

*Honoring The*  
**GRADUATING  
CLASS** *of*  
**2024**

**Friday · May 10 · 2024**

Wilson Recreation Center  
Duke University

**PROFESSIONAL STUDENT  
RECOGNITION CEREMONY**

**Duke** | **NICHOLAS SCHOOL** *of*  
*the* **ENVIRONMENT**

# GRADUATION 2024

## PROCESSIONAL

### WELCOME

**LORI SNYDER BENNEAR, Ph.D.**

Stanback Dean, Nicholas School of the Environment

### INTRODUCTION *of* CLASS SPEAKER

**DEAN BENNEAR, Ph.D.**

### CLASS SPEAKER

**RACHEL JACKSON, MEM-ESC '24**

### INTRODUCTION *of* GUEST SPEAKER

**DEAN BENNEAR, Ph.D.**

### GUEST SPEAKER

**JIM TOOMEY, BSE'83, DEL-MEM'08**

Syndicated Cartoonist

### RECOGNITION *of* DEGREE CANDIDATES

Master of Environmental Management

Master of Forestry

International Master of Environmental Policy

### PRESENTATION *of* AWARDS

Lynn Maguire Award for Excellence in Teaching and Mentoring of Professional Students

Virilis L. Fischer Award for Academic Achievement

### CLOSING REMARKS

**DEAN BENNEAR, Ph.D.**

## RECESSIONAL

Immediately following the ceremony, all graduates and their guests are cordially invited to a light reception outside of Wilson Recreation Center.

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# MASTER OF ENVIRONMENTAL MANAGEMENT

## Business and Environment

### **SALWA ALETANI**

An Analysis of Optimal Agricultural Edge of Field Practices to Maximize Sustainability Efforts

### **MACKENZIE TAYLOR AUDINO, MEM/MBA**

Filling the Ocean Funding Gap: A Study of Blended Finance and the Promise of Blue Bonds for Ocean Conservation

### **BATSANAA BATCHULUUN**

Financing Community-Based, Renewable, and Distributed Energy Resources in the Philippines: A Case Study in Supporting Energy Transition Finance for Low to Middle Income Countries

### **DAVID BLUESTEIN, MEM/MBA**

Environmental, Social, and Governance Strategy and Reporting at a Medium-Sized Alternative Asset Management Firm

### **YONGJUN CHEN**

Environment+ Program Business Model Development

### **ALEJANDRA DEL CAMPO FARRO, MEM/MBA**

Golden Harmony: A Study on the Coexistence of Artisanal and Small-Scale Gold Miners and Processing Plants to Mitigate Mercury Use in Peru

### **BENJAMIN MACALLISTER EGAN, MEM/MBA**

Making the Electric Grid Smarter and Cleaner: Navigating the Journey to Substation Virtualization

### **TASHA LYN GRIFFITHS, MEM/MF (FALL 2023)**

Funding Nature-Based Solutions: Forestland and Water Quality Nexus

### **LUCY GUYETT**

Critical Minerals for the Energy Transition

### **SUSANNA CRAMER JENKINS**

Sustainable Supply Chains, Emissions, and Value Creation: Lithium-ion Batteries for Passenger Electric Vehicles (EVs)

### **KACEY LYNN KATZENMEYER, MEM/MBA**

Scaling Carbon Dioxide Removal (CDR): Beyond Carbon Markets

### **SOKNA KRY**

Sustainable Supply Chain Management

### **SHIVANI KUCKREJA, MEM/MBA**

Establishing a Carbon Emissions Reduction Target and Action Plan for Philadelphia Macaroni Company

### **RUIQING LI**

Environment+ Program Business Model Development

### **MADELEINE MAE LLONCH, MEM/MBA**

A Comparative Analysis Between Biofuels and the Food & Agricultural Industries

### **PETYA MITEVA, MEM/MBA \***

Investing in Clean Hydrogen

### **SRISHTI MUTHA**

A Comparative Analysis Between Biofuels and the Food & Agricultural Industries

### **JUAN PABLO QUINTERO, MEM/MBA**

Kelponomics: A Comprehensive Analysis of the Global Seaweed Industry with Sustainable Strategies for Growth in the Icelandic Market

