



## KAUTILYA SCHOOL OF PUBLIC POLICY

GITAM (Deemed to be University)  
Rudraram, Patancheru Mandal  
Hyderabad, Telangana 502329

<b>Course Code:</b> PPOL6681	<b>Course Title:</b> Climate Change and Finance	
<b>Trimester:</b> 5	<b>Course Type:</b> Elective	<b>Credits:</b> 3
<b>Home Program(s):</b> MPP	<b>Batch/Academic Year:</b> 2022-2024	
<b>Course Instructors:</b> Mr. Udaibir Saran Das and Dr. Aman Srivastava	<b>Assigned T/RA:</b> Ms. Shrestha & Mr. Shubham	

### Course Description

Climate change is one of the biggest challenges facing humanity in modern times. As per the Paris Agreement the nations have agreed to limit greenhouse gas emissions so that global warming can be limited to 1.5 degree Celsius from pre industrialization era. This will require the right combination of planning, strategic priorities and availability of finance. Climate finance entails the management of risks and investment opportunities related to climate change using new and established financial market instruments and practices, as well as the inclusion of such factors in stock valuation and selection processes. In order to manage risks and seize new opportunities, asset owners and managers, banks, insurance firms, venture capitalists, corporations, and governmental organizations are getting more and more involved in the finance of climate change mitigation and resilience. This field is nascent and it offers great opportunities and challenges for the policy makers, particularly in capital starving emerging economies like India. The course will help the public policy students in understanding the basic dynamics of climate change, its impact on sustainable development goals, development of an alternate green market to finance sustainable projects, major green financial products, its demand and supply dynamics and climate action reporting standards.

### Learning Objectives

1. Explains the core concepts of climate finance and relevance of sustainability considerations for the key actors in the financial system.
2. Explains the potential contribution of climate finance to achieving the sustainable development.
3. Describes the role of regulations and policy initiatives in shaping the climate finance.
4. Describes different climate finance products that may be available to provide the capital needed to support the delivery of the sustainable development goals.
5. Explain the opportunities and challenges of climate finance in the world and India

## Course Outcomes

On successful completion of this course, students will be able to:

1. Understand the fundamentals of climate finance.
2. Understand the role of green bonds in improving the sustainability outcomes.
3. Learn to evaluate public / private companies from an Environmental, Social and Governance (ESG) perspective.
4. Apply policy frameworks to measure and monitor green investment opportunities.

## Textbooks and Course Materials

Schoenmaker, D., & Schramade, W. (2018). *Principles of sustainable finance*. Oxford University Press.

Sachs, J., Woo, W. T., Yoshino, N., & Taghizadeh-Hesary, F. (Eds.). (2019). *Handbook of green finance: energy security and sustainable development*. Singapore: Springer.

Bhattacharyya, R. (2022). Green finance for energy transition, climate action and sustainable development: overview of concepts, applications, implementation and challenges. *Green Finance*, 4(1), 1-35.

Lamperti, F., Bosetti, V., Roventini, A., Tavoni, M., & Treibich, T. (2021). Three green financial policies to address climate risks. *Journal of Financial Stability*, 54, 100875.

Tangney, P. (2020). Understanding climate change as risk: a review of IPCC guidance for decision-making. *Journal of Risk Research*, 23(11), 1424-1439.

Climate Policy Initiative. (2020). Landscape of Green Finance in India. *Climate Policy Initiative, with support of the Shakti Sustainable Energy Foundation, Delhi*.

## Course Schedule

Unit I	Sessions: 6	Introduction to climate change and climate related financial risks
		<ul style="list-style-type: none"> <li>● Introduction to climate change science</li> <li>● Climate change impact ,mitigation and adaptation</li> <li>● Vulnerability of financial sector to climate change</li> <li>● Climate change finance , definition and purpose</li> <li>● Climate finance and Sustainable Development Goals (SDGs)</li> <li>● Emerging National and international approaches to climate finance</li> </ul>

<b>Unit II</b>	<b>Sessions: 5</b>	<b>Climate Finance in India and the world</b>
<ul style="list-style-type: none"> <li>● Climate finance in India, progress, and challenges</li> <li>● Policies and regulation of climate finance in India</li> <li>● Experiences from global leading actors in the climate finance</li> <li>● International initiatives to accelerate climate finance</li> <li>● India's involvement with global climate finance Initiatives</li> </ul>		
<b>Unit III</b>	<b>Sessions: 4</b>	<b>Climate finance products</b>
<ul style="list-style-type: none"> <li>● Overview of climate finance products and principles</li> <li>● Green bonds / Green Loans /Green banks</li> <li>● Key elements of a Green Bond, Green Loan Instrument and Green Bank</li> <li>● Comparison of Green bond with other financial securities</li> </ul>		
<b>Unit IV</b>	<b>Sessions: 4</b>	<b>Demand and Impact of green bond</b>
<ul style="list-style-type: none"> <li>● Demand for green bond</li> <li>● Opportunities for green bond</li> <li>● Factors associated with growth and impact of green bond</li> <li>● Making the transition as a financial institution towards green finance</li> </ul>		
<b>Unit V</b>	<b>Sessions: 5</b>	<b>Climate Investments / Metrics and Environmental, Social, and Governance (ESG) reporting</b>
<ul style="list-style-type: none"> <li>● Introduction to Environmental, Social, and Governance (ESG)</li> <li>● Commonly used ESG reporting guidelines / standards</li> <li>● Integration of sustainability (ESG) into investment decision making</li> <li>● Climate investment and its role in resilience and adaptation building</li> <li>● Analytical frameworks for climate change risk assessment and mitigation</li> <li>● Green Accounting</li> </ul>		

