제회의장

## 자료집

- 주 최:

한국지속가능발전해법네트워크(한국SDSN), UN 지속가능발전해법네트워크(SDSN)  
고려대학교 오정에코리질리언스연구원(OJERI)



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- 후 원:



**KDI SCHOOL**, 문숙과학지원재단, **BK21 PLUS ELEC**



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  - 제프리삭스(Jeffrey Sachs) UN SDSN 대표 겸 미국 콜롬비아대학교 지구연구소 소장,
  - 권성동 국회 UN SDGs 포럼 대표, 국회의원
  - 이흥구 한국SDSN 고위자문회의 의장 (前국무총리)
  
- 기조발제  
양수길 KDI국제정책대학원 초빙교수, UN SDSN 국제전략이사 겸 한국SDSN 대표
  
- 논평 및 교차토론
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  - 최 열 환경재단 대표
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  - 민무숙 한국양성평등교육진흥원 원장
  - 홍현종 KBCSD 사무총장
  - 김의영 서울대 정치외교학 교수
  
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  - 국무조정실 녹색성장지원단
  - 환경부 환경정책실
  - 외교부 개발협력국
  - 이성훈 한국인권재단 상임이사

### 기조발제 자료

“UN 지속가능발전목표(SDGs)의 국가협치에 대한 의의와 대응과제” (한국SDSN 대표 양수길)

### 부록

1. Getting Started Guide: UN SDGs 운용추진방안
2. 한국SDSN: 배경과 현황



# UN 지속가능발전목표(SDGs)의 국가협치에 대한 의의와 대응과제

PROGRAM

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- 장 소: 서울 프레스센터 20층 국제회의장

진행: 이우균 한국 SDSN 운영위원장, 고려대 환경생태공학부 교수

시 간	발 표 주 제
13:30~13:50	참석자 등록
13:50~14:00	참석자 착석
14:00~14:05	개회사: 고려대학교 오정애코리질리언스연구원 <b>김정규</b> 원장
14:05~14:20	기조연설 (Skype 동영상-동시통역) <b>제프리사흐</b> (Jeffrey Sachs) UN SDSN 대표, UN사무총장 MDG 특별고문 겸 미국 콜럼비아대학교 지구연구소 소장 “SDGs의 글로벌 협치에 대한 시사점과 각국의 대응방안”
14:20~14:35	축사 및 격려사 <ul style="list-style-type: none"> <li>● 축사: 국회 UN SDGs 포럼 대표 <b>권성동</b> 의원, “SDGs 이행을 위한 국회의 역할”</li> <li>● 격려사: 한국SDSN <b>이우균</b> 고위자문회의 의장 (前국무총리), “SDGs와 국가 경영”</li> </ul>
14:35~15:00	기조발제 <b>양수길</b> KDI국제정책대학원 초빙교수, UN SDSN 국제전략이사 겸 한국SDSN 대표 “UN 지속가능발전목표(SDGs)의 국가협치에 대한 의의와 대응과제”
15:00~15:20	휴식 및 네트워킹
15:20~16:30	논평: “UN SDGs의 영역별 이행전략 - 주요 과제와 해법” <ul style="list-style-type: none"> <li>● <b>최 열</b> 환경재단 대표, “지구환경의 보호를 위한 주요 과제와 해법”</li> <li>● <b>신광영</b> 중앙대 사회학 교수, “사회적 배제와 불평등의 해소를 위한 주요 과제와 해법”</li> <li>● <b>이주호</b> KDI국제정책대학원 교수(前교육부장관), “개인의 능력 부여를 위한 주요 과제와 해법: (아동발달에서 평생학습에까지 걸치는) 평생교육문제를 중심으로”</li> <li>● <b>민무숙</b> 한국양성평등교육진흥원 원장, “개인의 능력 부여를 위한 주요 과제와 해법: 여성문제를 중심으로”</li> <li>● <b>홍현중</b> KBCSD 사무총장, “경제와 기업의 지속적 발전을 위한 주요 과제와 해법”</li> <li>● <b>김의영</b> 서울대 정치외교학 교수, “국가협치의 현황과 개선방안: 지속가능발전의 시각에서”</li> </ul>
16:30~17:20	교차 토론: “통합의 과제: 경제 - 사회 - 환경 부문 간 정책 상충의 문제와 대책” <ul style="list-style-type: none"> <li>● 좌장: <b>안병우</b> 前 국무조정실장</li> <li>● <b>최열, 신광영, 이주호, 민무숙, 홍현중, 김의영</b> 각 논평자 및 <b>양수길</b> 발제자: “경제 - 사회 - 환경 부문 간 상충의 문제와 통합을 위한 대책”</li> <li>● 청중석과의 일문일답</li> </ul>
17:20~18:00	정부의 대응방향과 시민사회의 입장 <ul style="list-style-type: none"> <li>● 좌장: <b>양수길</b> 한국SDSN 대표</li> <li>● 국무조정실 녹색성장지원단, “UN SDGs에 대한 정부의 시각”</li> <li>● 환경부 환경정책실, “제3차 지속가능발전기본계획(2016~2035)과 UN SDGs(2016~2030)”</li> <li>● 외교부 개발협력국, “SDGs 관련 대(對)UN 대응과제”</li> <li>● <b>이성운</b> 한국인권재단 상임이사, “시민사회와 주요 이해당사자들의 입장”</li> <li>● 청중석과의 일문일답</li> <li>● 좌장: 종합평가와 폐회선언</li> </ul>



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## **연사 소개**

- 개회식 -





[토론회 진행자]

이우균 한국 SDSN 운영위원장, 고려대 환경생태공학부 교수

1993년 독일 괴팅겐대학교 임학박사학위를 수여받았다. 중점연구분야는 산림환경계획, 산림생장 모형개발, 기후변화 영향 평가 및 적응 계획이다. 지리정보시스템과 원격탐사를 이용한 공간통계 및 분석 연구를 수행하고 있으며, 연구 중심 대상지는 한반도뿐 아니라 동북아시아 및 중위도권 국가로 확장을 통해 국제적인 기후변화 학술연구 활동을 하고 있다. 현재 고려대학교 환경생태공학부/기후환경학과 교수로 재직 중이며, 고려대 환경 GIS/RS 센터장, BK21Plus에코리더양성사업단장을 맡고 있다.



김정규 고려대 OJERI(오정에코리질리언스) 원장

고려대학교 교수. 1989년부터 1994년까지 국립환경연구원에서 수질연구부 연구관으로 재임한 후, 1990년부터 1991년까지는 일본 국립환경 연구소에 수질관리공학 연구원으로 재임하였다. 이후 1994년부터 고려대학교 응용생명환경화학과에서 조교수와 부교수를 지냈고, 2000년 응용생명환경 화학과가 환경생태공학부로 재편되면서 현재까지 환경생태공학부 교수로 부임 중이다. 교수 부임 중 고려대학교 생명과학대학 학장, 한국토양비료학회 회장을 역임하였고 현재 고려대학교 오정에 코리질리언스연구원 원장으로 활동하고 있다.



제프리 삭스 UN SDSN 대표 겸 컬럼비아대학교 Earth Institute 소장

타임지가 선정하는 세계에서 가장 영향력이 있는 100명의 경제학자 중 한 명으로 두 차례나 선정된 세계적으로 저명한 경제학 교수이자 지속가능발전의 선구자이다. 29세인 1983년에 하버드대 최연소 정교수가 되었으며, 이후 개도국 거시정책 및 경제개발이론에 많은 연구를 수행하고 국제 통화기금(IMF), 세계은행, 유엔개발계획(UNDP), 경제협력개발기구(OECD) 등 국제기구 자문위원을 역임했다.

삭스 교수는 코피·아난 前 UN사무총장 이후 반기문 現 UN사무총장에 이르기까지 새천년개발목표(Millennium Development Goals) 특별자문관으로 재임하였고 Millennium Promise Alliance의 공동설립자 겸 수석전략가 및 새천년마을프로젝트(Millennium Villages Project)의 책임자로 UN사무총장을 대변해 새천년개발목표사업을 널리 알리는 역할을 하였다.

현재 미국 컬럼비아대학교 Earth Institute의 소장이자 UN지속가능발전해법네트워크(UN Sustainable Development Solution Network, SDSN)의 대표로서 유엔의 Post-2015 의제인 2030 지속가능발전 어젠다를 알리고 실현하는데 힘쓰고 있다.

<빈곤의 종말>(2005)>, <부(富)의 공유: 인구과잉의 지구를 위한 경제학(2008)>, 그리고 <문명의 대가(代價)(2011)>는 뉴욕타임스에 의해 베스트셀러로 선정된 바 있고, 최근 <지속 가능한 발전의 시대(2015)>를 발간하였다. 하버드대학교에서 경제학 학·석사 및 박사학위를 취득하였다.



권성동 국회 유엔 지속가능발전목표(UN SDGs) 포럼 대표  
20대 국회의원 / 새누리당, 강원 강릉시, 3선

권성동 의원은 제 27회 사법시험 합격 후 수원지방검찰청, 춘천지방검찰청 강릉지청, 서울중앙지검 부부장 검사 및 인천지방검찰청 특수부 부장검사를 역임하였다. 이후 2008년 대통령실 법무비서관을 거쳐 2009년 제 18대 국회의원을 시작으로, 19대, 20대 국회의원에 당선되었다. 국회 지식경제위원회 위원(2010~2011년), 국회운영위원회 위원, 새누리당 강원도당 위원장을 역임하고, 2012년 새누리당 정책위부위원장, 새누리당 정책조정위원회 제1조정위원장(2013년)과 전략기획본부장을 지냈다. 19대 국회에서 법제사법위원회 및 환경노동위원회 간사와 정보위원회 위원을 역임하였고, 현재 새누리당 사무총장과 국회 평창동계올림픽 및 국제경기대회지원특별위원회 위원으로 활동하고 있다.



이홍구 한국SDSN 고위자문회의 의장(煎 국무총리)

이홍구 한국SDSN 고위자문회의 의장은 제28대 대한민국 국무총리(1994~1995년) 및 제20대 통일원 장관 겸 부총리(1994년), 주영국대사관 대사(1991~1993년)을 역임하였다. 또한 2012 세계자연보전총회 조직위원회 위원장, 사법정책자문위원회 위원장 (2009.07~ ), 헌법연구자문위원회 고문(2008.09~ ), 중앙일보 이사회 의장(2005.02~ ), 서울국제포럼 이사장(2000년~ ), 민주평화통일자문회의 수석부의장(1993~1994년), 대통령 정치담당 특보(1990년), 제14대 국토통일원 장관(1988~1990년) 등을 역임하였다. 그리고 서울대학교 사회과학대학 정치학과 교수(1980~1988년)로 재직하였으며, 서울대학교 사회과학연구소 소장(1979~1982년)을 역임하였다.

에모리대학교 학사(1959년), 예일대학교 대학원 석사( ~1961년), 예일대학교 대학원 정치학 박사( ~1968년) 학위를 수여 받았으며, 에모리대학교 문학 명예박사를 수여 받았다.



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## **연사 소개**

- 기초발제 -





양수길 KDI국제정책대학원 초빙교수, UN SDSN 국제전략이사 겸 한국SDSN 대표

현재 KDI국제정책대학원 초빙교수(2013.2~현재)이다. 2009년 2월 대통령직속 녹색성장위원회에 피촉 되었으며 동 위원회 민간인 위원장(2010.7~2012.10)을 역임하였다. Global Green Growth Form(덴마크 정부 이니셔티브) 국제자문위원회 공동위원장(2011~2012), World Bank, OECD, UNEP 및 GGGI 공동운영 Green Growth Knowledge Platform(GGKP) 연구자문위원회 위원장(2012.1~현재) 및 UN 지속가능발전해법네트워크(SDSN) 지도이사회 전략이사(Leadership Council)로 피촉 되었다(2012.11~현재).

한국개발연구원(KDI) 연구위원 및 선임연구위원(1981~1993), 대외경제정책연구원(KIEP) 원장(1997~1998), 외교부 주 OECD 대사(1998~2010)를 역임하였으며 OECD Development Centre 자문이사회 의장(1999~2010) 겸임을 겸임하였다. 1982년 '8%균일 관세율 안' 제시하여 현재의 8% 중심세율 구조에 반영하였다. 1983년 전면적 수입자유화 주장, 80년 대 연차적 수입자유화일정 예시계획에 반영하였다. 1993년 이경식 경제부총리 자문관으로 금융실명제 실시 위한 대통령 긴급명령 준비 비밀 실무작업 기획(국민훈장 동백장 수상)을 담당하였으며, (사)국가경영전략연구원 원장(2005~2010), 한국태평양경제협력위원회 회장(2007~2010), 경제개발정책, 대외경제정책, 국가미래 비전에 관한 4개 대통령자문위원회 등 수많은 대정부 자문기구에 참여하였다. 서울대학교 화학공학과를 졸업 후 미국 존스홉킨스 대학교에서 경제학 박사 학위를 취득하였다.



'UN 지속가능발전목표(SDGs)의  
국가협치에 대한 의의와 대응과제' 토론회

## **연사 소개**

- 논평 및 교차토론 -





안병우 건전재정포럼 운영위원장(煎 국무조정실장)

안병우 煎 국무조정실 실장(장관급)은 서울대학교 행정학과를 졸업 후 제8회 행정고시 합격 후 경제기획원 예산심의관, 공보관 및 물가정책국과 정책조정국 국장을 역임하였다. 이후 재정경제원 예산실 실장을 거쳐 재정경제원 차관보직을 역임하였다. 이후 제1대 예산청 청장직을 수행 후 국무조정실 실장에 임명 되었다. 현재 건전재정포럼의 운영위원장직을 수행하고 있으며, 공직을 수행하는 동안 업적을 인정받아 홍조근정훈장과 청조근정훈장을 수여 받았다.



### 최열 환경재단 대표

1949년 대구 출생. 1975년 강원대학교 농화학과를 졸업(68학번)하고 1995년 강원대학교 명예철학박사와 2007년 인제대학교 명예정치학박사를 취득하였다. 1982년에 우리나라 최초의 민간 환경 단체인 한국공해문제연구소를 만든 이래 우리나라 환경운동을 개척하였다. 1988년 공해추방운동연합을 창립했고, 1992년 리우환경회의에 NGO 대표단장으로 참가한 후 1993년 환경운동연합을 창설하고 사무총장을 맡았다. 2002년 환경재단을 창립하여 대표를 맡고 있으며 제 1회 시민인권상(1993), 유엔에서 주는 환경상인 글로벌 500(1994), 골드만 환경상(1995)을 수상했으며, 미국 월드워치 연구소가 뽑은 세계의 시민 운동가 15인(1999)에 선정되었다. 저서로 <최열 아저씨의 지구촌 환경이야기>, <최열 아저씨의 지구 온난화 이야기>등이 있다.



### 신광영 중앙대 사회학과 교수

서울대 사회학과를 졸업하고, 미국 미네소타대학에서 사회학 석사, 위스컨신대학에서 사회학 박사 학위를 취득한 후, 한림대학교 사회학과 교수 역임하였으며, 현재는 중앙대학교 사회학 교수로 재직 중이다. Survey Research Center at UC-Berkeley Research Fellow, 덴마크 Aalborg University 초빙교수, 동경대 사회과학연구소 초빙 교수를 역임했으며, 현재 스웨덴 Linköping University Institute for Research on Migration, Ethnicity and Society Affiliated Researcher로 활동 중이다. 저서로는 <한국 사회 불평등 연구>(후마니타스, 2013), <스웨덴 사회민주주의: 노동, 정치와 복지>(한울, 2015) 를 포함 6권의 단독저서와 20여권의 공동 저서가 있으며, 현재 국제학술지 Social Forces, Journal of Contemporary Asia, Globalizations의 편집위원으로 활동 중이며, Journal of German and European Studies 국제학술지 공동편집위원장을 맡고 있다.



이주호 KDI국제정책대학원 교수 (前 教育部 장관)

이주호 교수는 한국개발연구원(KDI) 연구위원과 KDI 국제정책대학원 교수를 거쳐 2004년 제17대 국회의원(2004~2008)으로 교육제도의 개혁과 법제화에 힘썼다. 이후 교육부 교육정책심의회 위원, 제17대 대통령직인수위원회 사회교육문화분과위 간사, 2008년 대통령실 교육과학문화수석비서관, 2009년 교육과학기술부 제1차관을 역임하고 2010년 8월 제3대 교육과학기술부 장관에 취임했다. 1983년 서울대 국제경제학과에서 학사학위를, 1985년 동대학원에서 석사학위를 받고, 1990년 미국 코넬대에서 경제학 박사학위를 받았으며, 저서로는 '고용대책과 인적자원개발'과 공저인 '교원 보수의 경제분석과 정책개혁' '자율과 책무의 학교개혁:평준화 논의를 넘어서' '자율과 책무의 대학개혁' '평준화를 넘어 다양화로' 등이 있다.



민무숙 한국양성평등교육진흥원 원장 (前 대통령비서실 여성가족비서관)

민무숙 원장은 1981년 이화여자대학교 영어영문과를 졸업하고 서울대학교 교육사회학 석사를 마친 뒤, 미국으로 건너가 일리노이대 교육사회학 박사학위를 취득하였다. 박사학위 취득 후, 1995년 한국여성정책연구원 연구위원을 시작으로 2014년 2월까지 선임연구위원으로서 교육연구부장, 평등인력정책실장, 기획조정실장, 원장직무대행 등을 역임, 2006~2008년 여성가족부 여성인력기획관, 2014~2015년 대통령비서실 여성가족비서관 등을 역임하며, 양성평등과 여성의 역량 강화를 위해 여성정책을 개발하고 집행하는데 힘썼다.



홍현중 지속가능발전기업협의회(KBCSD) 사무총장

홍현중 지속가능발전기업협의회 사무총장은 한양대학교 화공프로세스 석사 학위를 마친 후 전문 기업인으로 활동하였다. GS칼텍스 부사장을 역임하였으며 현재 GS 칼텍스 고문 역할을 수행하고 있다. 또한 지속가능발전기업협의회(KBCSD) 사무총장이다. KBCSD는 2002년 WBCSD(World Business Council for Sustainable Development)와의 MOU 체결을 통해 한국 Global Network 협력 기관으로 설립 되었다. KBCSD는 산업계를 선도하여 경제, 환경, 사회의 조화로운 발전을 추구하는 대기업 최고경영자 협의회로서, 에너지효율화, 기후변화대응, 환경경영 전반에 대한 산업계 리더십을 확산하기 위해 노력하고 있다. 산업계 시각의 방향성과 발전적 대안 제시를 통해 對정부·국회 제언을 하고 있으며, 기후변화 및 에너지 혁명, 안전관리, 지속가능한 가치사슬 등 기업경영 환경에 영향을 미칠 미래 메가트렌드를 중심으로 산업계 중심의(business-driven) 비즈니스 해법을 제시하고 있다. 글로벌 차원에서는 WBCSD, 아시아BCSD, 다국적개발은행(ex. ADB, IDB), GCF 등과의 네트워킹 및 협력사업을 통해 아시아지역의 그린 비즈니스 및 미래성장동력 신사업화를 추진중이다.