### **NADEEM WALI**

Sustainable Supply Chains, Emissions, and Value Creation: Lithium-ion Batteries for Passenger Electric Vehicles (EVs)

### **COLLEEN PATRICIA WOODRUFF, MEM/MBA**

Environmental Benefits and Market Potential of Agrivoltaics: The Symbiotic Relationship of Sustainable Agriculture and the Energy Transition

### **YAO YAO**

A Comparative Analysis Between Biofuels and the Food & Agricultural Industries

## Coastal Environmental Management

### **TASNEEM AHSANULLAH ^^**

Global Assessment of Perceptions of Procedural Equity in Marine Protected Areas

### **MAEVE EMIA ARTHUR**

Shellfish Aquaculture Management Priorities in Florida, Maine and North Carolina

### **ALLISON CLAIRE BARBARO ^^**

Spatial Opportunities for High Seas Conservation Under the U.N. Biodiversity Beyond National Jurisdiction

### **ISAAC GEORGE BENAKA ^^**

Semi-Decadal Transformations in Geomorphology and Landcover of a Mixed-Energy Barrier Island Complex in North Carolina

### **KATRINA BERNAUS**

Investigating Application of a Seafood Recommendation Program for Small-Scale Pacific Salmon Fisheries: A Case Study of a Rights-Based Chinook Fishery

### **CHRISTIANA LANGENFELDER BISHOP ^^**

Will Wind Development Adversely Impact North Atlantic Right Whales Through an Increase in Vessel Traffic?

### **NATHANIEL STEPHENSON BLACKFORD, MEM/MF (FALL 2023)**

Vegetation Dependence on Depth in a Salt Marsh, and Implications for Marsh Drowning

### **JESSICA ANN MARIE BROOKS, MEM/MF**

The Dirty Truth: Effects of Leaches from Commercial Plastic Products on Soil Respiration

### **TAYLOR SUZANNE COLEMAN ^^**

Population Consequences of Multiple Stressors Project - Analysis of Sound as a Stressor for North Atlantic Right Whales in the Cape Cod Bay Area During 2013 (CCB/SERDP)

### **EVERETT THOMAS CRADDOCK**

Application of a Novel Climate Adaptation Tool for Prioritization of Historic Structures in Coastal National Parks

**HAYDEN ELIZABETH DUBNICZKI** ^^

Kiribati's Tuna Purse Seine Fishery, a Case for Comprehensive Vessel Identity Information

**LAURA ELIZABETH EXAR** ^^

An Analysis of Material Use in Living Shorelines

**AILEEN MARIANNE LAVELLE** ^^

Species Distribution Model of the North Pacific Loggerhead in North American Waters and Implications for Fisheries Bycatch

**JASMINE GABRIELLA PAPAS** ^^

A Habitat Model of the Short-finned Pilot Whale in Correlation with the Gulf Stream

**AMANDA GRACE SAJEWSKI** ^^

Hooked! An Analysis of Sea Turtle Bycatch in the Recreational Rod and Reel Pier Fishery of North Carolina

**JENNA CAROLINE SEAGLE**

A Deep Dive into Hawaii's Seafood Industry: Reducing Fish Processing Waste

## Ecosystem Science and Conservation

**HANNA MARIE BLISKA** ^

Improving Access of Climate Information for Communities Vulnerable to Drought in California

**EMMA THERESE BRENTJENS** ^

Examining Data Gaps in Best Management Practice Implementation and Monitoring in the Chesapeake Bay: A Multi-Method Approach

**GABRIEL MARIO CAMPOS** ^^

Drone Technology for Analyzing Reforestation Efforts in the Brazilian Atlantic Forest

**WALLACE REED CARADINE III, MEM/MF**

Linking Forest Restoration to Sustainable Value Chains with se.plan

**YING CHI CHEUNG** ^^

An Analysis of Optimal Agricultural Edge of Field Practices to Maximize Sustainability Efforts

**JESSICA LAUREN CITROLA, MEM/MBA**

Sustainable Supply Chains, Emissions, and Value Creation: Lithium-ion Batteries for Passenger Electric Vehicles (EVs)

**KELLY MARIE DAVIDSON** ^^

Estimating the Nutrient and Sediment Pollution Impacts of Land Use Conversion in the Chesapeake Bay

