**Slide 2:**

**\***Hello, this lecture is a follow-up from the Millenium Development Goals that we discussed before, which subsequently gave rise to the Sustainable Development Goals or SDGs.

The SDGs build on the success of [the Millennium Development Goals (MDGs)](http://www.un.org/millenniumgoals/), and aim to go further towards ending all forms of poverty.

The new Goals are unique in that they call for action by all countries: poor, rich and middle-income; to unite and promote prosperity while protecting the planet.

They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs, while tackling climate change and environmental protection.

On the 1st of January 2016, the [17 Sustainable Development Goals (SDGs)](http://www.un.org/sustainabledevelopment/sustainable-development-goals/)of the [2030 Agenda for Sustainable Development](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E), officially came into force.

And what exactly are these SDGs?  **Next - slide 3: (Goals 1- 4)**

**\*Goal 1:** Is to End poverty in all its forms everywhere by 2030.

Because, there are still over 700 million people living on less than $1.9 a day, which is defined as **extreme poverty** by the World Bank and United Nations.

And the overwhelming majority of these people are in sub-Saharan Africa and Southern Asia.

**Goal 2:** Aims to End hunger, achieve food security and improved nutrition, as well as promote sustainable agriculture.

* By 2030, we should end hunger and ensure access by all to enough food all year round, especially to those at the Bottom of the Pyramid.
* This goal is intended to encourage us to rethink how we grow, share and consume our food.
* The food and agriculture sector offers key solutions for development (especially rural development), and is central for hunger and poverty eradication.

**Goal 3:** Aims to Ensure healthy lives and promote well-being for all, and for all ages.

Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality.

However, many more efforts are still needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.

**Goal 4:** To Ensure inclusive and quality education for all and promote lifelong learning.

Major progress has been made towards increasing access to education at all levels and increasing enrolment rates in schools, particularly for women and girls.

But bolder efforts are needed to make even greater strides for achieving these universal education goals. **Next Slide 4: (Goals 5 - 8)**

**\*Goal 5:** Aims to Achieve gender equality and empower all women and girls.

While the world has achieved progress towards gender equality and women empowerment under the Millennium Development Goals, women and girls continue to suffer discrimination and violence, world over.

The SDGs view Gender equality as not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

**Goal 6:** Seeks to Ensure access to water and sanitation for all.

Water scarcity, poor water quality and inadequate sanitation have a significant negative impact on quality of life overall. Drought afflicts some of the world’s poorest countries, worsening hunger and malnutrition.

Meanwhile, there is sufficient fresh water on the planet to achieve this goal. But requires better economic systems and suitable infrastructure.

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

As we know, Energy is central to nearly every major challenge and opportunity the world faces today.

But at the same time, we have to make sure that the energy solutions we adopt do not negatively impact the environment.

**Goal 8:** Seeks to Promote inclusive and sustainable economic growth, employment and decent work for all.

Today about half of the world’s population still lives on the equivalent of about US$2 a day.

Thus, Solutions are urgently required that will allow people to have quality jobs that stimulate the economy, while not harming the environment. **Next slide 5: (Goals 9 - 12)**

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

Investments in infrastructure - such as transport, irrigation, energy and information & communication technology – are crucial to achieving sustainable development and empowering communities in many countries. It has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure.

Inclusive and sustainable industrial development is the primary source of income generation, allows for rapid and sustained increases in living standards for all people, and provides the technological solutions to environmentally sound industrialization.

*And, technological progress* is the foundation of sustainable industrialisation.

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

The international community has made significant strides towards lifting people out of poverty.

However, inequality still persists and large disparities remain, with respect to access to health, education and other assets.

Additionally, while income inequality between countries may have been reduced, inequality within countries has risen.

There is growing consensus that economic growth is not sufﬁcient to reduce poverty if it is not inclusive and if it does not involve the three dimensions of sustainable development – economic, social and environmental.

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

Cities are considered to be hubs for ideas, commerce, culture, science, productivity, social development and much more.

However, many challenges exist to maintaining cities in a way that continues to create jobs, while not straining land and resources. Common urban challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing and declining infrastructure.

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

Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent. Its implementation will help to achieve overall development plans, reduce future economic, environmental and social costs, and strengthen economic competitiveness.

Sustainable consumption and production aims at “doing more and better with less,” increasing net welfare gains from economic activities by reducing resource use, degradation and pollution along the whole lifecycle, while increasing quality of life. It thus requires the involvement of different stakeholders, including business, consumers, policy makers, researchers, scientists, media, and development cooperation agencies, among others. **Next Slide 6: (Goals 13 - 17)**

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

**Goal 14:** Conserve and sustainably use the oceans, seas and marine resources.

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

But climate change is a global challenge that does not respect national borders. Emissions anywhere affect people everywhere. It is an issue that requires solutions that need to be coordinated at the international level and it requires international cooperation to help developing countries move toward a low-carbon economy.

**Goal 15:** Sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.

The world’s oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind.

Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation.

Careful management of this essential global resource is a key feature for a sustainable future.

**Goal 16:** Promote just, peaceful and inclusive societies.

Goal 16 of the Sustainable Development Goals is dedicated to the promotion of peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels.

**Goal 17:** Revitalize the global partnership for sustainable development.

A successful sustainable development agenda requires partnerships between governments, the private sector and civil society.

Efforts are needed to mobilize, redirect and unlock the transformative power of trillions of dollars of private resources to deliver on sustainable development objectives. Long-term investments, including foreign direct investment, are needed in critical sectors, especially in developing countries. These include sustainable energy, infrastructure and transport, as well as information and communications technologies.

The public sector will need to set a clear direction though. Reviewing and monitoring frameworks, regulations and incentive structures that enable such investments must be retooled to attract investments and reinforce sustainable development. National oversight mechanisms such as supreme audit institutions and oversight functions by legislatures should be strengthened. **Next Slide 7: Concluding Remarks**

**\***Before we conclude this lesson, I’m sure some of you might be asking themselves why should one really care about SDGs. If you’re an engineer or scientist for example, and you wish to develop essential technologies that may make a positive contribution to global sustainable development, where would you begin?

An excellent starting is by understanding the SDGs, because even many of the global expert organisations (such as the World Health Organisation), who are entrusted with the mission of making recommendations/guidelines for safe technologies and health measures, will always look to align their policies and strategies with the SGDs. Major funding organisations, such as the Gates Foundation, Wellcome Trust etc., typically align their strategies and priorities with such an initiative. Same goes for a company that wishes to expand internationally or establish a Corporate Social Responsibility Strategy; they would surely benefit by looking at SDGs to inspire their strategy. And list goes on….