김의영 서울대 정치외교학부 교수

현재 서울대학교 정치외교학부 교수와 한국정치연구소 소장 및 사회과학연구원 원장을 맡고 있다. 거버넌스 연구회(Governance Research Forum) 회장, 한국정치학회 부회장, 유엔(UN DESA)과 경희대학교가 공동 주최한 2009 세계시민포럼(World Civic Forum) 사무총장을 역임하였다. 주요 저서 및 논문으로 『거버넌스의 정치학: 한국 정치의 새로운 패러다임 모색』, 『동네 안의 시민정치』, “지속가능발전과 거버넌스” 등이 있다.



'UN 지속가능발전목표(SDGs)의  
국가협치에 대한 의의와 대응과제' 토론회

## **연사 소개**

- 종합토론 -





이성훈 한국인권재단 상임이사

현재 한국인권재단 상임이사이자 국제개발협력시민사회포럼 (KoFID) 운영위원장을 역임하고 있다.

국제개발협력민간협의회(KCOC) 정책홍보위원회 위원회, KOICA 연구전문위원, 서울시 인권위원회 위원과 서울시 국제개발협력 자문위원직을 수행하였으며, 국제적으로 세계시민참여연대 CIVICUS 국제이사이며 아시아개발연대 Asia Development Alliance (ADA)와 Asia Democracy Network (ADN) 공동대표직을 수행하고 있다.

서울대학교 사회학과와 가톨릭대학교 사회학과 대학원을 졸업하였다. 2008년부터 경희대 공공대학원 및 성공회대 아시아시민사회석사과정 (MAINS)에서 글로벌 거버넌스와 시민사회, 아시아 및 국제 인권과 개발 등의 주제에 대해 객원교수로 강의를 하고 있다.

국가인권위원회 정책교육국장 (2008.4-2010.3)을 역임했고 그 전에 태국 방콕의 아시아인권단체 협의체인 포럼아시아 사무총장 (2005-2008.3)과 스위스 제네바에서 국제가톨릭지식인문화운동(Pax Romana) 사무총장 (1997-2004)으로 일했다.



이용수 외교부 개발협력국 국장

'UN 지속가능발전목표(SDGs)의  
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## 기조발제 자료

"UN 지속가능발전목표(SDGs)의 국가협치에 대한 의의와 대응과제"  
(한국SDSN 대표 양수길)





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# ‘UN SDGs의 국가협치에 대한 의의와 대응과제’ 토론회 기초발제

2016년 6월 13일(월) 14:00~18:00 한국프레스센터 국제회의장

양 수 길

KDI국제정책대학원 초빙교수  
한국SDSN (UN SDSN Korea) 대표

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## 1. UN의 모든 회원국, 2030 지속가능발전의제 이행에 합의

- 동 의제의 핵심은 2030년까지 이행해야 할 17개의 '지속가능발전목표(SDGs)' 및 그 달성을 위한 169개의 세부목표(targets).
- 작년 12월에 합의된 '파리협약'(Paris Agreement)은 SDG13('기후변화행동')의 이행을 지원.



## 2. 대응과제(1): UN 및 각 회원국은 2016~2017 기간 중 2030 의제의 이행 체제를 정립해야.

- SDGs 및 targets를 이행해 나가는 과정에서 그 진도를 측정하기 위한 '지표세트(indicators)'를 설정 - 글로벌 지표와 국가 지표로 구성.
- 지표들을 증거로 SDGs의 이행 현황을 평가, 대응하기 위한 모니터링(review) 체제 정립 - 국별 모니터링이 기본이되 이를 기반으로 지역별 모니터링 및 UN차원의 글로벌 모니터링도 실시.
- 지표 세트를 실시간으로 뒷받침해주는 각종 글로벌 및 국가 통계체계 구축 - 'Data Revolution'

### 3. 대응과제(2): 각 회원국은 또한 2030년까지 SDGs를 달성하기 위한 '국가 지속가능발전전략'을 정립해야.

- 부문별 개혁과제, 혁신적 정책들과 투자계획 및 국제협력과제들로 구성.
- 국가 전략에 병행해 지방정부 차원의 지속가능발전전략도 수립되어야.
- 그 일환으로 SDG13 이행 차원에서 파리협약에 부응해 이산화탄소 순(純)배출의 궁극적(21세기 후반까지) 영화(零化) 위한 '저탄소발전 전략'(LEDS) 혹은 녹색성장전략을 개발해야.
- 전략을 수립하기 위해서는 각 2030 SDG에 이르는 세부지표, 주요 이정표 및 단계적 이행대책을 2030 목표로부터 '후방도출(backcasting)'해야.

### 4. 17 SDGs의 배경: 다면적 글로벌 지속가능성 위기의 확산

- 사회적 지속가능성 위기
  - 빈곤개도국 내 수십억 빈곤인구 상존
  - 각국 내에도 빈곤층 상존.
  - 국제적 및 국내적 각종 불평등의 확산과 심화
  - 소득과 부와 권력의 격차의 확대와 만연한 성차별.
- 환경적 지속가능성 위기
  - 자연환경의 훼손, 자연자원의 고갈 및 지구온난화로 인한 각종 지구 환경의 파괴
  - 사막화, 가뭄, 담수부족, 생물다양성의 손실, 각종 극단기후현상 및 그로 인한 재해의 증가, 해수면의 상승, 해수의 산성화, 먹거리 사슬의 파괴, 연안지역과 저지대 국가의 침수, 농업수확의 감소, 글로벌 보건위협의 확산
- 경제적 지속가능성 위기
  - 청년실업 등 실업문제의 만성화와 경제성장 활력의 쇠퇴
  - 글로벌 금융시장의 불안정화
- 평화에 대한 위협의 확산
  - 지역갈등의 급증, 폭력적 극단주의와 테러리즘, 강제이주 등 인간집단에 대한 위기.

## 5. 글로벌 지속가능성 위기의 원인

- 각국 정부와 정치권의 단기주의: 중장기적 문제와 대책에 소홀
  - 사례: "미세먼지 오염의 주범은 고등어다!"
- 각국 정부조직의 분권화로 인한 칸막이 속의 정책대응: 경제적, 사회적 및 환경적 지속가능성의 동시적 고려에 소홀 - 파행적 국가발전
- 특히 경제성장 우선주의로 환경적 및 사회적 문제 대응 등한시
  - 사례: 이산화탄소 및 오염물질 배출 불구 석탄 화력발전소의 증설 계속
- 한 나라 혹은 지역의 문제가 국경 혹은 지역 경계를 넘어 국제적으로 전파
- 개도국의 경우 국내 문제의 해결을 위한 자원, 지식, 역량, 기술 등 부족.
- 지구환경, 빈곤개도국, 지역 갈등 등 글로벌 공유지(common) 문제 대응을 위한 글로벌 협치의 부진

## 6. SDGs의 요지

1. 모든 곳에서 모든 형태의 **빈곤** 종식
2. 기아 종식, **식량안전**과 영양 개선 달성 및 지속가능한 농업 진흥
3. 모든 연령층의 모든 사람을 위한 **건강한 삶** 보장 및 복리 증진
4. 포용적이고 공평한 양질의 교육 보장 및 모두를 위한 **평생학습** 기회 증진
5. **양성평등** 달성 및 모든 여성과 소녀의 권익 신장
6. 모두를 위한 **물과 위생**의 이용가능성 및 지속가능한 권리 보장
7. 모두를 위한 저렴하고 신뢰성 있으며 지속가능하고 현대적인 **에너지**에 대한 접근 보장
8. 모두를 위한 지속적이고 포용적이며 지속가능한 **경제성장** 및 안전하고 생산적인 고용과 양질의 **일자리** 증진
9. 회복력 있는 **사회기반시설** 구축, 포용적이고 지속가능한 **산업화** 증진 및 **혁신** 촉진
10. 국가 내 및 국가 간 **불평등** 완화
11. 포용적이고 안전하며 회복력 있고 지속가능한 **도시와 정주지** 조성
12. **지속가능한 소비 및 생산** 양식 보장
13. **기후변화**와 그 영향을 방지하기 위한 긴급한 **행동**의 실시
14. 지속가능발전을 위한 대양, **바다 및 해양자원** 보존 및 지속가능한 사용
15. **육상 생태계**의 보호, 복원 및 지속가능한 이용 증진, 산림의 지속가능한 관리, 사막화 방지, 토지황폐화 중지·역전 및 생물 다양성 손실 중지
16. 모든 수준에서 지속가능발전을 위한 **평화롭고 포용적인 사회** 증진, 모두에게 **정의**에 대한 접근 제공 및 효과적이고 책임감 있으며 포용적인 제도 구축
17. **이행수단** 강화 및 지속가능발전을 위한 **글로벌 파트너십** 활성화

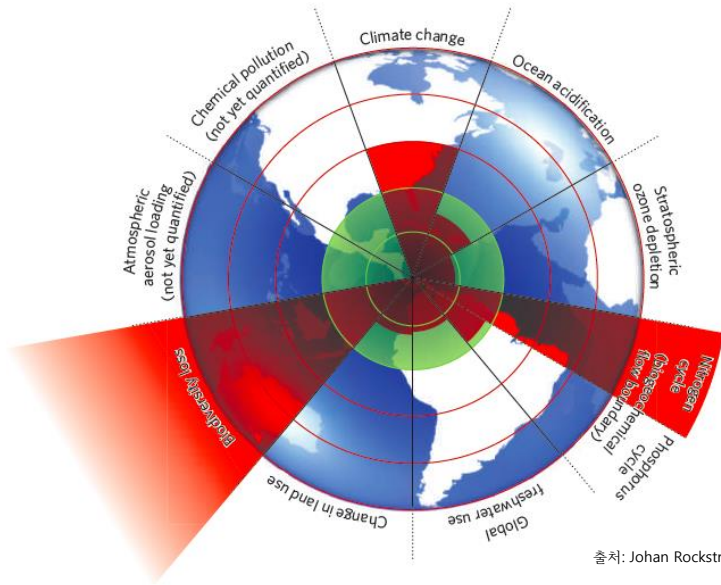
## 7. 인류와 지구를 위한 각 SDG의 다섯 가지 측면

- **People**(사람): 빈곤과 기아의 근절 & 모든 인간이 존엄과 평등과 건강한 환경을 누리며 잠재능력을 발휘할 수 있도록 보장.
- **Planet**(지구): 지구를 훼손으로부터 보호 - SCP, 자연자원의 지속 가능한 관리, 시급한 기후변화 행동 - 현재와 미래 세대 모두의 필요를 조화.
- **Prosperity** (번영): 모든 인간이 번영하고 만족스런 삶을 향유하고 경제, 사회 및 기술적 진보가 자연과 조화를 이루도록.
- **Peace** (평화): 두려움과 폭력으로부터 자유스러운, 평화와 정의와 포용성 갖춘 사회를 배양.
- **Partnership**(파트너십): 글로벌 파트너십에 입각해, 특히 가난한 자와 가장 취약한 자들의 필요에 중점을 두고 당 의제의 이행을 제반수단(Means of Implementation, MoI)을 동원 - 모든 국가와 시민, 모든 이해당사자들의 참여.

## 8. SDGs의 근본정신: '지구적 경계'의 존중

- 인류가 당면한 지속가능성 위기의 원인(프란시스 교황)
  - "권력과 물질에 대한 이기적이고 무한한 욕심으로 한정된 자연자원을 남용하고 사회적 약자를 소외시키고 있다" (프란시스 교황)
- '지구의 경계'(planetary boundaries)
- 글로벌 인구 증가와 무절제하고 이기적인 소비·생산활동의 증가로 부와 소득의 분배는 점차 악화되는 가운데 경제의 규모가 지구의 경계를 역량을 넘게 되어 인류문명의 존속 기반이 무너지는 것이 지속가능발전 위기의 근본원인.
- SDGs는 지구의 경계 내에서 자연자원과 지구시스템을 공평하게 상호 절제하면서 사용하자는 것 → "지구경계를 존중하는 사회적 시장경제(social market economy)" 추구.

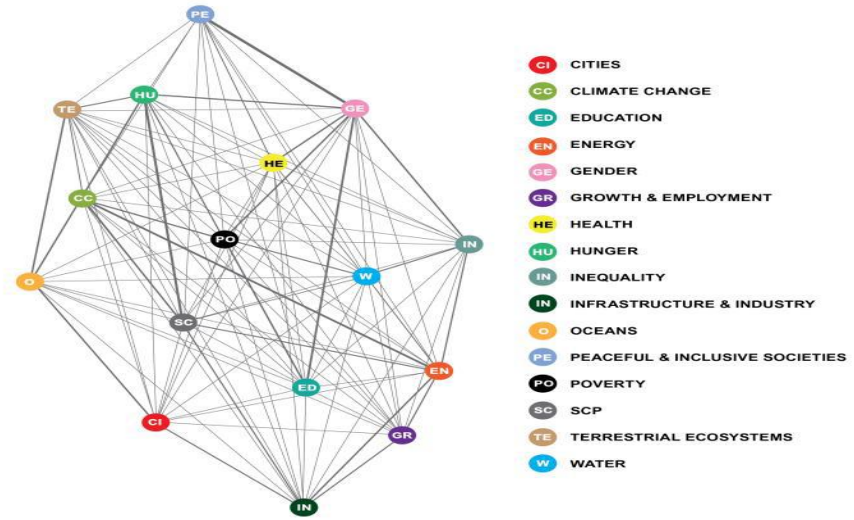
## 9. 지구경계의 침범 현황



## 10. 2030 SDGs의 특징

- 17개 SDG는 세계경제의 패러다임 전환을 위한 행동의제.
  - 사람과 지구(환경)을 통합한 경제패러다임 → 빈곤, 사회공동체의 해체, 지구환경의 파괴
  - 새로운 패러다임 → 사회공동체의 구축, 지구환경의 보호, 경제성장의 도모, 평화의 유지를 동시적으로 추구하는 균형된 발전 패러다임
- 17개 SDG는 상호 불가분하게 통합된 목표세트 - 동시적 추진이 중요.
- 17개 SDG는 보편적인 행동의제. 즉 선후진국 모두 이행해야 할 의제
  - 17개 SDG는 글로벌 하게 성취되어야 할 목표.
  - 169개 세부목표(target)는 글로벌한 목표 및 국가별 목표들로 구성.
  - 각국 고유의 현실, 역량, 발전수준, 정책 및 우선순위를 감안해 적용을 차별화
  - 글로벌 목표에의 기여를 통해 개도국 등 타국 지원정책 추구
- 인간의 존엄성 존중
  - '누구도 낙오시키지 말자'(No one will be left) 원칙: 모든 국가와 각 사회의 모든 구성원에 대해 SDGs 실현 추구.
  - 특히, 가장 뒤에 처진 나라와 사람에게 가장 우선적으로 적용.

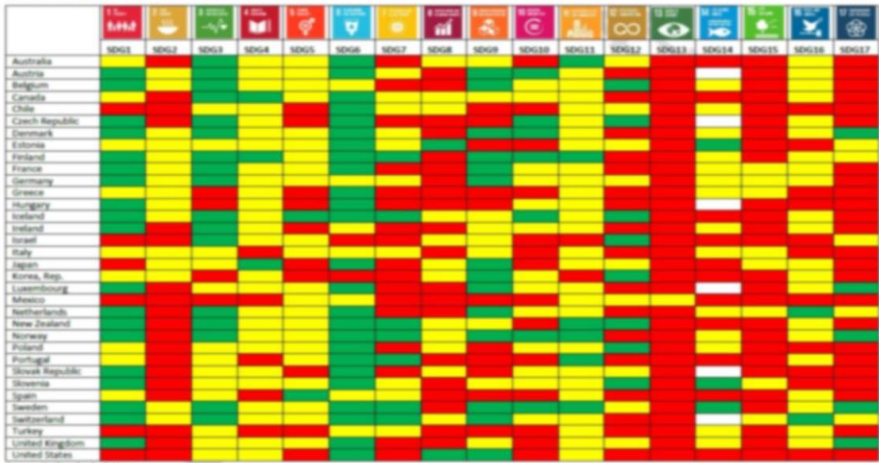
## 11. SDGs는 하나의 통합된 시스템



출처: UN, Global Sustainable Development Report, 2015.

## 12. 'SDG Index'에 의한 OECD국들의 지속가능발전수준: 예시적 평가(SDSN)

Table 3. SDG Dashboard for OECD countries



주: ■ '불량', ■ '우량', ■ '부족'.