**LOGAN ALEXANDER DYE** ^^

An Ecologically Focused Guide to Community Solar Siting and Development

**MICAH BENJAMIN EZEKIEL, MEM/MF (FALL 2023)** ^^

Linking Forest Restoration to Sustainable Value Chains with se.plan

**JACOB ALEX COHEN FREEDMAN** ^^

An Ecologically Focused Guide to Community Solar Siting and Development

**LI JIA GO** ^^ \*\*

Distribution of Natural Capital Financing in Markets

**LIAM HEALEY** ^^

Investigating the Quality of Carbon Credits from Nitrous Oxide Abatement in Nitric Acid Manufacturing

**RACHEL JACKSON** ^

Sowing the Seeds of Redemption: Supporting the Formerly Incarcerated Population of Durham through Agricultural Education

**LAUREN ELISE KOBAYASHI, MEM/MPP**

Promoting Safety and Reducing Wildlife-Vehicle Collisions Through Effective Wildlife Crossing Infrastructure: Identifying Infrastructure Best Practices

**ANDREA JOYCE KOLAROVA, MEM/MF (FALL 2023)** ^^

Quantifying Emerald Ash Borer Induced Ash Mortality & Assessing Ash Reintroduction Strategies in the Duke Forest

**DILI LI**

Wastewater Pollution from Petrochemical Refining Industries: Modernizing Treatment Technologies & Downstream Impacts

**YING LIU** ^^

Sustainable Supply Chain Management for Matthews International

**SAMANTHA NURMI, MEM/MF (FALL 2023)**

Long-term Effects of Repeated Fire on the Belowground Ecosystem and Soil Nutrients: A Study of the Tall Timbers' Stoddard Fire Plots in the American Southeast

**SOPHIA TERESE PALIA** ^

Communicating the Processes, Values, and Impacts of Carbon Offsetting by the Communities of the Integrator of Indigenous and Campesino Communities of Oaxaca (ICICO)

**GABRIEL VIEIRA DA MOTTA PIACSEK, MEM/MF (FALL 2023)** ^^

Linking Forest Restoration to Sustainable Value Chains with se.plan

**EMILY PURCELL, MEM/MBA** ^^

Kelponomics: A Comprehensive Analysis of the Global Seaweed Industry with Sustainable Strategies for Growth in the Icelandic Market

**CAROLINE ROWLEY**

Passive Acoustic Monitoring of *Ceropithecus nictitans* in Ivindo National Park, Gabon

**NANDITHA RAM SATAGOPAN** ^^

Wastewater Pollution from Petrochemical Refining Industries: Modernizing Treatment Technologies & Downstream Impacts

**SIYU SUN** ^^

Conservation and Restoration Prioritization for the Cape Fear River Basin: Social and Environmental Justice Considerations

**MEIXIN WANG, MEM/MF (FALL 2023)** ^^

Linking Forest Restoration to Sustainable Value Chains with se.plan

**ELIZABETH WHITE** ^^

Camera Trap Distance Sampling in Tropical Forests: Assessing Drivers of Terrestrial Wildlife Abundance in Ivindo National Park, Gabon

**ISABEL BROOKS ZUNGAILIA** ^^

Estimating the Nutrient and Sediment Pollution Impacts of Land Use Conversion in the Chesapeake Bay

## Ecotoxicology and Environmental Health

### **SAFIATOU BAMBA** ^^ ++

Resource-Extractive Concessionary Activity and Malaria Incidence in the Peruvian, Ecuadorian, and Brazilian Amazons: A Spatiotemporal Analysis

### **HANNAH GABRIELLE BUERK**

Evaluating Lead Exposure from Ammunition Usage in the Hunting Community

### **KALLIE RENEE DAVIS**

Zebrafish Developmental Neurotoxicity of PFMOAA – An Emerging PFAS in the Cape Fear River Watershed

### **ELIZABETH ANN GOOD**

Aquatic Macroinvertebrates and Metal Contamination in Forested and Urban Streams

### **EMILY KUHLMANN**

Serum Protein Binding of PFAS Used in Clean Energy

### **SAKINA SHAHID**

Connecting Environmental Exposures to Toxicology: Exposure Studies Using Silicon Wristbands and Whole Model Organisms