### 13. SDG Index에 의한 한국의 '지속가능발전수준' 예시적 평가(SDSN)

대한민국 Korea, Rep.	SDG1	SDG2	SDG3	SDG4	SDG5	SDG6
	빈곤퇴치	기아해소 / 식량안보	보건증진	교육보장 / 평생학습	성 평등	물과 위생
	SDG7	SDG8	SDG9	SDG10	SDG11	SDG12
	에너지	경제성장 / 일자리	인프라 / 산업화	불평등 해소	도시	지속가능한 소비·생산
	SDG13	SDG14	SDG15	SDG16	SDG17	
	기후변화 대응	해양자원	육상생태계	평화로운 사회·제도	이행수단/글로벌 파트너십	

주: ■ '불량', ■ '우량', ■ '부족'

### 14. SDGs의 활용방안

- 지속가능발전 시대로의 전환기 범국민적 협력과 기업·개인의 적응 촉진
  - 미래에 대한 'Narrative'(미래로의 발전 시나리오)의 제공: 상호 연결된 글로벌 및 국가적 주요 중장기적 문제와 도전에 관한 정책당국자들과 시민들의 상호토론과 통합적 사고 및 이해의 촉진 → 국가의 지속가능발전전략
  - 정책당국자들, 시민사회, 각종 기관들 및 기업의 SDGs 지향적인 정책과 행동 촉진: 책임의식과 Peer Pressure 및 상호 협력 증진
  - 자연·사회과학 전문가들의 지속가능발전 문제와 해법에 대한 연구 촉진.
  - 기업에게 주요 경영지표 제공.
  - 학생 등 젊은이들: SDGs 시대의 경력개발과 취업 준비를 위한 지표 제공.
- 국가와 지역사회 및 국제협력관계의 management tool로 활용
  - 'What to do'의 점검표(check-list)로 활용 → 정책목표의 점검 및 조정
  - 국가경영 및 그에 따른 '진보(progress)'의 성적표(score card)로 활용 → 책임성(accountability)의 증진

## 15. SDGs의 이행 추진 방안: 모니터링 대책

- 향후 15년간 SDGs 이행에 대해 세 가지 수준에서 모니터링('follow-up and review')을 주기적으로 실시: 세부목표(targets) 및 지표들(indicators) 개발, 활용.
- **국가차원 모니터링:** 각 정부가 자발적 추진. 지역 및 글로벌 모니터링의 기반.
  - 장기적 오리엔테이션, 성과/도전/갭 평가 → 성공·실패요인 및 새로운 문제 파악 → 정책의 선택·개선
  - 기존 플랫폼 및 과정 최대 활용 → 국가 여건과 역량 및 필요성과 우선순위 부응해 운용.
  - 개방적, 포용적, 참여적 절차: 모든 이에게 투명하고 모든 이해당사자에 의한 보고를 조장, 지원.
- **지역차원 모니터링:** 상호 동료학습 및 지역차원의 도전 파악과 대응전략 모색. 아태지역의 경우 UN ESCAP 추진.
- **글로벌 모니터링:** UN ECOSOC 운영 HLPF 주관으로 장관급 참석 모니터링 연례적 실시. UN총회 주관 정상급 참석 모니터링 4년에 1회 실시.
  - 제1차 HLPF - 2016. 7. 11~20 실시. **한국** 등 22개국 보고. 주제: "누구도 낙오시키지 말자" [SDG 1(빈곤), 6(물·위생), 8(일자리·성장), 10(불평등) 및 17(수단·파트너십)]
  - 국가별 경험 및 주제별(Thematic) 모니터링 실시: 경험의 공유, 정치적 리더십과 지도와 권고 제공. 총체적 일관성, 의제의 타당성 및 야심 복돋기.
  - 선진국과 개도국의 진보와 성취, 당면도전 및 새로운 과제를 파악.
  - 사무총장은 연차적 SDG Progress Report 및 Global Sustainable Development Report 발간

## 16. SDGs 이행과정의 설계: 국가발전 협치의 추구

- SDGs의 이행을 위한 국가지속가능발전전략 수립 및 SDGs의 이행 평가는 중앙정부가 주도하되 시민사회에게 개방된 국가경영 협치 체제를 구축, 운영해야.
- 중앙정부: SDGs 이행대책, 국가전략, 국가 모니터링 제도와 절차 수립, 연차 보고서 발간, 다자이 해당사자 자문그룹의 운영. 시민들과 국제사회에 대해 책임성 수행
- 지방정부: 국가 지속가능발전의 주요 시험대.
- 학계: 대학교 및 고등교육기관들이 계획 및 이행과정에서 주요 역할. 연구개발을 통해 신기술을 창출하고 전략적 우선순위와 베스트 프랙티스 파악 및 1차 자료의 수립, 분석, 해석을 통해 의제 이행을 평가. 교육, 훈련 통해 차세대 지속가능발전 리더들 양성 및 공문화와 시민교육을 주도. 정부에 의한 SDG 이행계획 수립과 운영 지원. SDSN은 대학 등 지식기관의 이런 활동을 지원하도록 UN이 출범시켰음.
- 시민사회: SDG기반 과정에서 '누구도 낙오시키지 않는다' 원칙의 이행에서 핵심적 역할 수행. 첫째, '목소리' 작은 공동체와 지방의 이익을 대변. 둘째, 가난한 계층과 약자들 지원 경험에 입각해 소외계층 지원 대책 개발, 제시에 적극적임.
- 기업: 정부와 협력 파트너로서 역할 큼. 지속가능생산공정, 자원의 재활용, 노동자를 위한 사회보호 개선, CSR 사업, 자선기부 등의 기회. SDG 의제는 기업의 성장을 위해 중요: 지속가능 경영 및 지역사회 친화적 경영은 기업의 경쟁력에 기여. 그러나 정부는 기업의 SDG과정 참여를 위한 인센티브를 설정해야.
- 국회 및 지방의회: SDGs 이행의 모니터링과정 참여, 지원.

## 17. SDGs의 이행 위한 협치구조의 설정

- SDG들을 상호통합적으로 운용하기 위해서는 여러 부처와 정부기구들이 참여하고 중앙정부와 지방정부 내(內) 및 상호간 조정이 이루어질 수 있도록 하는 과정이 제도화되어야.
- 부문 간 통합적 계획수립을 위해 정보와 인적자원, 기술, 전략수립 및 모니터링 및 평가(M&E) 등에 걸쳐 부처 간 협력 역량을 개선해야.
- 부처 간 조정을 위해 '국가지속가능발전위원회' 등의 범부처 조직 혹은 기구 설치 필요.
  - 동 조직에는 상공회의소, 통계청, 지방정부, 시민사회와 학계의 대표 등 참가.
  - 동 조직 혹은 기구는 반드시 국가수반이 인정하고 지원해 주어야.
- 범부처 조직의 기능
  - SDG 이행전략들의 개발 혹은 조정
  - 국가차원 모니터링 시스템 및 이에 따른 국가 지표세트 개발
  - 지속가능발전 연차보고서 수집 및 update (5년에 한번 주요 개정)
  - 주요 이해당사자들과의 협의.
  - SDG 이행에 대한 지역 및 글로벌 대화에 대비

## 18. SDGs 이행추진을 위한 우리의 당면과제(1)

- **현황과 문제점: UN 2030 의제에 대한 대응추진 책임소재의 불명으로 추진에 진척이 없음.**
- 동 책임이 현재로는 일단 국무조정실 녹색성장지원단에 배정되어 있음. 그러나 동 지원단은 주무 업무로 '녹색성장기본법'에 의거 "녹색성장 5개년계획(2014~2018)"을 수립, 운영하고 있고 지속가능발전관련 업무는 일전 환경부에 배정되어 있음.
- 우리 정부는 지속가능발전에 관해 '지속가능발전법'에 의해 환경부가 지속가능발전 위원회를 책임 운영하면서 '지속가능발전 기본계획'의 수립과 운영을 추진하고 있고 그 일환으로 동 법에 의거해 지난 1월에 동 위원회를 통해 "제3차 지속가능발전기본 계획(2016~2035)"을 수립, 공표.
- 기존의 지속가능발전법은 UN 2030 의제 이전에 수립된 법령으로서 본 발제자료에서 제시되고 있는 SDGs 이행체제를 수용하기에 무리가 있고 또한 제3차 기본계획도 SDGs의 필요성에 의거해 재설정될 필요가 있음.
- 지속가능발전은 환경문제 뿐 아니라 경제, 사회 및 협치 부문에 걸치는 정책의의제로서 환경부의 업무분야를 크게 초월. 반면 녹색성장은 지속가능발전 전략의 주요 축으로서 지속가능발전의 하부 개념이어서 지속가능발전 의제를 녹색성장기획단이 관장하는 데 무리가 있음.

## 19. SDGs 이행추진을 위한 우리의 당면과제(2)

- **대응방안:** 정부는 SDGs 대응차원의 지속가능발전을 효과적으로 추진하기 위한 SDGs 이행체제를 구상하고 20대 국회를 통해 이에 따른 법 개정(녹색성장기본법 및 지속가능발전법)을 추진하도록 해야 할 것임.
- **추진전략:** 2017년까지 SDGs 이행체제를 정립하도록 하고 2016~2017년 중 개방적 공개적 관민협의과정을 거쳐 동 체제의 구상을 개발, 도출.
- **당면과제:** SDGs 이행체제의 구상 개발과 정립방안에 대한 협치 차원의 여론 수렴과 대책 도출을 위해 대통령 혹은 국무총리께서 금년 상반기 중 관민 다자적 이행당사자 그룹으로 '지속가능발전포럼'을 한시적(2016下~2017上)으로 설치.



'UN 지속가능발전목표(SDGs)의  
국가협치에 대한 의의와 대응과제' 토론회

## 부록

1. UN SDSN(2015.12),  
Getting Started with the Sustainable Development Goals



# Getting Started with the Sustainable Development Goals

A Guide for Stakeholders

December 2015

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# Acronyms

<b>BAU</b>	Business-As-Usual	<b>MDGs</b>	Millennium Development Goals
<b>CHW</b>	Community Health Worker	<b>NCSO</b>	National Council for Sustainable Development
<b>COP21</b>	21st Session of the Conference of Parties	<b>NSDS</b>	National Sustainable Development Strategy
<b>CSO</b>	Civil Society Organization	<b>NSO</b>	National Statistics Office
<b>DAC</b>	Development Assistance Committee (OECD)	<b>NSS</b>	National Statistical System
<b>DBR</b>	Domestic Budget Revenue	<b>ODA</b>	Official Development Assistance
<b>DFI</b>	Development Finance Institute	<b>OECD</b>	Organization for Economic Co-operation and Development
<b>DDP</b>	Deep Decarbonization Pathway	<b>OOF</b>	Other Official Flows
<b>DRM</b>	Domestic Resource Mobilization	<b>OWG</b>	Open Working Group
<b>DOTS</b>	Directly Observed Treatment Short-Course	<b>PPP</b>	Public Private Partnership
<b>ECOSOC</b>	UN Economic and Social Council	<b>R&amp;D</b>	Research and Development
<b>FAO</b>	Food and Agriculture Organization	<b>Rio+20</b>	United Nations Conference on Sustainable Development Rio+20
<b>FfD</b>	Financing for Development	<b>SDGs</b>	Sustainable Development Goals
<b>GFATM</b>	The Global Fund to Fight AIDS, Tuberculosis and Malaria	<b>SDGCC</b>	Sustainable Development Goal Coordinating Council
<b>GFF</b>	Global Financing Facility	<b>SDSN</b>	Sustainable Development Solutions Network
<b>GHG</b>	Greenhouse Gas	<b>SIDS</b>	Small Island Developing States
<b>IAEG</b>	Inter-agency and Expert Group	<b>UN</b>	United Nations
<b>ICT</b>	Information and Communications Technology	<b>UNDP</b>	United Nations Development Programme
<b>IDDRI</b>	Institute for Sustainable Development and International Relations	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>IEA</b>	International Energy Agency	<b>WFP</b>	World Food Programme
<b>IEAG-SDG</b>	Independent Expert Advisory Group on SDGs	<b>WHO</b>	World Health Organization
<b>IFAD</b>	International Fund for Agricultural Development		
<b>LLIN</b>	Long-lasting Insecticidal Net		
<b>MDB</b>	Multilateral Development Bank		

# Why a guide for getting started?

This guide is a first and preliminary guide on how to “get started” with implementing the Sustainable Development Goals (SDGs). It aims to help stakeholders, including governments at all levels (national, regional, and local), to understand the SDG Agenda, to start an inclusive dialogue on SDG implementation, and to prepare SDG-based national development strategies (or align existing plans and strategies with the goals). It draws upon lessons learned from the Millennium Development Goals (MDGs), and proposes guiding principles to help countries navigate the SDG Agenda. The guide reflects the universality of the SDG Agenda by recognizing countries’ different starting points.

We underscore the preliminary nature of this document and welcome comments and suggestions for improvement. These will be integrated into subsequent versions of the guide.

## What is in the guide?

**Chapter 1** introduces the concept of sustainable development, explains the evolution from Millennium Development Goals to Sustainable Development Goals, and discusses the importance of goal-based planning.

**Chapter 2** offers practical guidance on how to get started with implementing the 2030 Agenda, including how to measure current performance, convene a multi-stakeholder dialogue, and prepare a roadmap for the design of SDG strategies.

**Chapter 3** provides a set of tools to support the design of sector- and goal-based strategies to achieve the SDGs.

## Who is this guide for?

This guide has been written primarily for:

1. SDSN Member Institutions, notably universities
2. Businesses trying to get oriented around the SDGs
3. National and local policy makers responsible for thinking through the implementation of the SDG agenda
4. Citizens and civic groups

Chapter 1:

# Getting to know the Sustainable Development Goals

# An introduction to the SDGs

In September 2015 Heads of State and Government agreed to set the world on a path towards sustainable development through the adoption of the 2030 Agenda for Sustainable Development.<sup>1</sup> This agenda includes 17 Sustainable Development Goals, or SDGs, which set out quantitative objectives across the social, economic, and environmental dimensions of sustainable development – all to be achieved by 2030. The goals provide a framework for shared action “for people, planet and prosperity,” to be implemented by “all countries and all stakeholders,

acting in collaborative partnership.” As articulated in the 2030 Agenda, “never before have world leaders pledged common action and endeavour across such a broad and universal policy agenda.”<sup>2</sup> 169 targets accompany the 17 goals and set out quantitative and qualitative objectives for the next 15 years. These targets are “global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities.”<sup>3</sup> A set of indicators and a monitoring framework will also accompany the goals. The indicators are defined by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs), which will present its recommendations to the UN Statistical Commission in March 2016.

## Box 1: The Sustainable Development Goals (SDGs)

The 17 Sustainable Development Goals form a cohesive and integrated package of global aspirations the world commits to achieving by 2030. Building on the accomplishments of their predecessors the MDGs, the SDGs address the most pressing global challenges of our time, calling upon collaborative partnerships across and between countries to balance the three dimensions of sustainable development - economic growth, environmental sustainability, and social inclusion[1.i].



**Goal 1:** End poverty in all its forms everywhere

**Goal 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Goal 3:** Ensure healthy lives and promote well-being for all at all ages

**Goal 4:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

**Goal 5:** Achieve gender equality and empower all women and girls

**Goal 6:** Ensure availability and sustainable management of water and sanitation for all

**Goal 7:** Ensure access to affordable, reliable, sustainable and modern energy for all

**Goal 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**Goal 9:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

**Goal 10:** Reduce inequality within and among countries

**Goal 11:** Make cities and human settlements inclusive, safe, resilient and sustainable

**Goal 12:** Ensure sustainable consumption and production patterns

**Goal 13:** Take urgent action to combat climate change and its impacts

**Goal 14:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development

**Goal 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

**Goal 16:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

**Goal 17:** Strengthen the means of implementation and revitalize the global partnership for sustainable development

The SDGs build upon the success of the 8 Millennium Development Goals agreed upon in 2000 to halve extreme poverty by 2015 as a midpoint towards eradicating poverty in all its forms. The MDGs focused on the many dimensions of extreme poverty, including low incomes, chronic hunger, gender inequality, lack of schooling, lack of access to health care, and deprivation of clean water and sanitation, among others. They achieved some great successes, for example halving the likelihood of a child dying before their fifth birthday (see Box 2). Yet, many countries did not make sufficient progress, particularly on environmental sustainability, and it is now widely recognized that additional work is needed to achieve the ultimate goal of ending extreme poverty in all its forms. Further, there is consensus that the scope of the MDGs needs to be broadened to reflect the challenges the world faces today. Around 700 million people still live below the World Bank's poverty line, and billions more suffer deprivations of one form or another. Many societies have experienced a rise of inequality even as they have achieved economic progress on average. Moreover, the entire world faces dire environmental threats of human-induced climate change and the loss of biodiversity. Poor governance, official corruption, and in dramatic cases overt conflict, afflict much of the world today.

The SDG Agenda responds to these compound challenges, and is therefore broader and more complex than the MDGs. Most importantly, it adopts sustainable development as the organizing principle for global cooperation, meaning the combination of economic development, social inclusion, and environmental sustainability. Hence, the overarching name "Sustainable Development Goals," as the key message to the world community. Furthermore, the SDGs and related agenda apply to all countries, developed and developing alike. The post-2015 agenda calls for actors to move away from business-as-usual (BAU) approaches towards the sustainable use of resources and peaceful and inclusive societies[1.4].

The outcome document for the SDG Agenda synthesizes the breadth of these issues by declaring that the SDG framework will stimulate action on five key themes: people, planet, prosperity, peace, and partnerships, which are described briefly below[1.5].

## Box 2: Lessons from the MDGs

The SDGs build on the success of the Millennium Development Goals (MDGs) in mobilizing collective action around a time-bound set of globally agreed goals. The eight MDGs were adopted in 2002 as a framework to operationalize the Millennium Declaration. The Declaration, adopted by Member States of the UN General Assembly in the year 2000, articulated the world's "collective responsibility to uphold the principles of human dignity, equality and equity at the global level" and to eradicate the world's most extreme and deplorable conditions, including poverty and destitution[1.ii]. The MDGs, which conclude at the end of 2015, focus on the most vulnerable populations, and address extreme poverty, hunger, disease, gender equality, education, and environmental sustainability. They mark a historic and effective global mobilization effort to achieve a set of common societal priorities. By packaging these priorities into an easy-to-understand set of eight goals, and by establishing measurable, time-bound objectives, the MDGs promote global awareness, political accountability, improved monitoring, mobilization of epistemic communities, civic participation, and public pressure.

Many countries have made significant progress towards achieving the MDGs. In 1990, the baseline year for measuring MDG progress, almost half of the developing world lived on less than US\$1.25 a day measured in 2005 prices (the World Bank poverty line used during the MDG period). According to new estimates from the World Bank, today less than 10% of the world's population live on less than the equivalent \$1.90 per day measured in 2010 US\$[1.iii]. Furthermore, according to the UN Millennium Development Goals Report 2015, the likelihood of a child dying before age five has been nearly halved, and the global maternal mortality ratio dropped by 45%. Since 1990, nearly 3.3 million deaths from malaria have been averted, and new HIV infections have decreased by 1.4 million cases[1.iv].

Primary school net enrollment in the developing world has reached 91%. Ninety-one percent of the world uses improved drinking water. Additionally, ozone-depleting substances have been almost eliminated, with the ozone layer predicted to recover by mid-century. The MDGs have also provided a galvanizing force and organizing framework for development cooperation. Official development assistance (ODA) has increased by 66% since 2000, providing an additional US\$135.2 billion of support[1.v].

## People

*"We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfill their potential in dignity and equality and in a healthy environment."*[1.6]

The MDGs played an important role in focusing the world's attention on reducing extreme poverty, yet progress has been incomplete. As of 2011, the percent of people in extreme poverty (living on less than \$1.90 a day) in sub-Saharan Africa was 44.3%, and in South Asia was 22.3%[1.7]. In particular, least developed countries, landlocked developing countries, and small-island developing states remain behind, as they face structural barriers to development. In many societies the most vulnerable populations have made little progress. Mass migration, often caused by violence and conflict, has led to massive displacement, instability, and large populations living in dangerously overcrowded refugee camps and informal settlements. Gender inequality remains widespread, as many young girls are deprived of education and forced into early marriages.

Under the MDGs the world has made tremendous progress in reducing child mortality, but six million children still die each year from preventable causes[1.8]. Maternal mortality rates have come down in most countries, but not sufficiently to meet the MDG. Large numbers of people do not have access to affordable primary health care [see Tracking universal health coverage: First global monitoring report], and major efforts are needed to ensure universal access to basic infrastructure, including energy, water, sanitation, and transport. While a lot of progress has been made in increasing primary school enrolment in all countries, completion rates remain low, and far too many children do not complete a full cycle of education from early-childhood development through to secondary school completion. Approximately 800 million people remain chronically undernourished[1.9] and do not have access to sufficient, safe, and nutritious food. Another billion or so face various kinds of micronutrient deficiencies [see The State of Food Insecurity in the World 2015]. For these reasons the SDGs commit to ending extreme poverty in all its forms, including hunger, and call on all people to enjoy universal access to essential social services and basis infrastructure by 2030.

## Planet

*"We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations."*[1.10]

The scale of human impact on the physical Earth has reached dangerous levels, which threatens long-term

progress against poverty and the well-being of rich and poor countries alike. The world economic system is already "trespassing" on the Earth's "planetary boundaries," [see Planetary boundaries: Guiding human development on a changing planet; Big World, Small Planet. Abundance within Planetary Boundaries]. Many natural resources and ecosystems essential for human and societal well-being are being threatened or destroyed, such as loss of biodiversity, air pollution, water shortages and pollution, deforestation and grasslands degradation, and soil contamination. Climate change is no longer a future threat but a stark current reality. We are already seeing the consequences of rising carbon dioxide concentrations and higher global temperatures, such as changes to the intensity and duration of extreme weather events and ocean acidification[1.11]. With the scale of global economic activity doubling roughly every generation we must change how the economy functions or the environmental consequences of growth will become overwhelming and indeed devastating.

The SDGs commit to protect the planet from degradation, including through sustainable production and consumption and the sustainable management of natural resources (including terrestrial and marine ecosystems), as well as taking urgent action to tackle climate change.

## Prosperity

*"We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature."*[1.12]

The world must shift to sustainable consumption and production patterns that do not deplete natural resources for future generations, and that promote prosperity for all. Unless this shift occurs, continued population and economic growth will further increase planetary pressures and exacerbate social exclusion and inequality. The sustainable development framework places a central emphasis on decoupling economic growth from unsustainable resource use and pollution, and offers unprecedented opportunities for low-income countries to join an international production system. Additionally, rapid technological change and globalization are driving a rise in global incomes but also a rise in inequality among and within countries. Current growth patterns are not providing enough decent work, especially for young people without adequate skills and training, and are leading to widespread unemployment. Women continue to be economically undervalued and excluded in many countries and regions. Rapid population aging can leave the elderly in dire conditions unless appropriate policies are in place. And vulnerable groups such as the disabled and indigenous populations remain marginalized and excluded from full socioeconomic participation[1.13].

## Peace

*“We are determined to foster peaceful, just and inclusive societies, which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.”[1.14]*

In an age of globalization, governance within and among countries is becoming more diffuse and complex. Critical steps for sustainable development include promoting good governance, rule of law, human rights, fundamental freedoms, equal access to fair justice systems, as well as combatting corruption and curbing illicit financial flows. Effective and inclusive institutions are necessary to prevent all forms of abuse, exploitation, trafficking, torture, and violence. Most important, enhanced global cooperation through the UN Security Council and other UN institutions is necessary to prevent the spread of wars and extreme violence as is now afflicting many countries in the Middle East, North Africa, and Western Asia. Collaborative partnerships of all kinds will be essential to build effective, accountable and inclusive institutions at all levels. [1.15]

## Partnerships

*“We are determined to mobilize the means required to implement this Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.”[1.16]*

The SDG Agenda calls for a renewed global partnership, indeed many partnerships at all levels, with all countries and stakeholders working in solidarity to achieve the goals. Today’s governments must coordinate with a broad spectrum of actors, such as multinational businesses, local governments, regional and international bodies, and civil society organizations. Accountability and transparency will be increasingly important at all levels of society, with revised regulatory mechanisms needed to ensure human, civil, and environmental rights. [1.17].

# The benefits of goal-based planning

Why do we need Sustainable Development Goals? Do global goals matter? The evidence from the MDGs is powerful and encouraging. Global goals such as the MDGs and the SDGs complement international conventions and other tools of international law by providing a globally shared normative framework that fosters collaboration

across countries, mobilizes all stakeholders, and inspires action. Well-crafted goals are able to accomplish the following[1.18]:

- Provide a shared narrative of sustainable development and help guide the public’s understanding of complex challenges. The SDGs will raise awareness and educate governments, businesses, civil society leaders, academics, and ordinary citizens about the complex issues that must be addressed. Children everywhere should learn the SDGs as shorthand for sustainable development.
- Unite the global community and mobilize stakeholders. Community leaders, politicians, government ministries, academics, nongovernmental organizations, religious groups, international organizations, donor organizations, and foundations will be motivated to come together for a common purpose around each SDG. The shared focus on time-bound quantitative goals will spur greater mobilization, promote innovation, and strengthen collaboration within epistemic communities or networks of expertise and practice. The experience in public health under the MDGs provides a powerful illustration of how communities can mobilize around time-bound goals.
- Promote integrated thinking and put to rest the futile debates that pit one dimension of sustainable development against another. The challenges addressed by the SDGs are integrated and must be pursued in combination, rather than one at a time. As a result, SDGs cannot be ordered by priority. All are equally important and work in harmony with the others. Each goal should be analyzed and pursued with full regard to the three dimensions of sustainable development (economic, social, and environmental).
- Support long-term approaches towards sustainable development. The goals, targets, and indicators will allow public and private actors to identify what is needed and chart out long-term pathways to achieve sustainable development, including resources, timelines, and allocation of responsibilities. This long-term perspective can help to insulate the planning process from short-term political and business imperatives.
- Define responsibilities and foster accountability. In particular, the goals can empower civil society to ask governments and businesses how they are working towards every one of the new goals. Timely, accurate data on progress is crucial for effective accountability. The SDGs must drive improvements in data and monitoring systems, which look to capitalize on the “data revolution,” i.e. significant improvements in local, national, and global data collection, processing, and dissemination, using both existing and new tools.

# New opportunities for sustainable development

As noted, the SDG framework has been designed to address today's challenges. While some trends, such as human-induced climate change or social exclusion, are moving in the wrong direction, other development trends offer reasons for hope. We live in an "a time of immense opportunity,"[1.19] with the end of extreme poverty in sight. There have been tremendous technological advances that have led to improved development outcomes, particularly in the key fields of health, energy, nanotechnologies, systems design, and especially information and communications technologies (ICTs), which have dramatically improved global interconnectedness and opened vast new opportunities for productivity advances across the world economy. The SDG agenda sets out five key opportunities for development that is (i) inclusive, (ii) universal, (iii) integrated, (iv) locally-focused, and (v) technology-driven.

## Inclusive Development

"[A]ll stakeholders, acting in collaborative partnership, will implement this plan [SDG Agenda]." [1.20] The SDGs will engage multiple stakeholders at all levels of society to actualize the agenda. No one is left behind or left out, as "governments, international organizations, the business sector and other non-state actors and individuals must contribute." [1.21] Participatory processes will allow stakeholders to give voice to the needs and interests of the people they represent, enabling better-planned and better-informed initiatives.

## Universal Development

The MDGs set out goals mainly for developing countries, to which rich countries added assistance through finances and technology. In contrast, the SDGs are "universal goals" that apply to all countries and "involve the entire world, developed and developing countries alike" [1.22], "taking into account different national realities." [1.23] Countries are asked to build on current policy instruments and frameworks to meet the goals and targets, taking into account differences in national contexts and development levels. Achievement of any of the SDGs will require concerted global efforts to achieve all of them. The 2030 Agenda is not about what the rich should do for the poor, but what all countries together should do for the global well-being of this generation and those to come.

## Box 3: A Brief History of Sustainable Development

The SDGs are part of a history of multilateral efforts to shift the world onto a sustainable and resilient pathway. Intergovernmental efforts formally began with the 1972 UN Conference on the Human Environment. The phrase "sustainable development" was adopted and popularized in 1987, in the report of the United Nations Commission on Environment and Development, known widely by the name of its chairwoman, Norwegian Prime Minister Gro Harlem Brundtland. The Brundtland Commission provided a definition of sustainable development that was used for the next 25 years: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." [1.vi] This intergenerational concept of sustainable development was adopted at the 1992 UN Conference on Environment & Development in Rio de Janeiro. Over time, the definition of sustainable development has evolved to capture a more holistic approach, linking the three dimensions of sustainable development: economic development, social inclusion, and environmental sustainability. This three-part vision of sustainable development was emphasized at the 2012 Rio+20 Conference. The SDGs aim to provide a global framework for cooperation to address the three dimensions of sustainable development within an ethical framework based on: (i) the right to development for every country, (ii) human rights and social inclusion, (iii) convergence of living standards across countries, and (iv) shared responsibilities and opportunities [1.vii].

## Integrated Development

The SDG Agenda moves away from siloed approaches to development and promotes the integration of the economy, environment, and society. The SDGs are "integrated and indivisible and balance the three dimensions of sustainable development." [1.24] The success of one leads to the success of all. Included in this is the need for good governance and strong social networks, which translates into a framework focused on "people, planet, prosperity, peace and partnerships [1.25]." For example, a country's ability to combat hunger is directly connected to its agricultural system, its strategy for rural development, economic and income growth, management of natural resources, level of infrastructure, natural disaster mitigation plans, and the health of its population, requiring that many actors work together across and outside of government.

## Locally-Focused Development

Local authorities and communities are responsible for the realization of the goals at local scales, recognizing in particular interdependent relationships between urban, peri-urban, and rural areas. The Rio+20 follow-up document, Key Messages and Process on Localizing the SDG Agenda, notes that “many of the critical challenges of implementing the SDG Agenda will depend heavily on local planning and service delivery, community buy in and local leadership, well-coordinated with the work of other levels of governance.”[1.26] A bottom-up approach can be successful in achieving transformational sustainable pathways through direct contact with communities, which informs national-level policy decisions. Cities will be particularly important to this process. By 2050, the world’s urban population is projected to grow by 2.5 billion people, to over 70% of the world living in cities, with approximately 90% of the growth expected to be in the developing regions of Asia and Africa[1.27]. Cities are the locus of worldwide consumption and production. The contribution of cities to global output is expected to rise to three-quarters in 2050[1.28]. Placing attention, investment, and innovation in cities will bring the world closer to the SDGs.

## Technology-driven Development

Rapid technological change, particularly in ICT and data, but also in material science, manufacturing (e.g. 3D printing), genomics, and other areas, is deepening the integration of the world economy and enabling breakthroughs in productivity across the economy, with a significant potential to speed the pace of global development and economic convergence. Of great note for the SDGs is the current “data revolution,” characterized by an explosion of available data resources and rapidly evolving technologies for analyzing those data. One key lesson learned from the MDGs is that a lack of reliable data can undermine governments’ ability to set goals, optimize investment decisions, manage development processes, and measure progress. Drawing from this MDG experience, in 2014 UN Secretary-General Ban Ki-moon advocated for the harnessing of the current data revolution in support of sustainable development[1.29]. New technologies also offer tremendous opportunities to deliver public services, including healthcare, education, and basic infrastructure to more people at lower cost. E-government can offer new approaches to manage the complex and dynamic relationships between institutions and stakeholders with diverse objectives and competencies, assess and integrate initiatives at different governance levels, and support synergies to meet different goals.

## What is Next?

The following chapters of this guide set out practical guidance on how to get started with implementing the 2030 Agenda. They explore how to take stock of a country’s current performance on sustainable development, how to convene a multi-stakeholder dialogue, prepare a roadmap for the design of SDG strategies, and finally, provide a set of tools to support the design of sector and goal-based strategies.

Chapter 2:

# Preparing for implementation

# Taking stock and identifying priorities for implementation

Before embarking on SDG implementation, stakeholders should take stock of where their country, sector, region, or city stands with regards to achieving all seventeen goals. A quick 'temperature check' of the key dimensions of sustainable development, including economic development, social inclusion, and sustainable environmental management, can help develop a shared understanding of priorities for implementation. In this way, national and local government actors and other key stakeholders can commence a dialogue on implementation of the SDGs with a common understanding of current conditions and the business-as-usual (BAU) trajectory.

Quick indicators for assessing a country or city's broad performance on the SDGs are captured in Table 1. They were selected based on several criteria: (i) maximum data availability, (ii) applicability in broad range of country settings, (iii) broad coverage of goal priorities. Of course these metrics do not measure the full range of SDG challenges, and they should not be misunderstood as doing so. They can also not serve as a management tool or accountability framework for implementing the goals – they are just a basis for getting started quickly through a rapid self-assessment. The SDSN Report Indicator and a Monitoring Framework (box 4) discussed criteria for SDG indicators in greater detail.

Since an initial snapshot is a rapid exercise to support initial national and local dialogues, data should be taken from existing official statistics including surveys, census, administrative records, geospatial imagery, or other forms of open data. The latest available data should be used and disaggregated to the greatest extent possible, so that it is possible to see how different socio-economic groups are fairing in as close to real-time as possible.

In many cases there will be data gaps, but these are instructive in and of themselves, because they demonstrate which areas do not receive sufficient attention, where institutional capacity may be insufficient, or where deeper analyses are required to understand what needs to be measured and how.

This information can help discern where countries or regions are lagging far behind the SDG targets and to articulate priority goals. Identifying priorities does not mean choosing one goal at the expense of another; the SDGs were crafted as an integrated set, which are interdependent and complementary. Instead, prioritization means identifying those areas lagging furthest behind and catalyzing resources, awareness, and policy actions in those areas to spur rapid progress.

## Box 4: Principles for Indicator Selection

### 10 Principles for Selecting Global Monitoring Indicators<sup>[1]</sup>

1. Limited in number and globally harmonized
2. Simple, single-variable indicators, with straightforward policy implications
3. Allow for high frequency monitoring
4. Consensus based, in line with international standards and system-based information
5. Constructed from well-established data sources
6. Disaggregated
7. Universal
8. Mainly outcome-focused
9. Science-based and forward-looking
10. A proxy for broader issues or conditions

### 5 Principles for Selecting Quick Stock-Taking Indicators

1. Limited in number (2-3 per goal) but capturing core elements of each goal
2. Applicable to broad range of country settings
3. Recent high-quality data available for as many countries as possible
4. Consensus based, in line with international standards and system-based information
5. Constructed from well-established and accessible data sources

[1] For more information see Sustainable Development Solutions Network, (2015), Indicators and a Monitoring Framework for Sustainable Development Goals: Launching a data revolution for the SDGs. p. 17.

Prioritization can also mean identifying specific areas to pursue in the short or medium term as an entry point to the broader transformation towards sustainable development. For example, a country or region subject to acute drought may decide to focus on sustainable water resource management as one of its immediate objectives, recognizing that a comprehensive water resource management strategy will consider the balance of the local ecosystem (SDGs 14/15), water use within local industry (SDG 12), the impact of the water shortages upon poverty, agriculture and employment (SDGs 1/2/8), and so on.

A stocktaking and prioritization exercise is not only relevant for national and local governments. The SDGs are universal goals that apply to all key stakeholders and should serve as a lens for critical internal reflection. For example, companies should see the SDGs as an opportunity to take stock of their business practices in their interactions with customers, suppliers, and the natural environment; civil society should use them as an opportunity to think through more holistic, cross-sectoral approaches to poverty alleviation and environmental management; and universities and knowledge institutions should consider whether the evidence and knowledge they are generating contributes to the pursuit of a more sustainable world for people and planet. For this reason, stakeholders should also seek to establish a set of measures against which to take stock of their performance on the SDGs.

The Global Reporting Initiative, the World Business Council for Sustainable Development, and the Global Compact have already developed a set of Key Performance Indicators with which businesses can measure their current performance on sustainable development and track their future contributions. The SDG Compass sets out an inventory of business indicators, mapped against the SDGs. It allows businesses “to explore commonly used indicators and other relevant indicators that may be useful when measuring and reporting your organization’s contribution to the SDGs.”

Civil society organizations, faith-based groups, and knowledge institutions should conduct a similar stocktaking exercise to consider how they contribute to each of the goals and identify priority areas for action. Each will need to consider its respective strengths and expertise as part of such an exercise.

Quick stocktaking exercises will be crucial to ensure that all stakeholders come to the table with a sense of their respective contributions towards the SDG agenda, as well as an informed opinion on priority concerns for the country, region, city, or sector.

**Table 1: Illustrative indicators for a quick assessment of a country or region’s starting position with regards to sustainable development**

Goal	Headline indicators
Goal 1	Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population)
	Poverty headcount ratio at national poverty lines (% of population)
Goal 2	Prevalence of undernourishment (% of population)
	Prevalence of obesity, BMI ≥ 30 (% of adult population)
	Cereal yield per hectare
Goal 3	Mortality rate, under-5 (per 1,000 live births)
	Life expectancy at birth, total (years)
Goal 4	Lower secondary completion rate (% of relevant age group)
	PISA score
Goal 5	Proportion of seats held by women in national parliaments (%)
	School enrollment, secondary (gross), gender parity index (GPI)
Goal 6	Improved water source (% of population with access)
	Water Stress Score
Goal 7	Access to electricity (% of population)
	Alternative and nuclear energy (% of total energy use)
Goal 8	Share of youth not in education, employment or training, total (% of youth population)
	Average annual per capita GDP over the past 5 years
Goal 9	Mobile broadband subscriptions per 100 inhabitants
	Research and development expenditure (% of GDP)
Goal 10	Palma ratio
	Gini index
Goal 11	Percentage of urban population living in slums or informal settlements
	Mean annual concentration of PM2.5 in urban areas
Goal 12	Municipal solid waste generation (kg per capita)
Goal 13	CO2 emissions per capita
	Losses from natural disasters (% GNI)
Goal 14	Share of marine areas that are protected
	Fraction of fish stocks overexploited and collapsed (by exclusive economic zone)
Goal 15	Red List Index
	Annual change in forest area
Goal 16	Homicides per 100,000 population
	Corruption Perception Index
Goal 17	For high-income and upper-middle-income countries: International concessional public finance, including official development assistance (% GNI)
	For low- and lower-middle-income countries: Government revenues (% GNI)
	Subjective Wellbeing (average ladder score)

A recent study by SDI, SDSN and Berelsmann Stiftung presents a very valuable resource for OECD countries embarking upon a stocktaking exercise. See Kroll, C., (2015) *Sustainable Development Goals: Are the rich countries ready? Sustainable Governance Indicators*, SDSN and Berelsmann Stiftung, Gutersloh: Berelsmann Stiftung.

# Preparing to develop SDG strategies

Once national and local governments and key stakeholders have taken stock of their starting point and have started to articulate priority issues, it is necessary to embark upon a roadmap exercise to develop a national SDG strategy.

## Do we really need a plan?

It may be necessary to explain to key stakeholders why an SDG strategy, built upon set of sector-specific strategies, is required. The idea of long-term strategies and planning is deeply frowned upon by some; ‘isn’t that how the old centrally planned economies collapsed?’ But in order to achieve goals as complex as the SDGs, societies will certainly need plans, with government taking the lead supported by the active engagement of business, academia, and civil society. There need not be rigid central planning of every sector in micro-detail, but basic and quantified strategies that look ahead are useful. These help governments and other stakeholders think over a 15-year time horizon and answer the question how can my country or my city achieve the new Sustainable Development Goals and/or what can my company, organization or institution contribute? This forward-looking planning is particularly important since the complexity of the goals requires integrated sustainable development plans that speak to one another and prioritize social, economic, and environmental considerations concurrently.