### **PAYTON LEIGH WOOD** ++

Impacts of Artisanal and Small-Scale Alluvial Gold Mining for Environmental Welfare in Napo, Ecuador

## Energy and Environment

### **YASSER M. ALABAISHI, MEM/MEMP** (FALL 2023)

Aviation Fuel Supply Chain Risk Assessment for the United States Air Force

### **MEERA PRASANNA AYYAGARI**

Exploring Microgrids: Powering Resilience in Eastern North Carolina

### **HARLAN BELCHER, MEM/MBA**

Building a Better Business Intelligence Platform for EV Charging Developers

### **KEVIN STEFFECK BIEHL, MEM/MBA** +

Carbon Free Data Centers Through Solar Photovoltaic Generation, Battery Energy Storage, and Medium Voltage DC Power Distribution

### **ISAAC JOHN BOWLIN**

An Ecologically Focused Guide to Community Solar Siting and Development

### **MARIA NOELLE CARLSON**

Exploring Microgrids: Powering Resilience in Eastern North Carolina

### **AL GHIFFARY DAZUL HERMAN** \*\*

Grid Modernization for a Just Energy Transition in the Philippines

### **KE DING** +

Establishing Carbon Emissions Reduction Target and Action Plan for Philadelphia Macaroni Company

### **ALEXANDER DOBRINOV, MEM/MBA**

A Report on the Energy Transition in the EU

### **HENRY L. DREWYER, MEM/MBA**

Carbon Free Data Centers Through Solar Photovoltaic Generation, Battery Energy Storage, and Medium Voltage DC Power Distribution

### **BRAXTON MALYHIA DUNCAN**

Critical Minerals for the Energy Transition

### **JON PETER EKBERG (EEP)** \*\*

Exploring the Social Costs of Plastics: Global Review of Impacts and Economic Damages

### **SAMRIDDHA GHOSH**

Establishing a Carbon Emissions Reduction Target and Action Plan for Philadelphia Macaroni Company

### **YU-TING (JOLINA) HSUEH**

Critical Minerals for the Energy Transition

### **ZHENGQI JIAO**

Estimating the Energy and Emissions Impacts of a Commuter Rail System in North Carolina

### **HANNA KARNEI (EAM)**

Distributed Solar Photovoltaics in South Carolina: A Techno-Economic Analysis for Red Ventures Fort Mill Campus

### **SARAH LOUISE KEAR, MEM/MCRP**

Charging Forward: A Comprehensive Analysis of New York State's Electric Vehicle and Clean Energy Goals

### **ERIN KIRTON, MEM/MBA**

Environmental Benefits and Market Potential of Agrivoltaics: The Symbiotic Relationship of Sustainable Agriculture and the Energy Transition

### **HARU KOGA (EAM)**

Decarbonization of Industrial Electronics

### **QIUYING LIAO**

Distributed Solar Photovoltaics in South Carolina: A Techno-Economic Analysis for Red Ventures Fort Mill Campus

### **SHIH-HSUAN (INA) LIAO**

Distributed Solar Photovoltaics in South Carolina: A Techno-Economic Analysis for Red Ventures Fort Mill Campus

### **JINXI LIU**

Establishing a Carbon Emissions Reduction Target and Action Plan for Philadelphia Macaroni Company

### **KRISTINA KIERA MCKAIN**

Exploring Microgrids: Powering Resilience in Eastern North Carolina

### **MIAOJUN PANG**

Estimating the Energy and Emissions Impacts of a Commuter Rail System in North Carolina

### **SHREYA DIPTI PATEL**

Sustainable Supply Chains, Emissions, and Value Creation: Lithium-ion Batteries for Passenger Electric Vehicles (EVs)

### **XINGYING REN**

Environmental Impacts of Critical Minerals Used in the Renewable Technologies Supply Chain

### **KAYLEIGH BETH RUBIN, MEM/MPP**

Challenges and Potential Solutions for Managing Solar Module Waste in Developing Nations

### **TATIANA SOKOLOVA, MEM/MBA**

Making the Electric Grid Smarter and Cleaner: Navigating the Journey to Substation Virtualization