A plan needs to take the SDGs seriously as time-bound, quantitative objectives and articulate the major shifts in policy, programs, and investments required to achieve each goal. Take SDG 4 for example, on quality education for all. Consider a low-income country in sub-Saharan Africa. Perhaps today only 25% or 30% of kids 16 or 17 years old are completing a secondary education. Perhaps three-fourths are not. But according to SDG 4 there should be universal completion, 100% completion, by 2030. The key stakeholders in that country – the government, business community, academia, and civil society – must think very hard about a sound strategy to close an enormous education gap, and to do so successfully by 2030. Such a strategy must identify a pathway to many more schools, more access for poor students, more and better-trained teachers, and of course and expanded education budget. A successful strategy will have to deploy every innovative technique at hand, such as a vast scale-up of free, online education; distance learning; and distance training of teachers via smart phones, tablets, and every other kind of device to accelerate the uptake and the quality of education in the country. All of this will require a rollout plan, a financing model, and a functional international partnership to support low-income countries.

Another argument for long-term plans is that the SDGs set out ambitions over a 15-year period. Few sitting governments today will be in power 15 years from now. To overcome this challenge, each nation needs long-term plans and strategies that transcend normal day-to-day politics and electoral cycles. These SDG plans should empower all major political groups to say “Of course we’re on board; the SDGs are a global and national objective, not a partisan objective. And we therefore need national, rather than partisan, strategies that help to see our country through to success by 2030.”

There is one further reason for comprehensive SDG planning process at national and local levels: When the 193 member states of the United Nations were debating this new agenda they realized that the extent of global challenges could not be captured by fewer than 17 goals. This is a big number, but they went further, setting out 169 quantitative and qualitative targets or strategic objectives under each goal area. The targets are intended to help guide implementation, but as recognized by member states repeatedly, this long list of targets is only indicative; every country has its own national circumstances and national priorities. The challenges facing the United States or Ghana or Tajikistan are very different and highly context-specific. They are dependent on geography, on the state of development, on the history of the country, and on the nature of the country’s relations with world markets and regional economies. For this reason an SDG planning process is necessary to help governments rationalize the targets and identify the ones that are most relevant to their specific challenges.

## Who should be engaged?

Developing SDG strategies and plans should be a multi-stakeholder process, engaging national and local government representatives, civil society, businesses, faith-based groups and representatives from academia and science. As noted in *Transforming our World*, inclusive development means “all stakeholders, acting in collaborative partnership, will implement this plan [SDG Agenda].” [2.1]

Effective multi-stakeholder engagement will build on the expertise of individual actors to do collective problem solving. Different actors will need clearly defined roles and responsibilities to make the process work. This section discusses what various stakeholders can contribute to the process and how they may best be included.

### National Governments

National governments are the ultimate duty-bearers of the SDG agenda. Having endorsed the agenda on September 25th, 2015, national governments are now bound to embark upon a comprehensive program of implementation, developing a national strategy (-ies), agreeing upon a national monitoring framework and a process

for annual reporting, and establishing multi-stakeholder advisory groups to support implementation. Above all, governments need to show a strong public commitment to implementing the SDGs. They will be accountable to their citizens through national formal and informal mechanisms, and to the international community via annual dialogues at the High-Level Political Forum (see the section on “Institutional arrangements” below).

### Local Governments

Home to half of the world’s people and three quarters of its economic output, cities will be a critical frontline of implementing the sustainable development agenda. Cities will be dynamic test beds for new sustainable development strategies and approaches, and they will generate and compile considerable amounts of social, environmental, economic, and private sector data. City and local governments will provide a crucial conduit from the national level to local citizens and community groups.

### Academia

Universities and institutions of higher education can play a major role in the planning and implementation process. The SDSN was created to support universities and other knowledge centers to play this role. Through research and development (R&D) they can create and incubate new technologies, they can identify strategic priorities and best practices in strategy and innovation, and they can help to monitor the agenda through the collection, analysis, and interpretation of primary data. Universities of course are also the key nodes of higher education, training a new generation of sustainable development leaders, and playing a key role in public awareness and education as well. Universities can be a critical and invaluable source of long-term independent technical assistance to governments to design and support implementation of SDG plans, working with specific ministries and/or national statistical offices.

### Civil society

Civil society groups will play a pivotal role for SDG-based planning in two main ways. First, many represent the needs of underrepresented communities and regions. This makes them critical partners in ensuring that SDG strategies target the needs of all segments of society and ensuring accountability for SDG implementation. Second, they have extensive experience in delivering services to the poor and can recommend appropriate interventions in different parts of the country. They therefore need to be represented in multi-stakeholder bodies and thematic working groups for public consultations on important issues for SDG planning.

### Table 2: Stakeholder Groups at National and Local Levels

Although stakeholders vary from country to country, the following is a general list of the main actors at the national level. The list also includes specific stakeholder groups that play an important role in urban and regional development.

Stakeholder Groups	
Category	Examples
National governments	Professional staff within ministries; representatives from governments and municipalities
Civil society organizations	Non-governmental organizations, volunteer organizations, indigenous peoples’ organizations, faith-based organizations, social movements, and community-based organizations
Businesses	Business leaders, chambers of commerce and industry, cooperatives and unions, economic development corporations, and manufacturers
Academic institutions	National SDSNs, universities, technical institutions, research centers, National Academies, and schools of urban planning, social sciences, and public policy
Development partners	Bilateral and multilateral donors, UN agencies, regional development and central banks, and international institutions such as the World Bank and IMF
Sub-national governments	State/provincial governments or other forms of regional government are often responsible for urban and local development
Local authorities	Local councils and elected representatives, public utility and service providers, planning bodies, parastatal agencies

### UN country teams

The UN country teams have access to specialized technical expertise that can support strategic planning, in particular they are often the collectors of core household survey data, such as the Multi-Indicator Cluster Surveys led by UNICEF. As trusted partners of governments and civil society, UN country teams are also well positioned to support the setting up of consultative processes for the design of SDG-based national development strategies. In support of such work the UN has already released an interim Reference Guide for UN Country Teams, entitled Mainstreaming the 2030 Agenda for Sustainable Development.

### International financial institutions

International financial institutions should participate both in strategy formation and in goal-based or sectoral committees. In particular, the World Bank’s sectoral and economic expertise can make an important contribution to SDG needs assessments (see Chapter 3). The International Monetary Fund (IMF), regional development banks, sub-regional development banks, and aid coordination groups can lend guidance on the process of developing an SDG-consistent Medium-Term Expenditure Framework (MTEF) and macroeconomic framework.

### Development partners

Donors can contribute technical and managerial expertise and may provide critical financial support for the preparation and implementation of the SDG-based national development strategy. Their participation is needed to develop a broad consensus on the country's investment needs and priorities for achieving the SDGs. Such a consensus will form the basis for an honest dialogue about needed development assistance. Starting early in the process, agencies may want to designate a focal point for participating in the government-led working groups.

### Business

Business should be represented in the SDG planning process, as opportunities for collaboration abound. Some include: (i) sustainable production processes, (ii) regenerative use of natural resources, (iii) improved social protection for labor, (iv) corporate social responsibility initiatives, and (v) philanthropic donations. When working in partnership with business, governments should keep in mind the profit-driven nature of companies and figure out how to capitalize on that for the benefit of development priorities. For instance, governments should set up incentives to attract businesses to participate in the SDG process. Many companies already see the SDG Agenda as critical to their growth, and data shows that businesses that incorporate sustainable practices into their model outperform their competitors[2.2]. Similarly, sustainability is valuable to the longevity of a company when the business model is in alignment with the interests of the community it is operating in. On the other side, governments must consider criteria for choosing companies to partner with. Performance indicators include records in human rights violations, corruption scandals, financial transparency, and compliance with the law and tax system.

## Box 5: The Role of the UN Sustainable Development Solutions Network (SDSN)

In 2012, UN Secretary-General Ban Ki-moon launched the UN Sustainable Development Solutions Network (SDSN) to mobilize global scientific and technological expertise to promote practical problem solving for sustainable development, including the design and implementation of the Sustainable Development Goals (SDGs). Following their adoption, the SDSN is now committed to supporting the implementation of the SDGs at local, national, and global scales.

To this end, SDSN works with partners in academia, government, business, civil society, and the United Nations to promote practical solutions for sustainable development. We mobilize universities and other knowledge institutions around the world for the implementation of the goals and promote the exchange of lessons and learning.

The SDSN is governed by a remarkable Leadership Council comprised of some 100 global leaders on sustainable development from science, civil society, business, government, and international organizations.

### SDSN Priorities

#### Support for the SDGs

The SDSN provides analysis and technical recommendations to support the implementation of the 2030 agenda, drawing on our global network and the Leadership Council. In particular the work focuses on integrated sustainable development pathways, data, monitoring and review, financing for development, and the climate change agenda.

#### A global network of problem solvers

More than 20 National and Regional SDSNs have been launched, mobilizing and empowering universities and other knowledge institutions in support of the SDGs. With more than 350 member institutions from over 80 countries, we are building a global network of problem solvers. Our technical expertise is organized across Thematic Networks that foster collaboration and knowledge sharing among expert communities. In addition, SDSN Youth mobilizes young people around the world to prioritize the SDGs and to promote practical youth-led solutions.

#### Solution initiatives and long-term pathways

Thematic Networks and National and Regional SDSNs are committed to finding novel solutions — often using modern technologies or new business models. This includes helping countries chart long-term pathways for achieving the SDGs. One example, the Deep Decarbonization Pathways Project, supports countries in mapping out how they can transform their energy systems to promote economic growth and reduce emissions, to keep the rise in global temperatures to less than 2°C, as agreed by all countries.

#### Education for sustainable development

SDSN's flagship online education initiative, SDSNedu, is training the largest-ever cohort of students of sustainable development through free online courses from the world's leading experts. Uniquely, SDSN-edu is operated through a consortium of institutions and works with SDSN members around the world to integrate high-quality online education into universities' curricula.

**Table 3: Examples of National Councils on Sustainable Development (NCSD)**

Country	Name	Membership	Objectives
Colombia	Comisión Interinstitucional de Alto Nivel para el alistamiento y la efectiva implementación de la Agenda de Desarrollo Post 2015 y sus Objetivos de Desarrollo Sostenible (2015).	Governmental: Ministers of Foreign Affairs, Finance/Internal Revenue, Environment and Sustainable Development; as well as the DGs of Presidency, National Statistics, Prosperity and Planning. The Comisión is also entitled to establish technical and working groups of mixed membership (academia, civil society, business, government).	Develop SDG implementation national and strategy and sub-national action plan; coordinate with stakeholders; establish monitoring and evaluation mechanisms; mobilize academia and promote peer learning; and capacity building[2.i].
Philippines	Philippine Council for Sustainable Development (PCSD) (1992).	Mixed: government, business and civil society.	PCSD advises government on NSDS, scrutinizes government implementation and facilitates stakeholder engagement[2.ii].
Czech Republic	The Government Council for Sustainable Development (2003)[2.iii].	Mixed: government, civil society, academia and business	Development, implementation and revision of NSDS[2.iv].

## Institutional arrangements

The integrated nature of the SDGs requires corresponding institutional arrangements, within and across national and local governments, involving multiple ministries, departments, and government institutions. This level of cross-sectoral cooperation requires innovative planning instruments that use frameworks and incentives to coordinate cross-ministerial activity. Currently, ministries largely have separate budgets, communication channels, and monitoring systems. Cross-sectoral planning asks governments to improve the capacity of ministries to collaborate effectively in areas including information sharing, human resources, technology, strategy design, and monitoring and evaluation (M&E).

There are a variety of ways for a country to design a coordination mechanism to oversee SDG-based national planning. For example, Ghana established a high-level inter-ministerial commission that brings together sectoral working groups across ministries. Mexico and Colombia have aligned SDG efforts with the President’s Office to ensure the highest level of commitment. And the United States has established an inter-agency organizational structure that includes foreign and domestic agencies[3.7]. Countries can build upon existing ministries, such as the Ministry of Planning, or their National Council on Sustainable Development (NCSD) (see Table 2), which over 100 countries have created in response to the 1992 Rio Earth Summit[3.8]. Some countries may want to create a new Ministry of Sustainable Development to oversee implementation. All countries will need a coordination process. A key step in the inception meeting is to map out a new organizational structure for government and stakeholders to engage on the SDGs with a 15-year time horizon.

### Box 6: The German Council for Sustainable Development (RNE)

The German Council for Sustainable Development (RNE) is an “advisory body mandated by and reporting back to the German Federal Government.”[2.vi] It is comprised of 15 council members appointed on an individual basis for three-year terms by the Chancellor. Its role is to advise “the government on its sustainable development policy and, by presenting proposals for targets and indicators, seeks to advance the Sustainability Strategy as well as propose projects for its realization.” It also serves to “foster social dialogue on the issue of sustainability” and “increase the level of awareness among all concerned and the population as to what sustainable development actually means by demonstrating the consequences of social action and discussing possible solutions.”[2.vii]

### Box 7: Sweden spearheads High-Level Group for SDG implementation

Realizing that the “true test” of the 2030 Agenda was going to be its implementation, as well as “maintaining strong political momentum,” the Swedish Government formed a High-Level Group with nine leaders from various countries, e.g. South Africa’s President Jacob Zuma, to ensure that the all stakeholders genuinely commit to the implementation of the SDGs and the 2030 Agenda. Likewise, it will also “work in various ways to promote exchange of experience and discussions on challenges and solutions between governments, civil society, the private sector and international organizations.”[2.v]

Whatever the organizational structure, these commissions or inter-ministerial groups should be endorsed at the highest level (by the Head of State or Government), and should engage ministries of planning, finance and economy, health, education and social development, agriculture, environment, the Chambers of Commerce, and the National Statistical Office. Furthermore, commissions should have local government participation (both city and regional representation), as well as representation from civil society and academia. To create an efficient process, representation should be limited; non-governmental representatives should act as interlocutors on behalf of their broader constituency.

**The primary responsibilities of such a group should be the following:**

- To develop or coordinate SDG implementation strategies
- To develop a national monitoring framework and accompanying set of national indicators
- To compile or update an annual sustainable development report (with major revisions at 5-year intervals)
- To consult with key stakeholders
- To prepare for regional and global dialogues on SDG implementation

## Box 8: Aligning international processes with the SDGs

As with national planning, relevant international institutions and processes also need coordination and to be aligned with the SDGs, as the central lodestar for their endeavors. This should involve the United Nations agencies, but also the Groups of 7 and 20, the European Union, WTO and many more. The G20 have already broken ground in this regard with their recent commitment in Antalya (15-15 November 2015) to develop an action plan for the SDGs. Another forum which provides an opportunity for coordination of these various processes is the High Level Political Forum on SDG follow-up and review. This mechanism should seek to encourage other multilateral processes, agencies and entities to participate and present the alignment of their work with the SDGs and their contribution to the process.

For more on this see G20 Leaders' Communiqué: <http://www.mofa.go.jp/files/00011117.pdf>, and Espey, J., Walecik, K., and M. Kuhner (2015) *Follow up and review of the SDGs: Fulfilling our commitments*, Working Paper, UN Sustainable Development Solutions Network, New York, USA: SDSN.

Chapter 3:

# Tools for designing SDG strategies and roadmaps

# Backcasting

Sustainable development requires a long-term transformation, which in turn requires longer-term planning processes than the usual annual budgets or medium-term expenditure frameworks. The SDG framework calls for 15-year strategies that provide national roadmaps and coordinate stakeholders and activities for collective action. Some of the SDGs will require planning over a period of several decades. For example, SDG 13 on climate change will necessitate the development of deep decarbonization pathways to 2050[3.1].

A best practice in long-term planning is backcasting. This means “generating a desirable future, and then looking backwards from that future to the present in order to strategize and to plan how it could be achieved.”[3.2] In the context of the SDGs, backcasting is a problem-solving framework that envisions how development should progress, with intermediate actions based on long-term quantitative targets. Unlike forecasting, which estimates the probabilities of various outcomes based on expected trends, backcasting begins with a projection of the desired outcome(s), and works backwards to understand what is needed for their realization. The graphic below illustrates how backcasting can help map out a development trajectory and milestones that stem from the country’s vision for the year 2030, as opposed to BAU development trajectories.

The core of the backcasting exercise is creating a long-term plan that maps out targets, milestones, and steps that need to be taken to achieve the desired endpoint by the desired date, including financing needs. The milestones are then translated into a quantified strategy – typically including an investment plan and financing strategy – that can be used within ministries and released to the public for broader consultation. Combined with a situational analysis, SDG backcastings help to define the policies, institutional and technical reforms, public investments, and partnerships needed to achieve the SDGs by 2030.

## Box 9: Sustainable Development Vision Statements

The vision statements below, which vary in scope and scale, offer examples for how governments might frame their long-term vision for sustainable development as part of backcasting an SDG-based national strategy. The African Union vision statement represents a regional example, and the Mexico vision statement a national perspective.

### African Union’s Agenda 2063

“Aiming to encourage discussion among all stakeholders, ‘Agenda 2063’ is an approach to how the continent should effectively learn from the lessons of the past, build on the progress now underway and strategically exploit all possible opportunities available in the immediate and medium term, so as to ensure a positive socio-economic transformation within the next 50 years.”[3.i]

In this vision statement, the African Union defines the purpose of its 50-year, long-term strategy for growth and change and outlines the core values that underpin it. The statement is clear in defining and communicating the organization’s priorities, yet remains sufficiently broad to encompass the national strategies of member states[3.ii].

### Mexico’s National Energy Strategy 2013-2027

“Through this strategy we aim to achieve: the social inclusion of the population, by providing access to the benefits that derive from the use of energy; the long-term sustainability of the sector; and the mitigation of negative impacts that the production and consumption of energy may have on human health and the environment, including the reduction of greenhouse gas emissions.”\*

This national vision statement emphasizes the multidimensional approach of the energy sector’s strategy, aligns itself with the missions of other sectors, and highlights specific goals it aims to achieve[3.iii].

\*Unofficial translation by the authors

## Box 10: Backcasting — The Deep Decarbonization Pathways Project

### About the project

In 2010, all parties to the UN Framework Convention on Climate Change (UNFCCC) operationalized the objective of the UNFCCC to “prevent dangerous anthropogenic interference with the climate system” by adopting the target of keeping the global rise in mean surface temperature below 2°C compared with the pre-industrial average. Achieving this goal will require major reductions in greenhouse gas (GHG) emissions and therefore transformative changes to countries’ current energy, infrastructure, and production systems. Indeed, by around 2070, all economies will need to have reached full “decarbonization” of their energy systems, meaning net zero emissions of greenhouse gases from energy use and other sources.

The Deep Decarbonization Pathways Project (DDPP), an initiative of the UNSDSN and the Institute for Sustainable Development and International Relations (IDDRI), aims to help countries to pursue their national development priorities while achieving the deep decarbonization of energy systems by mid-century, consistent with the 2°C limit. The objective of the DDPP analysis is to identify one or more “deep decarbonization pathways,” in which emissions of CO<sub>2</sub> per person are around 1.7 tons per person as of 2050. (This signifies roughly an 80% reduction of CO<sub>2</sub> emissions compared with 2005 levels in the highly developed economies.) Each country’s pathway takes into account the national socio-economic conditions, development aspirations, infrastructure stocks, resource endowments, and other relevant factors.