### **ALEXANDRIA GABRIELLE URBINA**

Exploring Microgrids: Powering Resilience in Eastern North Carolina

### **NAGARAJAN VAIDYA SUBRAMANIAN**

Investigating the Quality of Carbon Credits from Nitrous Oxide Abatement in Nitric Acid Manufacturing

**DAVID ALFONSO VELTRI JR. (EEP)**

Costs and Impediments to Using Home Efficiency Government Incentives

**JARDON MARIE WARGO**

Decarbonization of Industrial Electronics

**XINYU WU, MEM/MBA**

Environmental Benefits and Market Potential of Agrivoltaics: The Symbiotic Relationship of Sustainable Agriculture and the Energy Transition

**YIXUAN WU**

Decarbonization of Industrial Electronics

**SIQI ZU**

Sustainable Supply Chain Management for Matthews International

## Environmental Economics and Policy

**ASHTON CLOER BACHMAN ^**

Communicating the Processes, Values, and Impacts of Carbon Offsetting by the Communities of the Integrator of Indigenous and Campesino Communities of Oaxaca (ICICO)

**ANNE-ELISABETH INEZ BAKER ^**

Exploring the Social Costs of Plastics: Global Review of Impacts and Economic Damages

**WILLIAM JACOB BAUGHMAN**

Effects of Conservation Area Proximity and Size on Municipal Ballot Measures in the Eastern United States

**GRIFFIN BIRD ^^**

Effects of Conservation Area Proximity and Size on Municipal Ballot Measures in the Eastern United States

**SAMUEL GLOVER CAMPBELL**

Grid Modernization for a Just Energy Transition in the Philippines

**HALEY MARIE CLAPPER**

The Effects of Redlining on Residential Energy Efficiency and Resilience in Extreme Temperature Events

**DEJANAE DAVIS**

Costs and Impediments to Using Home Efficiency Government Incentives

**LEWIS DEMYAN, MEM/MBA**

Assessment of Venture Capital's Role in Climate Tech: A Case Study on End-of-Life Batteries

**ANDREW MALCOLM DREIS, MEM/MBA**

Building a Better Business Intelligence Platform for EV Charging Developers

**JUSTIN JOSEPH GULINO \*\***

Ocean Data Science Initiatives Engage in the Ocean Science-Policy Interface by Positioning their Data and Services as Policy Relevant

**SALLY JERNIGAN-SMITH ^**

Financing Community-Based, Renewable, and Distributed Energy Resources in the Philippines: A Case Study in Supporting Energy Transition Finance for Low to Middle Income Countries

**ADAM DAVID LOHMAN, MEM/MF (FALL 2023)**

Cutting the Green Tape in North Carolina

**ELIZABETH MEMORY MITCHELL, MEM/MCRP \***

Preparation is the Key to Success: Strategies for Pre-Emptive Managed Retreat in Vulnerable Coastal Municipalities

**JUAN CAMILO MORENO RAMOS \*\***

Exploring the Social Costs of Plastics: Global Review of Impacts and Economic Damages

**DANIA NASIR**

Designing and Implementing Workshops: A Program Evaluation of an Agricultural and Chicken Husbandry Development Program in Madagascar

**SAI POWAR**

Grid Modernization for a Just Energy Transition in the Philippines

**JOY ELINOR MARIAN REEVES ^**

Financing Community-Based, Renewable, and Distributed Energy Resources in the Philippines: A Case Study in Supporting Energy Transition Finance for Low to Middle Income Countries

**SADAF SADRUDDIN SUTARIA \*\***

Exploring the Social Costs of Plastics: Global Review of Impacts and Economic Damages

**CHIA-SHEN TSAI**

Estimating the Energy and Emissions Impacts of a Commuter Rail System in North Carolina

**MARINEL SUMOOK UBALDO ^**

Financing Community-Based, Renewable, and Distributed Energy Resources in the Philippines: A Case Study in Supporting Energy Transition Finance for Low to Middle Income Countries

**VICTORIA ANN VELASQUEZ**

Developing and Evaluating K-12 Education Resources For New York City's Department of Environmental Protection (DEP)

**STEVEN TYLER WAGNER, MEM/MBA \* +**

Public Funding for More Efficient Land Use Practices: Evaluation of USDA's Partnerships for Climate-Smart Commodities as a Catalyst for Private Investment

**JACOB ALEXANDER WILENTZ, MEM/MPP ++**

Addressing Data Collection and Surveillance in the Arctic and Recommendations for the Department of Defense

**CAROLINE BROOKE ZEPECKI**

Distribution of Natural Capital Financing in Markets

**YIWEI ZHU +**

Sustainable Supply Chains, Emissions, and Value Creation: Lithium-ion Batteries for Passenger Electric Vehicles (EVs)

## Water Resources Management

**NICOLE RENÉE EASTMAN**

Examining Data Gaps in Best Management Practice Implementation and Monitoring in the Chesapeake Bay: A Multi-Method Approach

**SHIRLEY JEANNE LYNN FONTANIE, MEM/MBA**

Developing and Evaluating K-12 Education Resources For New York City's Department of Environmental Protection (DEP)

**TIAJAHLYN D. FURR, MEM/MEMP**

Wastewater Pollution from Petrochemical Refining Industries: Modernizing Treatment Technologies & Downstream Impacts

**WING SUI ARIEL LAM**

Estimating the Nutrient and Sediment Pollution Impacts of Land Use Conversion in the Chesapeake Bay

**MEGAN LOUISE MCCLAUGHERTY ^^**

Examining Data Gaps in Best Management Practice Implementation and Monitoring in the Chesapeake Bay: A Multi-Method Approach

**KAMIL JARIS OROZCO**

Intentional Technical Assistance: Using Network Model Analysis and Community Engagement Tools to Assess Fresh Food Availability and Accessibility in Knightdale, North Carolina

**JIYOUNG PARK**

Critical Minerals for the Energy Transition

**DOROTHY ANNE RATHMELL**

Developing and Evaluating K–12 Education Resources For New York City’s Department of Environmental Protection (DEP)

**DELORIS ELIZABETH SOTO ^^**

Intentional Technical Assistance: Using Network Model Analysis and Community Engagement Tools to Assess Fresh Food Availability and Accessibility in Knightdale, North Carolina

## Duke Environmental Leadership (DEL-MEM) Program

**HEATHER CONFORTO BEATTY**

ScopeFour Capital Marketing Communications Plan

**TIANA CHANEL ELAME +**

Game Changing Interconnection Reform: Reshaping Transmission Planning and Realigning Incentives

**JOHN MICHAEL FALLON**

Enhancement of Louisiana Marine Mammal Stranding Response Through UAS

**TAUSHA MARIE FANSLAU**

Start Right – Environmental Compliance Strategies for Start-ups

**JOSEPH JAMES GIARAMITO**

Just Transition: Native Energy Sovereignty Through Solar Energy

**ASHLEY JILL HILLARD**

Loups Marin: Exploring Human Dimensions of Conflicts with Wildlife through Filmed Interviews About Gray Seals Returning to Cape Cod

**IMANI EVETTE LOVE**

Plugging into Justice: Merging Environmental Justice Practices into the Transition to Electric Vehicles

**JENNIFER AMY MANDEL**

Power in Numbers: Case Study of the Culebra Community Residential Solar Project

**KRISTY TATUM MARKOWITZ**

Incorporating Participatory Planning Processes for Engaging with Smallholder Coffee Farmers in Climate Change Resiliency Planning in Latin America

**STEPHEN ROBERT NITTLER**

Tackling Social Opposition: Can the Fossil Fuel Pipeline Playbook Work for the Grid?

**MADELAINE ARIELLA SHIFF**

Don’t Worry, It’s Biodegradable: The Promise and Perfidy of Bioplastics in a Greenwashed World

**SUZANA TESLA**

Greening Your Home: Making Home Sustainability Buyer and Seller-Friendly

**JUSTIN THOMAS WILLIAMS**

Comparing the Proposed Benefits of Electricity Deregulation in South Carolina to the Electricity Deregulation Outcomes Experienced in Maryland: A Primer on Electricity Deregulation in South Carolina for Residential Ratepayers

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## MASTER OF FORESTRY

*The Master of Forestry degree is accredited by the Society of American Foresters (SAF).*