The principles of the DDPP are:

- The national decarbonization pathways will be truly deep, i.e. consistent with the 2°C limit, and consistent with countries’ socio-economic development objectives.
- The deep decarbonization pathways will be country-specific, reflecting national endowments of renewable energy supplies and public policy preferences (e.g. regarding nuclear energy).
- The pathway will be technically sound and employ technologies that are available today or can reasonably be expected to be available soon.
- The national decarbonization pathways will be transparent regarding economic and technological assumptions.

### Case Example: France’s DDP

#### Step 1: Analyze current national and/or local policies and strategies

France has a low endowment of domestic fossil fuel resources; energy imports, mostly oil and gas, are a substantial source of the total external trade deficit. France has

developed a specific energy security strategy that included the launch of a nuclear energy program in the 1970s. As a result, France is already a relatively low energy consumption country and has GHG emission intensities at the lowest end of the OECD countries, but still has room to improve to meet 2°C target.

Decarbonization was first introduced in 2005 with the adoption of a Factor 4 emission reduction target for 2050, compared with 1990. More recently, decarbonization has been an important component of the Energy Transition, which the President has set as a priority. To investigate this issue, the National Debate on Energy Transition took place in 2013 as a deliberative process between different groups of stakeholders (NGOs, trade unions, business, MPs, mayors, etc.) and aimed to identify and assess the consequences of different scenarios.

Three policy commitments structure the decarbonization scenarios (or “energy transition trajectories”) for France:

1. European targets are translated into domestic objectives: EU 3x20 for 2020 targets (20% reduction in EU GHG from 1990 levels; raising the share of EU energy consumption produced from renewable resources to 20%; 20% improvement in the EU’s energy efficiency).
2. Factor 4 reduction of emissions in 2050 compared to 1990 (-75%).
3. The reduction of the share of nuclear in power generation, down to 50% by 2025, target set in 2012 by the President.

Key challenges for the French economy and society that are directly or indirectly related to the purpose of decarbonization include:

1. The rebuilding of industrial competitiveness counterbalances the de-industrialization observed over the last 40 years, and the 2.6 million fall of employment in industry.
2. The reduction of energy poverty, which has become a crucial issue as in 2010 more than 6% of the French population experienced fuel poverty; in particular, low-income households living mostly in rural areas or in small towns spend on average 15% of their income on energy, for housing and transport.
3. A long-term effort in directing land and urban planning towards more sustainable patterns through ambitious infrastructure deployment. This is in particular crucial to control mobility needs in a relatively low-density country.
4. The highly controversial issue of nuclear energy beyond 2025. France’s nuclear power plants are, on average, nearly 30 years old and an intense debate concerns the choice between upgrading them with new nuclear plants, extending their service life in some cases, or replacing them with other technologies.

## Box 10 (cont.): Backcasting — The Deep Decarbonization Pathways Project

### Step 2: Use a long-term vision for sustainable development

The National Debate on Energy Transition in 2013 considered 16 pre-existing energy scenarios (from NGOs, academic researchers, and public agencies). Each scenario described alternatives for the deep decarbonization of the French energy system along two dividing lines: the level of demand and the energy mix. All these trajectories describe a plausible deep decarbonization pathway, since they all reach the Factor 4 emission reduction target.

The assessment of the DDP for France combines an overall ambitious energy efficiency improvement program and a diversification of low-carbon energy carriers mobilizing electricity penetration, bioenergy and renewables, or waste heat.

- Between 2010 and 2050, economic projections for France anticipate average economic growth to be 1.8% per annum, population is expected to increase by 11%, and the structure of the economy is supposed to be stabilized during the next decades.
- The deep efficiency measures would reduce final energy consumption by nearly 50% in 2050 compared to 2010, and electricity, although decreasing by 20% in absolute terms, sees its share increasing from 24% to 39% in 2050.
- The carbon intensity of fuels in end-use sectors is decreased by a three-fold reduction of coal consumption and, even more crucial for the transport sector, by a massive substitution of oil by gaseous fuels and biomass. On the supply side, the decrease of the share of nuclear (from 77% in 2010 to 50% in 2025 and 25% in 2050) does not create a rise of carbon emissions because it is accompanied by deep diffusion of renewable electricity—mostly hydro, wind and PV—which increases from 17% in 2010 to 71% in 2050.
- Under this pathway, buildings and electricity emissions are deeply decarbonized and most emissions remaining in 2050 come from the transport and industry sectors. As for transport, very important reductions are obtained over the 2010-2050 period, but given the high initial emission level transport still represents 30% of 2050 CO<sub>2</sub> emissions. Industry becomes the second major emission contributor in 2050 (26%); this is notably because of an assumption of constant structure of the economy that assumes in particular a constant share of energy-intensive industries.

### Step 3: Create a 15- year strategy

To achieve the long-term vision, France's, near-term sectoral priorities will focus on:

1. Renewable energy development
2. The implementation of a building retrofitting plan

These two actions are crucial for any deep decarbonization pathway in France, but face strong inertias (both because they are associated with long-lived infrastructure and require the development of specific skills that are not currently available), which makes early development crucial. In addition, these actions have strong potential positive effects on employment that can increase the social and political desirability of these measures. Specific financing mechanisms must be conceived to support in particular the massive retrofitting program. A carbon price has to be rapidly implemented, even at a low level during the first years, but with a pre-established increasing rate, in order to reach a level near to the 100€/tCO<sub>2</sub> in 2030 that has been already identified as consistent with the policy targets[3.iv].

# Needs assessments and costing

Countries must mobilize adequate public and private resources to invest in key sustainable development areas. In some cases, regulations, taxes or subsidies can help redirect private investments towards supporting SDG outcomes, such as a shift from coal-fired power plants to solar power generation. In other cases, national budget outlays should be increased to finance a scaling-up of public services and infrastructure investments. If private and domestic public resources are insufficient to finance the SDGs they need to be complemented by non-concessional and concessional international public finance, including official development assistance (ODA) for the poorest countries.

Conducting needs assessments to determine the volume of public and private investment required is a complex undertaking that will require significant work in most countries. To start the process, countries may consider six major investment areas that cover the principal investments needed to achieve the goals[3.3]:

1. Health
2. Education
3. Social protection
4. Food security and sustainable agriculture
5. Infrastructure
  - a. Energy access and low-carbon energy infrastructure
  - b. Water and sanitation
  - c. Transport infrastructure
  - d. Telecommunications infrastructure
6. Ecosystem services and biodiversity

Another important SDG investment need – though one requiring vastly lower volumes of incremental financing – is data collection, analysis, and dissemination. This item is considered in the next section.

Global sector needs assessments are available that can help provide a sense of the scale of incremental investments needed to achieve the SDGs. Investment Needs to Achieve the Sustainable Development Goals in Low- and Lower-Middle-Income Countries reviews common investment needs expressed in US dollars per capita or as a share of GDP that can provide a starting point for a more thorough analysis.

Some important factors to keep in mind when estimating SDG investment needs include:

- **Make SDG needs assessments transparent.** Sound needs assessments help understand how ambitious goals can be achieved over the long term. Such analyses should be transparent so that key stakeholders can review assumptions and results.

- **Ensure that climate change adaptation and mitigation needs are accounted for.** Tackling climate change will be key to achieving the SDGs. Many investments in mitigation and adaptation – such as a low-carbon energy plant or climate-resilient infrastructure – are operationally indistinguishable from investments in “development” and must be structured and executed together[3.4].
- **Include operating and capital costs.** Both sets of expenditure must be financed if the SDGs are to be achieved, so an SDG needs assessment must address operating and capital expenditure.
- **Consider economy-wide effects of SDG investment needs.** As described in Investment Needs to Achieve the Sustainable Development Goals in Low- and Lower-Middle-Income Countries, SDG implementation is expected to have significant spillovers into the larger socioeconomic conditions within a country. Some important effects that might include supply-side effects on economic growth, changes in the labor market, and domestic government resource mobilization.

On the basis of SDG needs assessments countries, regions, or cities can develop a financing strategy that distinguishes between (i) private financing opportunities, (ii) incremental government resource mobilization as well as opportunities for greater efficiency in government spending, and – where needed – (iii) international public financing (concessional and non-concessional). Please refer to Investment Needs to Achieve the Sustainable Development Goals in Low- and Lower-Middle-Income Countries for more details on how to conduct SDG needs assessments and sound financing analyses.

# Preparing to monitor the SDGs: setting indicators and harnessing the data revolution

The success of the SDG Agenda hangs on careful monitoring of our progress. As recognized in the SDG outcome document, Transforming Our World, “quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind. Such data is key to decision-making.”[3.5] The high visibility given to indicators and data collection within the SDG dialogues, and throughout the final outcome document, reflects a major shift in recent years. Key lessons learned from the MDGs underscore that high-quality, disaggregated data is essential to ensure equitable progress against goals and targets[3.6]. We have learned that data will only drive policy and decision-making if it is timely, and that there are sizeable gaps in our knowledge that require a change in the way we collect data and evidence[3.7].

Collecting reliable data to support our measurement of progress on the SDGs will depend on three key processes:

1. Crafting a robust set of national monitoring indicators
2. Strengthening statistical capacity
3. Capitalizing on the data revolution, harnessing new technologies and new sources of data

Achieving better quality, high frequency data in support of the SDGs will require a step-change in the way governments and National Statistical Offices (NSOs) do business. NSOs will remain the key functionaries in the process of generating data to monitor and manage sustainable development at the national level, but they must work within the context of a broader ecosystem that includes additional data contributors including local and regional governments, private companies, academia, civil society, and citizens. NSOs must commence an evolution from data producer to coordinator, managing the various data inputs from the broader ecosystem, ensuring data quality, comparability and harmonization. This will ensure that data streams are relevant and useful for national policy makers and other stakeholders looking to manage and monitor progress.

Over the course of the last 2 years SDSN has developed a set of guidance documents on designing SDG-relevant indicators, assessing the quality of statistical systems for SDG monitoring, and on the data revolution for sustainable development. The following is a brief summary of the resources available at <http://unsdsn.org/what-we-do/indicators-and-monitoring>.

## Crafting a robust set of national SDG indicators

Indicators will be the backbone of monitoring progress towards the SDGs at the local, national, regional, and global levels. A sound indicator framework will turn the SDGs and their targets into a management tool to help countries and the global community develop implementation strategies and allocate resources accordingly. Indicators will also serve as a report card to measure progress towards sustainable development and to help ensure the accountability of all stakeholders for achieving the SDGs. The monitoring framework and indicators for the SDGs should reflect the lessons learned from the MDGs, namely that timeliness is crucial for the indicators to inform decision-making. MDG data often came with lags of three or more years [3.8][3.9][3.10], making it irrelevant for planning purposes. And data needs to be carefully disaggregated to track equity in achievement[3.11].

Countries will need to develop a set of national indicators that align with context-specific priorities and concerns to help track progress on the SDG agenda. These indicators should build upon existing monitoring methods used by the national statistical office or system, while also aiming to be aligned with the set of global monitoring indicators currently being devised by the Inter-Agency and Expert Group on SDG Indicators under the auspices of the UN Statistical Commission[3.12]. The process of devising national indicators needs to start quickly to allow for the setting of baselines. Review processes should be conducted in partnership with Parliaments, as well as through the global follow-up and review process under the High-Level Political Forum.

The SDSN has been working on guidelines for developing robust global, regional, and national SDG indicators for the past two years. Through intensive global discussions involving thousands of experts from UN organizations, academia, civil society, business, and a large number of national statistical offices (NSOs), it has devised a set of principles for framing indicators, as well as a set of 100 key indicators which have been offered as input to the global indicator dialogues. The full set of indicators can be found in the report Indicators and a Monitoring Framework for Sustainable Development Goals[3.13].

Indicators for SDG monitoring should be:

- 1. Limited in number and globally harmonized:** Recognizing that capacities vary and data collection is resource-intensive, the SDG indicators should build upon existing data sources and be limited in number. Global indicators should be complemented by national indicators designed to cover a country's specific challenges.
- 2. Simple, single-variable indicators with straightforward policy implications:** Indicators need to be simple to compile and easy to interpret and communicate. They must also have clear policy implications. Composite indices should be avoided where possible since they require more complex data collection methods, and often rely on imputation for missing variables and arbitrary weighting. Moreover, composite indices do not lend themselves easily to policy recommendations, and they expand the number of (underlying) variables that need to be collected through official statistical systems.
- 3. Allow for high frequency monitoring:** Timeliness is crucial for data to be a useful management and policy tool. SDG monitoring should operate on an annual cycle to align with national planning and budgetary processes, and prioritize indicators that lend themselves to annual production (or bi- or tri-yearly production).
- 4. Consensus-based:** Indicators should be underpinned by a broad international consensus on their measurement and be based on international standards, recommendations, and best practices to facilitate international comparison.
- 5. Constructed from well-established data sources:** Indicators should draw on well-established sources of public and private data, and be consistent to enable measurement over time. For a small number of new indicators, well-established data sources may be unavailable. In such cases, the establishment of a baseline will need to be an urgent priority over the next two or more years.
- 6. Disaggregated:** Preference should be given to indicators that lend themselves to disaggregation in order to track inequalities in SDG achievement. As noted in *Transforming Our World*, targets should only be considered achieved if they are met for all relevant groups. Key dimensions for disaggregation include: characteristics of the individual or household (e.g. sex, age, income, disability, religion, ethnicity and indigenous status); economic activity; and spatial dimensions (e.g. by metropolitan areas, urban and rural, or districts).
- 7. Universal:** When setting indicators at the global level, indicators should be applicable in all countries, developed and developing alike. When setting indicators at the national level indicators should be relevant at different territorial scales.

The ability of indicators to be localized is particularly important to encourage active implementation of the agenda within sub-national levels of government, such as cities.

- 8. Mainly outcome-focused:** As with SDG targets, it is generally preferable for indicators to track outcomes (or the ends) rather than means. Yet, in some cases, input metrics can play a critical role in driving and tracking the changes needed for sustainable development.
- 9. Science-based and forward-looking:** The SDGs will cover a 15-year period. Much will change in that time. For example, the world population is projected to increase by 1 billion people by 2030, and two-thirds of those will be living in cities. Indicators must be designed in such a way to account for these changing global dynamics and to anticipate future changes. National indicator frameworks must be flexible and allow for new indicators to replace outdated ones.
- 10. A proxy for broader issues or conditions:** A single indicator cannot measure every aspect of a complex issue, but well-chosen proxy indicators can track broader concepts. For example, to measure rule of law and access to justice, several aspects must be measured, including the capacity to redress crime, citizens' trust in the police and court systems, and the rates of redress. An indicator on the investigation and sentencing of sexual and gender-based violent crimes is an example of a possible proxy for the treatment of vulnerable groups and access to justice overall.

## Strengthening Statistical Systems

Collecting a broad range of indicators on sustainable development, at higher frequency and with more attention to quality, requires that we modernize statistical systems. Given the breadth and complexity of the SDG Agenda, many different types of data will be required (demographic, economic, social, and environmental) with varying levels of coverage. Table 4 presents a typology or toolkit of key data sources for monitoring the SDGs (see also Chapter 2).

Governments should undertake a comprehensive needs assessment of each of these key data sources, noting the frequency of the associated data, the level of disaggregation, the rigor (by comparing it with international estimates and benchmarking against countries with similar socio-economic or geographic characteristics), and by noting annual levels of investment. An SDSN-led consortium of groups provides a methodology for conducting such needs assessments in the report *Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development*. This report looks at aggregated costs for 77 International Development Association (IDA)-recipient countries, and provides a helpful frame for assessing the kinds of investments that need to be made in all countries. It also provides guidance on recommended frequencies for data collection and key institutional infrastructures, as well as indicative costs for specific data collection methodologies.

Improving the quality of government-led statistical systems must be a first order priority, to ensure that countries can track progress on the SDGs and make evidence-based course corrections. The process of conducting a needs assessment must therefore start as soon as possible, in conjunction with the baseline and benchmarking process.

## Capitalizing on the Data Revolution

Official data, including household survey, administrative, and census data, will play a critical role for the foreseeable future in tracking the SDGs and shaping governments' programs. But the unprecedented rate of innovation in data collection techniques and technologies, and the capacity to distribute data widely and freely has expanded the horizon of possibility. The adoption of the SDGs presents a strategic opportunity to build on the momentum of the data revolution and to bring about a shift in the way governments and the public sector use data and analytics. Our long-term ambition should be to move towards a more fully developed culture of statistical literacy, and for a more sophisticated government approach to data production, use, analytics, visualization, and communication.

**Table 4: A toolkit of data instruments for monitoring the SDGs[3.iv]**



### Census

Systematic recording of information from all members of a given population.



### Household Survey

National sample of randomly selected households that provides data on demographic and socioeconomic characteristics.



### Agricultural Survey

Surveys of farms, ranches, and people who operate related enterprises, including data on crop yields, economic variables, and environmental data.



### Geospatial Data/Infrastructure and Facility Inventories

Data with location-specific information (including other data input mentioned above) and spatial visualization, including facility inventories and core geographic data layers.



### Civil Registration and Vital Statistics (CRVS)

A form of administrative data that records vital events in a person's life, including birth, marriage, divorce, adoption, and death.



### Administrative Data

Information collected primarily for administrative or management purposes, including welfare, taxes, and educational record systems, amongst others.



### Economic Statistics

Financial and economic-performance measurements, including labor force and establishment surveys, economic performance, employment, taxation, imports and exports, and other industrial activities.



### Environmental Data

Real-time monitoring, ground stations, and satellite imagery for a range of environmental variables, including biodiversity, air quality, water resources, and forest and land use change.

Of particular importance is greater use of georeferenced data, which can now be collected easily using mobile phones to provide location-specific information on government facilities, water points, environmental challenges, and more. As one impressive example, the Nigerian Senior Special Advisor to the President on the MDGs, with support from the Earth Institute's Sustainable Engineering Laboratory, developed the Nigeria MDG Information System, an online interactive data platform. Using this system, all government health and education facilities as well as water access points were mapped across Nigeria within a mere two months.

The system now reports the latest status of more than 250,000 facilities using data generated with the help of smartphones. Any Internet user can now ascertain the status of every facility across the entire country.

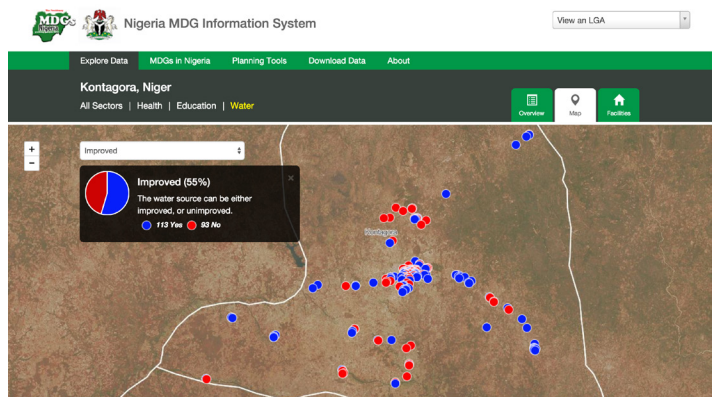
The software tools used for the Nigeria MDG Information System are open-source. National and sub-national governments, civil society organizations, and businesses can use them to develop dedicated georeferenced surveys for a variety of purposes. For example, such tools make it possible to generate the management information that local authorities need in order to improve service delivery. They can also be used by civil society organizations, for example to track which infrastructure facilities are fully operational or where illegal logging is occurring.