**ANN CATHERINE PERRY, MF/MBA**

Enhancing Timberland Value: Integrating Financial, Operational, and Sustainability KPIs for RMS

**SIMON MORELL SHARP**

Enhancing Timberland Value: Integrating Financial, Operational, and Sustainability KPIs for RMS

**PARKER BENTON WHITE, MF/MBA**

Enhancing Timberland Value: Integrating Financial, Operational, and Sustainability KPIs for RMS

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## INTERNATIONAL MASTER OF ENVIRONMENTAL POLICY

*The iMEP program, offered at Duke Kunshan University, is a collaboration between the Nicholas School of the Environment and the Sanford School of Public Policy.*

**FANGRUI CHEN**

Improving Industrial Volatile Organic Compounds Governance in a County-level City

**LUFEI CHEN**

Evaluate Nature-Based Solutions for Flood Management in Chinese Cities: A Case Study of Ningbo, Zhejiang

**YANG CHEN**

Evaluation of the Pricing of Pollutant Emissions Allowance in Zhejiang Province, China

**BOYA DENG**

Assessing the Changes in Rosewood Import in China under CITES Regulations: Based on Provincial-Level Data

**JOSE LUIS DIAZ RAMOS**

A Hippy Climate, a Rigid System. Climate Adaptation to Riverine Floods and Waterlogging at the Local Level in Colombia

**SIYU DONG**

Evaluate Nature-Based Solutions for Flood Management in Chinese Cities: A Case Study of Ningbo, Zhejiang

**YANXIN FU**

The Accessibility and Effectiveness of Zero-Carbon Certification for Scenic Spot – A Case Study of Huanghai National Forest Park

**LINGYU HE**

Examining the Strategic Commodification of Nature and Culture for Development: A Case Study of Baiyu County on the Qinghai-Tibet Plateau

**XINWEI JIN**

Evaluation of the Pricing of Pollutant Emissions Allowance in Zhejiang Province, China

**JASMINE KHATRI**

Prospects and Challenges in  
Regulating the Emerging Global  
Biodiversity Credit Market

**MUYANG LI**

Institutional Innovation for Biodiversity  
Finance with Direct Financing from  
International Foundations to IPLCs

**YUYAO MAO**

Assessing the Changes in  
Rosewood Import in China  
under CITES Regulations: Based  
on Provincial-Level Data

**SHIYAO SHAN**

A Simplified Urban Waterlogging  
Risk Assessment Framework: A  
Case Study of Nanning City

**KEYI SHI**

Promoting Plant-based Diets in China: A  
Field Study Testing Environmental, Health  
and Animal Welfare Framing Messages

**NANNAN TIAN**

The Accessibility and Effectiveness  
of Zero-Carbon Certification for  
Scenic Spot – A Case Study of  
Huanghai National Forest Park

**SIMING WANG**

Institutional Innovation for Biodiversity  
Finance with Direct Financing from  
International Foundations to IPLCs

**YINING WANG**

Global Trends and Drivers of the  
Invention of Carbon Capture,  
Utilization and Storage Technology

**MENGYING XU**

Building Integrated Photovoltaic  
(BIPV) Policy in China

**SHANGYI YANG**

Institutional Innovation for Biodiversity  
Finance with Direct Financing from  
International Foundations to IPLCs

**YANG ZHAO**

Temperature Consideration in Shallow  
Lake Model and its Policy Implications  
for Eutrophication Governance

**ZILI ZHOU**

Evaluation of the Pricing of  
Pollutant Emissions Allowance  
in Zhejiang Province, China

**YILUN ZHU**

Boasting Much but Doing Little?  
Examining the Influence of Political  
Ideology on Carbon Footprint in the U.S.

**MASTER'S CERTIFICATE PROGRAM RECIPIENTS**

\*Climate Change Science & Applications

^Community-Based Environmental Management

^^Geospatial Analysis

+Innovation & Entrepreneurship *(Administered by The Graduate School)*

++Global Health *(Administered by the Duke Global Health Institute)*

\*\*International Development Policy *(Administered by The Sanford School of Public Policy)*

# Duke

**NICHOLAS SCHOOL**  
*of the* **ENVIRONMENT**