Other innovative data applications are discussed below. As part of the SDG planning and implementation process, including designing a set of SDG indicators and conducting a needs assessment for SDG monitoring, governments should start an inclusive dialogue on how to modernize data production processes, using approaches such as:

1. **Satellite imagery:** The cost of high-resolution image acquisition is falling while the availability of images and capacity for automated processing are increasing. There are many applications for such data across multiple goals, such as predicting harvests, disaster response, earth observations, and food security situations; monitoring geographic patterns and likely transmission corridors of diseases that have geospatial determinants; measuring population density and the spread of new settlements; and mapping and planning of transportation infrastructure.
2. **Unmanned Aerial Vehicles (UAVs):** Closer to earth, UAVs are capable of collecting a range of useful measurements at low cost, with relevance to the complete SDG agenda.
3. **Crowd-sourcing:** Global connectivity has created the opportunity for wide-scale participation in data collection and data processing, with applications in road mapping, land cover classification, human rights monitoring, price tracking, species inventories, and disaster response planning, and new applications unfolding regularly.

4. **Smart-meters:** The increasing use of smart-metered systems for energy and water distribution, which transmit usage information over communications networks, create novel capabilities to measure and manage service provision. Enel's Telegestore system in Italy is one of the largest and most successful examples.
5. **Smartphone and tablet-based data collection:** As described in the SDSN indicator report, many surveys are now being conducted on digital mobile platforms. This practice reduces the time and cost for data collection, improves accuracy, simplifies collection of GIS and image data, streamlines integration with other information streams, and opens up the possibility of incorporating micro-chip based sensors into survey processes.
6. **Data mining:** New uses have been discovered for data sources emerging from processes not explicitly designed for such purposes, such as social media, mobile call data records, commercial transactions, and traffic records. Proven applications have been developed in a range of areas including crisis response, urban planning, and public health management

**Figure 1: Screenshot of Nigeria MDG Information System showing the location and status of water sources in the Kontagora region of Niger State, Nigeria**



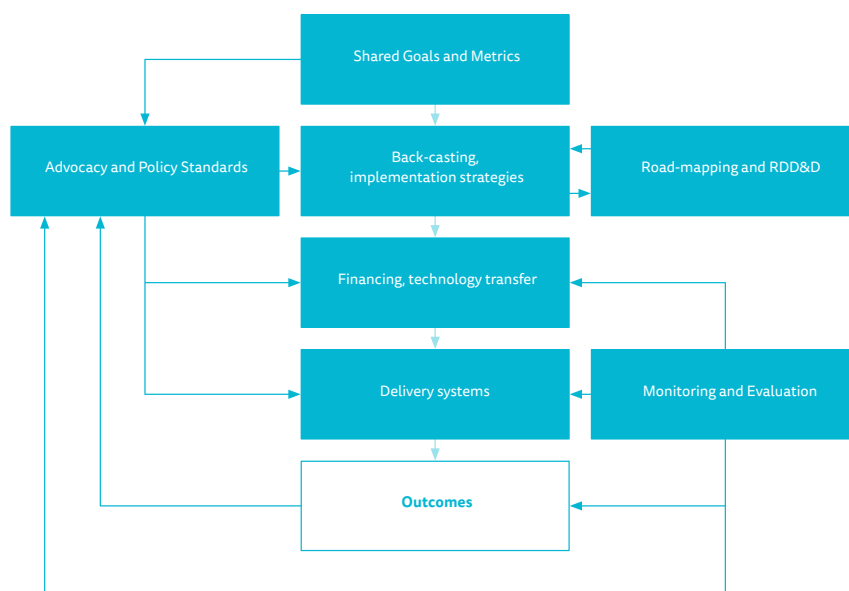
# Goal-based partnerships

The SDGs affirm the importance of global partnerships to achieve the SDGs at the national and international level. The MDG experience demonstrated the range of partnerships that can emerge for international collaboration, from bilateral partnerships between states to combinations of public, private, and multilateral actors.

Effective partnerships are not centrally planned, and they do not require one actor that oversees all activities. Yet delivering results at the required scale requires a high degree of mobilization and organization. As outlined in the document *Goal-based Investment Partnerships: Lessons for the Addis FfD Conference*[3.14], each sector has unique features and requirements for success, so there cannot be a one-size-fits-all approach to building global public-private partnerships.

Nonetheless, seven core processes of goal-based partnerships, illustrated in Figure 2 and described below, have been identified by the SDSN and involve many actors:

1. Shared goals and metrics that provide a coherent narrative for action, mobilize all actors involved in a particular area, galvanize the community to develop clear strategies for implementation, and raise the financing and develop the technologies needed to implement them.
2. Advocacy and policy standards to raise awareness of the importance and feasibility of the global goals, mobilize stakeholders, ensure accountability, and translate lessons into standards that other countries can emulate.
3. Backcasting and implementation strategies to show how the goals can be achieved through sustained investments and supportive policies.
4. Technology road mapping for RDD&D to identify missing technologies and organize public-private partnerships to address them.
5. Financing and technology transfer to mobilize the right mix of public and private resources to implement goal-based investment strategies.
6. Delivery systems that translate policies, strategies, and financing into outcomes.
7. Monitoring and Evaluation (M&E) to sharpen the understanding of what works, support advocacy, and hold all partners accountable.



**Figure 2: Core components of goal-based partnerships**

## Box 11: Global Partnership for Health, Lessons Learned from the MDGs

The health sector has mounted by far the most coordinated, sophisticated, and ultimately successful partnerships to implement the MDGs. From 1990 to 2013 the annual number of under-5 deaths worldwide fell from 12.7 million to 6.2 million. During the same time maternal deaths almost halved. By 2012 nearly 10 million HIV/AIDS-infected individuals in low-income and middle-income countries were receiving anti-retroviral treatment, up from virtually zero as recently as 2001[3.v].

The activation of global partnerships in the health sector offers important lessons for how to move rapidly from global goals to successful implementation on a global scale. It shows how a multitude of actors including national governments, civil society organizations (CSOs), businesses, international organizations, foundations, and the scientific community can be mobilized around shared goals to solve a complex, long-term investment challenge. Together these actors created a dynamic “ecosystem” that mobilized an entire epistemic community, ensured accountability, fostered innovation, and transferred knowledge for national-scale implementation programs. Among the many changes that have occurred in the health sector, Schmidt-Traub & Sachs’ Financing Sustainable Development: Implementing the SDGs through Effective Investment Strategies and Partnerships report identifies four principal transformations that led to the global health partnerships success:

### 1. Backcasting from shared goals to drive implementation and policy standards

In the early 2000s, the health sector adopted goal-based approaches as its operating framework, and operationalized them through backcasting exercises that systematically assessed interventions over the long-term. Such backcasting exercises became the norm for several specific initiatives around the key diseases. For example, the Stop TB Partnership designed the Global Plan to Stop TB, which launched national campaigns to roll out Directly Observed Treatment Short-Course (DOTS) with remarkable results. TB mortality has fallen 45% since 1990[3.vi]. Backcasting for tangible goals spurred important discussions around policy coherence and operational challenges across stakeholders.

### 2. Launch of the GFATM and Gavi

The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and Gavi (The Global Alliance for Vaccines and Immunisation) were the first to make large-scale funding available to national programs for the control and treatment of major diseases. The funding was provided competitively on the basis of countries’ proposals.

It empowered health ministers to develop large-scale programs, which asked line ministries to collaborate, removed major governance bottlenecks, and drove innovation in development and delivery of services. Even when plans were not funded, the planning exercise alone often spurred action.

### 3. Mass mobilization by activist CSOs and others around health MDGs

Many individuals and civil society organizations raised awareness, fostered collaboration, and promoted practical approaches to addressing the health challenges. For example, The Gates Foundation made critical contributions to building the “ecosystem” of these global health partnerships. In particular, it provided flexible and fairly elastic start-up funding for major new initiatives in the sector, such as funding the Commission on Macroeconomics and Health as well as the launch of Gavi.

### 4. Improved tools and standards through RDD&D and public-private partnerships

After goals were set a diverse array of stakeholders inventoried and standardized the tools needed for achievement, identified gaps in interventions, and developed new tools, notably through dedicated series in the medical journal *The Lancet*[3.vii]. Partners included international organizations like the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF), CSOs like the International Federation of the Red Cross and Red Crescent, Médecins Sans Frontières (MSF), and research institutions. Of particular importance were the often small-scale demonstration projects that informed and inspired the scaling-up of proven health-care interventions. For example, the small CSO Partners in Health demonstrated how complex ARV treatment regimens could be administered in Haiti and other low-income countries, thus paving the way for the large-scale rollout.

## Conclusion

This guide provides a first and preliminary attempt to explain how countries, regions, cities, or sectors might start the process of operationalizing and achieving the Sustainable Development Goals. As underscored, creative problem solving and intensive discussions among key stakeholders are required at local, national, regional, and global levels to make the SDGs a reality by 2030.

This guide focuses on the early steps. It is far from exhaustive and does not address the complex tasks of program design, budgeting, financing, service delivery, monitoring and evaluation, etc. We do hope that the ideas described here can help support multi-stakeholder discussions on achieving the SDGs in every country, every region, and every city. The National and Regional SDSNs will help initiate such discussions and mobilize knowledge institutions to support them in as many countries as possible.

We welcome comments and suggestions for improvement of this document and request that they be sent to [info@unsdsn.org](mailto:info@unsdsn.org). We plan to publish periodic updates to this guide, including a more detailed handbook on implementation during early 2016. Until then, many more resources are also available on our website: [www.unsdsn.org](http://www.unsdsn.org).

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# Annex 1: Resources for Getting Started with the SDGs

## Baseline Assessment

*Reconstructing Baseline Data for Impact Evaluation and Results Measurement* (Bamberger, 2010) <http://siteresources.worldbank.org/INTPOVERTY/Resources/335642-1276521901256/premnoteME4.pdf>

*Baseline Data Collection* (Keller & Baretto-Dillon) <http://www.sswm.info/content/baseline-data-collection>

*What is a baseline assessment?* (UN Women, 2012)

## Differential Diagnosis

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## Multi-stakeholder Consultation

*Creating Adaptive Policies: A Guide for Policy-making in an Uncertain World* (Swanson and Bhadwal, 2009)

*Multi-stakeholder Engagement and Communication for Sustainability: Beyond Sweet-talk and Blanket Criticism - Towards Successful Implementation* (Hemmati and Rogers, 2015)

*Participatory Scenario Development and Future Visioning in Adaptation Planning: Lessons from experience: Part I* (Bizikova, et al., 2014)

*GovernAbilities: The nexus of sustainability, accountability and adaptability. Essential tools for successful governance in the 21st century* (Swanson, et al., 2014)

*Using scenarios to make decisions about the future: Anticipatory learning for the adaptive co-management of community forests* (Wollenberg & Buck, 2000)

*Guidance on Participatory Assessment* (Dummet et al., 2013) [http://dmeforpeace.org/sites/default/files/1029\\_guidance-on-participatory-assessments.pdf](http://dmeforpeace.org/sites/default/files/1029_guidance-on-participatory-assessments.pdf)

## Backcasting

*Backcasting and why do we need it?* (Olga, 2013) <http://is.upc.edu/seminaris-i-jornades/seminaris/std-2013/documents/presentations-2013/olga-kordas>

*Backcasting* (European Commission, 2007)

*Backcasting for a Sustainable Future: The Impact After 10 Years* (Quist, 2007)

## Governance Systems

*Vertically Integrated Nationally Appropriate Mitigation Actions (V-NAMAs): Policy and Implementation Recommendations* (GIZ, 2014) [http://mitigationpartnership.net/sites/default/files/u1679/v-nama\\_-\\_policy\\_and\\_implementation\\_recommendations\\_2014.pdf](http://mitigationpartnership.net/sites/default/files/u1679/v-nama_-_policy_and_implementation_recommendations_2014.pdf)

*Governance for Sustainable Development: Five OECD Case Studies* (OECD, 2002) [http://www.ulb.ac.be/ceese/nouveau/site/ceese/documents/oecd/governance\\_for\\_sustainable\\_development\\_5\\_case\\_studies.pdf](http://www.ulb.ac.be/ceese/nouveau/site/ceese/documents/oecd/governance_for_sustainable_development_5_case_studies.pdf)

*Governance Principles, Institutional Capacity and Quality* (UNDP, 2011) [http://www.undp.org/content/dam/undp/library/Poverty\\_Reduction/Towards\\_SustainingMDG\\_Web1005.pdf](http://www.undp.org/content/dam/undp/library/Poverty_Reduction/Towards_SustainingMDG_Web1005.pdf)

*From Connectivity to Service Delivery: Case studies in e-governance* (UNDP, 2013) [http://www.undp.org/content/dam/undp/library/Democratic\\_Governance/Access\\_to\\_Information\\_and\\_E-governance/From\\_Connectivity\\_to\\_Service\\_Delivery\\_-\\_Case\\_Studies\\_in\\_E-Governance.pdf](http://www.undp.org/content/dam/undp/library/Democratic_Governance/Access_to_Information_and_E-governance/From_Connectivity_to_Service_Delivery_-_Case_Studies_in_E-Governance.pdf)

## Goal-based Financing for the SDGs

*Financing Sustainable Development: Implementing the SDGs through Effective Investment Strategies and Partnerships* (Sachs and Schmidt-Traub, 2015)

*Investment Needs to Achieve the Sustainable Development Goals in Low- and Lower-Middle-Income Countries: Understanding the Billions and Trillions* (Schmidt-Traub, 2015)

*Report of the Intergovernmental Committee of Experts on Sustainable Development Financing* (UN, 2015)

*Readiness for Climate Finance* (UNDP, 2012)

*Climate Finance Options* (UNDP website)

*Towards integration at last? The sustainable development goals as a network of target* (Le Blanc, 2015)

## Partnerships

*The State of the Global Partnership for Development* (MDG Gap Task Force, 2014)

*Public Private Partnerships Reference Guide* (WBO, 2014) [http://www-wds.worldbank.org/external/default/WDSContentServer/WDS/IB/2014/09/08/000442464\\_20140908133431/Rendered/PDF/903840PPP0Refe0Box385311B000PUBLIC0.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDS/IB/2014/09/08/000442464_20140908133431/Rendered/PDF/903840PPP0Refe0Box385311B000PUBLIC0.pdf)

*Multi-Stakeholder Partnerships Issue Paper* (ODI & Foundation for Development Cooperation, 2003) <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2117.pdf>

## Data Revolution

*Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development* (SDSN, 2015)

*Indicators and a Monitoring Framework for Sustainable Development Goals: Launching a data revolution for the SDGs* (SDSN, 2015)

*A World That Counts: Mobilising the Data Revolution for Sustainable Development* (UN-IAEG, 2014)

*Statistics and indicators for the post-2015 development agenda* (UN, 2013)

*Green Economy: Using indicators for green economy policymaking* (UNEP, 2014)

*Towards a New Industrial and Business Statistics Programme for Developing Countries and Countries with Economies in Transition* (UNIDO, 2009)

*JOINT UNECE/EUROSTAT/OECD TASK FORCE ON MEASURING SUSTAINABLE DEVELOPMENT* (UNECE, 2009)

*Embedding the Environment in Sustainable Development Goals* (UNEP, 2013)

'UN 지속가능발전목표(SDGs)의  
국가협치에 대한 의의와 대응과제' 토론회

## 부록

2. 한국SDSN: 배경과 현황



## 한국지속가능발전해법네트워크(한국SDSN) UN Sustainable Development Solutions Network (SDSN)

### 배경과 현황

2016년 5월

### 한국SDSN 본부

고려대학교 오정에코리질리언스연구원(OJERI)

02841 서울 성북구 안암로 145 문숙의학관 102호실

sdsn.korea@korea.ac.kr

Phone: 044-550-1287, HP: 010-9482-7090

[www.unsdsn.org](http://www.unsdsn.org)

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# 1. UN SDSN: 목적과 구성

## 목적

- 글로벌 차원에서 과학기술 전문가들을 동원해 UN SDGs의 개발 및 이행 등 지속가능발전(이하, "SD")을 위한 문제들의 실질적 해결을 촉진.

## 설립

- 2012년 8월 UN 반기문 사무총장이 'Sustainable Development Solutions Network (SDSN)' 발족 시킴. 대표(Director): 사무총장MDGs 특별고문 Jeffrey Sachs Columbia대학교 교수.
- 사무국: Columbia 대 The Earth Institute. 사무총장: Guido Schmidt-Traub

## 구성

- **회원기관:** 대학교, 연구기관, 기업체, 재단, 시민사회 등 SD 유관 전문성을 갖추고 SD 해법의 모색 및 이행에 상당한 역량을 투입할 용의가 있는 지식기관들. SDSN Assembly 참여. 현재 12개 **National Network** 및 10개 **Regional Network** 既 조직. 중국, 일본 등 SDSN 출범 준비 중. '**한국SDSN**' 2013년 10월에 발족.
- **국제전략이사회 (Leadership Council):** 2012년 11월에 발족. 세계 각국 및 주요 국제 민간기관의 전문가들 100인 내외로 구성. 한국 측에서 전 대통령직속 녹색성장위원회 위원장 양수길 박사가 위촉됨. 매년 9월(NYC)과 2/4분기 (제3국 도시)에서 2회 정기총회 개최.
- **Thematic Networks:** 지속가능발전 관련 주요 문제분야별 대 주제를 연구하는 글로벌 전문가 연구그룹. 현재 12개 운영 중. 각 TN, 100인 내외 전문가들로 구성.

# 2. UN SDSN 주요 사업

SDGs 개발 및 이행 UN 지원 연구, 자문, 발간: *The SD Action Agenda, Indicators and Monitoring Framework for the SDGs, Getting Started with SDG Implementation* 등 각종 보고서 및 연구논문 제출·발간, 전문가회의 및 부대 행사 개최.

기후변화행동지원 연구, 공론화: Deep Decarbonization Pathways 16개국 국제공동연구 Project (DDPP) 수행, Paris 협약의 저탄소발전전략(LEDS) 에 기여. IEA, WBCSD (Low-Carbon Technology Partnership Initiative, LCTPI) 등과 협력. 향후 LEDS 공동연구 추진.

SD의 자원조달 방안 연구: 아프리카국들의 SDGs 이행, One Belt One Road 사업 등의 민간재원 조달, 저소득국들의 SDGs 투자소요 추정 등 연구, 보고. 8개 보고서 발간.

국가 및 지역 SDSN의 연구, 토론 사업 지원.

SD MOOC 교육 실시('SDSNedu'): SD에 대한 고급 MOOC 교육 실시 중. 보건, 기후변화, 농업 중 여러 특정 주제에 대해 실시 중. 회원 대학교들과 제휴 모색. SDSN Association이 운영. 참조: [www.sdsnedu.org](http://www.sdsnedu.org)

해법 연구개발사업(Solution Initiatives): 특정 국가 혹은 지역의 특정 문제해결방안의 도출사업 실시 중. 국별 심층저탄소화경로의 모색(DDPP), 국별 지속가능농업·식량시스템 구축 경로의 모색, 사하라남부 아프리카 100만 스마트폰지원 벽지보건요원 사업, 지중해 플라스틱쓰레기 일소시스템 구축, 미국 지속가능도시 사업, 원격개방학교 모델 개발 등

'SDSN-Youth': 청년 층 대상으로 SDGs를 주지시키고 이행을 촉구하는 SNS 사업.

### 3. UN SDSN 주요 사업: Thematic Networks (1)

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**SDGs의 이행 및 공론화를 지원:** 각 분야에 걸쳐 연구 및 정책 개발 · 공유하고 국가 혹은 지역 SDSN이 해당 국가 · 지역의 SDGs이행 위한 **해법 모색 및 교육사업을 지원하기 위한 12개 주제분야별 국제전문가 그룹**의 운영 중.

1. **The World in 2050:** 모든 SDGs를 포괄하는 2050년까지의 세계 환경-경제-사회 통합 발전 모델 개발.
2. **Humanitarian-Development Linkages:** 취약지역을 중심으로 인도주의 의제(SDG 16 등)와 개발의제를 병행 추진하는 방안의 연구
3. **Gender, Human Rights, and Social Inclusion:** SDG 5, 10 및 16을 중심으로 인권존중이 실현되도록 하는 방안의 연구
4. **Early Childhood Development, Education, and Transition to Work:** SDG 4를 중심으로 유년기 아동의 발전에서 교육 및 직업에 이르기 까지 종합적, 전생애(全生涯) 내지 다세대에 걸쳐 지속가능발전에 최대한 기여하게 하기 위한 삶 과정의 관리 방안 연구
5. **Health for All:** 보편적 건강보험 실현을 중심으로 SDG 3에 초점을 둔 글로벌 건강증진 방안의 연구
6. **Deep Decarbonization Pathways:** SDG 13에 부응해 지구온도 상승 2.0°C 이하를 목표로 하는 16개 배출대국의 장기 저탄소발전 경로의 도출, 분석.

### 4. UN SDSN 주요 사업: Thematic Networks (2)

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7. **Sustainable Agriculture and Food Systems:** SDG 2에 부응, 농업의 환경부하를 줄이며 증가일로의 세계인구를 위한 식량을 생산하고 나아가 농촌의 지속가능발전을 실현하기 위한 대책의 연구
8. **Forests, Oceans, Biodiversity, and Ecosystem Services:** 어류에서 목재 및 탄소저장삼림에 이르기까지 생물다양성을 확보하고 생태계서비스 관리하기 위한 통합적 해법의 모색. SDG 14 및 15에 부응해 해양생태계와 삼림 생태계를 구분, 두 개의 네트워크를 분리, 운영.
9. **Sustainable Cities: Inclusive, Resilient, and Connected:** SDG 11을 중심으로 도시 및 인간정주공간의 모든 SDGs의 이행, 즉 지속 가능한 발전 및 관리 대책의 연구.
10. **Good Governance of Extractive and Land Resources:** SDG 12 및 16에 부응해 채굴자원의 지속 가능한 관리 및 관리의 책임성을 보장하기 위한 대책의 연구.
11. **Redefining the Role of Business for Sustainable Development:** 세계지속가능발전기업협의회 등 기업인 단체들과의 저탄소기술파트너십사업(LCTPi) 등 SDG 13 및 여타 SDGs관련 협력 추진.
12. **Data for Sustainable Development:** SDGs 이행을 모니터링하고 통계자료의 수집, 분석 및 보급을 혁신적으로 개선하고 데이터 갭을 극복하기 위한 연구. 2015년 9월 출범 'Global Partnership for SD Data'와 협력.

## 5. 한국SDSN: 2016년도 과제(1)

### 1) 정부를 지원해 한국의 UN 2030 지속가능발전의제 이행 추진방안을 연구, 제시.

- 17개 SDGs를 기준으로 국가발전의 '질'을 평가하고 주요 도전(문제)을 파악.
- 지속가능발전 전략을 연구: 주요 도전에 대한 대책을 강구하되 지속가능발전의 3면을 조화시키는 전략을 연구.
- 동 전략의 이행추진체제(implementation architecture)의 연구.
- 대(對)개도국 개발협력의제 및 이행체제의 연구.

### 2) SDSN의 국제연구사업에의 회원기관의 참여 촉진.

- SDSN의 Leadership Council차원 국제연구 · 토론에 참여
- 한국의 Paris협약 이행을 위한 NDC 제고방안 연구: 녹색기후센터(GTC) 후원 사업.
  - **TN6. Deep Decarbonization Pathways Project** 참여의 일환으로 한국의 장기 심층저탄소화경로 연구
- 여타 Thematic Network에 선별적 참여 추진: 고려대 등 회원대학의 교수 등 전문가 참여
  - **TN1. The World in 2050, TN3. Gender, Human Rights, and Social Inclusion, TN4. Health for All, TN7. Sustainable Agriculture and Food Systems, TN8. Forests, Oceans, Biodiversity, and Ecosystem Services, TN9. Sustainable Cities: Inclusive, Resilient, and Connected, TN12. Data for Sustainable Development** 등 참여 추진.

## 6. 한국SDSN: 2016년도 과제(2)

### 3) Solution Initiative의 개발 - 한국 특유의 문제에 대한 해법 연구사업 Scoping OJERI Workshops(9~12월):

- 동북아 대기오염 완화 국제협력 방안,
- 화학물질로부터의 안전 위협과 대책,
- 기후변화로부터의 리스크 및 적응대책.
- 고령화 대책: 출산율 제고를 위한 사회구조적 근본 대책.
- 지속가능발전을 위한 국가 거버넌스 개선 방안.

### 4) 2030 의제에 부응하는 한국의 Global Partnership 의제와 이행을 위한 과제 연구, 제시

### 5) 17 SDGs이행을 위한 지표 설정 및 데이터 베이스 구축 방안 연구.

### 6) 국내 SD MOOC 교육실시: 고려대 등 대학교 참여 추진.

### 7) 'UN 2030 SDG 파트너십 원탁회의' 운영

2030 SDGs의 추진에 기여하고자 하는 CSO 등 민간 기관들 간 정보교환, 정책당국자들과의 공동 대화, SDGs 이행 관련 공동학습 및 상호 협력모색을 위한 월례 실무대표자들 모임.

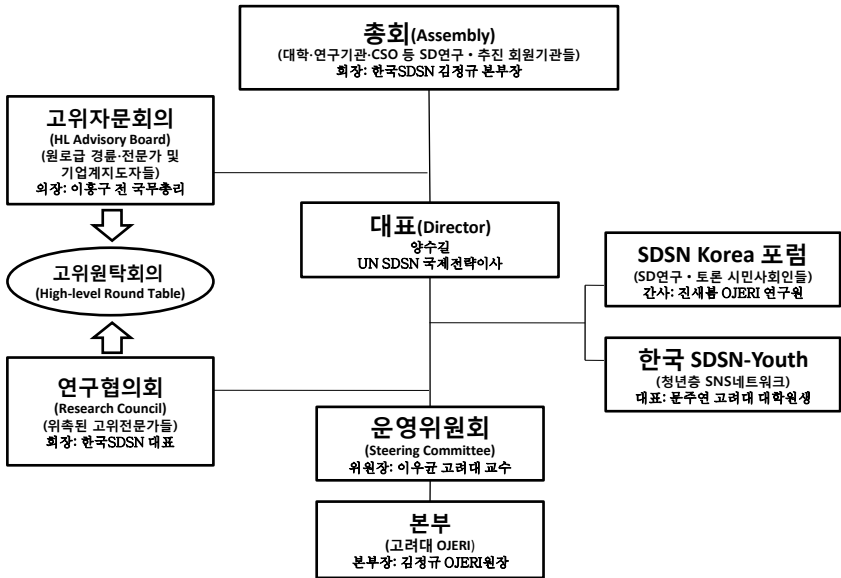
### 8) 'Korea SDSN-Youth' 의 조성, 운영: SDGs의 advocacy를 위한 SNS전개.

### 9) 금년 4월 25일 출범한 Future Earth Korea Committee와의 전방위적 협력 추진.

### 10) 한국SDSN의 고려대 OJERI 를 기해 회원기관(대학교 기반 연구소, 독립 연구기관 등) 확충.

- 2016년 1월, 고려대 오정예코리아질리언스연구원(OJERI)이 한국SDSN의 본부를 유지.
- 본부장: OJERI의 김정규 원장.

## 7. 한국SDSN 현황: 조직도



## 8. 한국SDSN 행사실적: 2013~2015년

### 주요 회의 개최

#### 2013년:

- 8월 23일: '한국UN지속가능발전해법네트워크 어젠다 모색' 컨퍼런스
- 10월 12~13일: SDSN의 국제연구사업 DDPP 발족 워크숍 주관
- 10월 14일: SDSN-Korea 창립선언 국제회의의 - 'UN SD Agenda and Challenges for Korea'

#### 2014년:

- 2월 26일: '갈색성장패러다임의 탈피를 위한 창조경제 아키텍처' 컨퍼런스
- 12월 4~5일: 'UN의 SDGs논의에 대응하는 한국의 지속가능발전 점검체계' 워크숍

#### 2015년:

- 8월 24일: 'UN의 2030 지속가능발전어젠다와 한국: 국가경영을 위한 활용방안과 국제개발협력 2.0의 모색' 컨퍼런스
- 11월 4일: "신(新)기후체제에 부응하는 심층저탄소화경로의 '역산도출': 국가에너지정책과 국제협력에 대한 시사점" 컨퍼런스

## 9. 한국SDSN 연구보고실적: 2013~2015년

### 1. 기(既) 발간

- ① An Action Agenda for Sustainable Development: Repot for the UN Secetray General, SDSN 발간 국제공동연구 보고서 (2014.05.05.)
- ② 우리나라 부문 및 세부업종별 중장기 부가가치 및 제품생산량 전망, 심층저탄소화연구사업 지원 연구용역보고서 (2014.12)
- ③ Pathways to Deep Decarbonization: 2014 Report, SDSN-IDDRi 추진 국제공동연구 보고서 – Korea 첩터(章) 포함 (2014)

### 2. 발간예정(2016.6)

- ① 갈색성장 패러다임의 탈피를 위한 창조경제 아키텍처: 녹색성장의 현황과 새로운 패러다임의 모색(총 11장, 400쪽)
- ② UN의 포스트-2015 지속가능발전어젠다와 한국: 국가경영을 위한 활용방안과 국제개발협력 2.0의 모색(총 10장, 350쪽)
- ③ Korea's Green Growth Practices – Looking Back and Forward: Stock-taking for Knowledge Sharing with Partners for Sustainable Development(영문보고서 총 18장, 500쪽)
- ④ 2050년 심층저탄소화목표에서 역산(backcast)해 본 에너지시스템 재편경로: 국가정책 및 국제협력에 대한 시사점(총 5장, 150쪽)

### 3. 주요 현안 대(對)정부 건의서: 청와대 및 유관 장관들께 제출

- ① 포스트-2020 온실가스감축목표안(案)에 대한 다섯 가지 우려와 대책 (2015.06.26.)
- ② UN 포스트-2015 발전어젠다 채택에 대한 한국의 대응방안 (2015.09.21.)

## 10. 한국SDSN 총회 회원기관(2013.10.14 잠정가입)

- 본 명단은 한국SDSN출범 시 가입권고에 잠정 동의한 기관들. 당 네트워크 운영모델이 확정됨에 따라 곧 '회원' 공식화 및 확충 예정.

경제정의실천시민연합(공동대표: 임현진, 선월 몽산, 최경표, 최인수)  
고려대학교 에코리질리언스연구원(김정규 원장)  
산업연구원(KIET)(유병규 원장)  
서울대 차세대융합기술연구원(박태원 원장)  
서울대 아시아연구소(강명구 소장)  
새종대 기후변화센터(전희찬 교수)  
안양시 시설관리공단(윤정택 이사장)  
에너지경제연구원(KEEI)(박주현 원장)  
에너지기술평가원(KETEP)(황진택 원장)  
(사)에코맘코리아(하지원 대표)  
연세대학교(김용학 총장)  
융합경제연구소(심상달 대표)  
자본시장연구원(안동현 원장)  
전국지속가능발전협의회(이상은 회장)  
중소기업기술혁신협회(INNOBIZ)(이규대 협회장)  
지속가능경영원(전수봉 원장)  
포스코경영연구원(POSRJ)(박창호 원장)

한국개발연구원(KDI)(김준경 원장)  
KDI국제정책대학원(전홍택 원장)  
한국과학기술연구원(KIST)(이병권 원장)  
한국과학기술원(KAIST)(강성모 총장)  
한국교통연구원(KOTI)(이창운 원장)  
한국노동연구원(KLD)(방하남 원장)  
한국보건사회연구원(KIHASA)(김상호 원장)  
한국여성과학기술단체총연합회(박새문 회장)  
한국환경정책평가연구원(KEI)(박광국 원장)  
환경파미래연구소(김병문 대표)  
SK경영경제연구소(황규호 소장)  
UNAI Korea (김영길 공동회장)  
UNITAR 제주국제연수센터(신현석 소장)  
UN Global Compact Korea (이승환 회장)

## 11. 한국SDSN 고위자문회의 구성

의장: 이홍구 (서울국제포럼 이사장, 前국무총리)

위원:

박결호(세종대 석좌교수, 前 환경부 장관),  
김정아(이화여대 사회복지학 명예교수,  
前 보건복지가족부 장관),  
김영길(UNAI Korea 회장, 前 한동대학교 총장),  
김한중(차별원그림 미래전략위원회 위원장,  
前 연세대학교 총장),  
민경석(경북대 환경공학 교수),  
박상용(연세대학교 경영학 교수, 공적자금위 민간위원장),  
박영아(한국과학기술기획평가원(KISTEP) 원장, 前  
국회의원),  
박원훈(경기과학기술진흥원 이사장, 前 아시아과학  
한림연합회 회장),  
박인구(동원그룹 부회장)  
박인국(한국고등교육재단 사무총장, 前 주UN대사),  
서상목(도산기념사업회 회장, 前 보건복지부 장관),  
손경식(CJ그룹 회장, 前 삼풍회사의 회장)  
안병우(서울대 이사, 前 국무조정실 실장),  
윤영관(서울대 의과학과 교수, 前 의교총상부 장관),  
이계우(KDI국제정책대학원 초빙교수, 前 세계은행  
선임경제연구원)  
이규식(연세대 보건행정학 명예교수),  
이민화(대구경북과학기술원(DGIST) 석좌교수),  
이병욱(세종대 공공대학원 교수, 前 환경부 차관),

이상은(전국지속가능발전협의회 회장),  
이시영(UNAI한국협회 자문위원장, 前 주UN대사),  
이재훈(초록우산 어린이재단 회장,  
국제개발민간협력협의회(KCOC) 회장),  
이주호(KDI국제정책대학원 교수,  
前 교육과학기술부 장관),  
이현구(서울대 공대 명예교수, 前 대통령과학기술특보)  
임현진(경제정의실천시민연합 공동대표,  
한국사회과학협의회 회장),  
임홍재(UN Global Compact Korea 사무총장),  
장태평(더푸른미래재단 이사장, 前 농림수산식품부 장관),  
전의찬(세종대 환경융합에너지학과 교수,  
국회기후변화포럼 공동대표),  
정인수(KDI국제정책대학원 초빙교수,  
前 한국고용정보원 원장),  
조윤계(서강대 국제대학원 교수, 前 대통령국제경제특보),  
최원(환경재단 대표, 기후변화센터 공동대표),  
최용(서울대 의과대학 명예교수),  
최종찬(국가경영전략연구원 원장, 건설재정보럼  
대표, 前 건설교통부 장관),  
허승호(한국신문협회 사무총장)

+ 당연직 위원: 회원기관 대표들

## 12. 한국SDSN 연구협의회 구성

강상진(한국환경정책평가연구원 선임연구위원),  
강상준(경기개발연구원 연구기획 연구위원),  
권원태(국립기상과학원 IPCC보고서 연구위원, 기후  
변화학회 회장),  
김교성(중앙대학교 사회복지학부 교수),  
김미화(자원순환연대 사무총장),  
김부일(KDI국제정책대학원 교수, 지속가능발전),  
김선희(국토연구원 도시연구 선임연구위원),  
김소희(기후변화센터 사무국장),  
김용하(순천향대 보령금융학과 교수),  
김정근(강남대학교 실버산업 교수)  
김정규(고려대 환경생태공학부 교수, 오정에코리질리언스  
연구소 소장),  
김정훈(SDGs지원한국협회 사무국장),  
김진희(한국교육개발원 국제교육개발협력 연구위원)  
김재길(한국해운경제연구원 선임연구위원),  
김태균(서울대 국제대학원 교수, KAIDEC사무총장),  
김희집(서울대 행정대학원 초빙교수, 前 액셀츄어  
Korea 총괄대표),  
남부원(한국YMCA 사무총장),  
남경호(한국해양수산개발원 선임연구위원),  
노희진(KOSCOM 상임감사, 前 한국자본시장연구원  
선임연구위원),  
류희숙(포스코경영연구소, CSR연구위원),  
박상용(에너지기술연구원 선임연구위원),  
박원훈(UNAI Korea 사무국장),

배성호(에너지기술평가원 글로벌협력실 책임연구위원),  
백성준(KDI국제정책대학원 교수, 인력개발교육),  
백진현(동의대 산업경영공학 교수, 온실가스배출),  
손요환(고려대 환경생태공학 교수)  
손혁상(경희대 공공대학원 교수, KAIDEC회장),  
송필배(KDI국제정책대학원 교수, 에너지정책),  
안병욱(기후변화행동연구소 소장),  
양이원영(환경운동연합 사무처장),  
오병용(전국지속가능발전협의회 사무총장),  
위금숙(위기관리연구소 소장),  
이성훈(국제개발협력시민사회포럼 운영위원장,  
한국인연재단 이사)  
이유강(고려대 환경생태공학 교수)  
이우성(STEPI 글로벌정책연구원 본부장),  
이은영(소비자시민모임 사무총장),  
이태주(글로벌발전연구원 원장, 개발협력),  
이현우(한국환경정책평가연구원 국토자연구실장),  
조용성(고려대 식물자원경제학 교수),  
최대용(KDI국제정책대학원 교수, 규제개혁),  
최성수(KDI국제정책대학원 교수, 도시개발),  
최슬기(KDI국제정책대학원 교수, 인구사회학),  
최재욱(고려대 보건대학원 교수, 환경의학연구소장),  
최창용(KDI국제정책대학원 교수, 개발경제-원조),  
하지원(에코맘코리아 대표)  
한기주(前 산업연구원 선임연구위원)