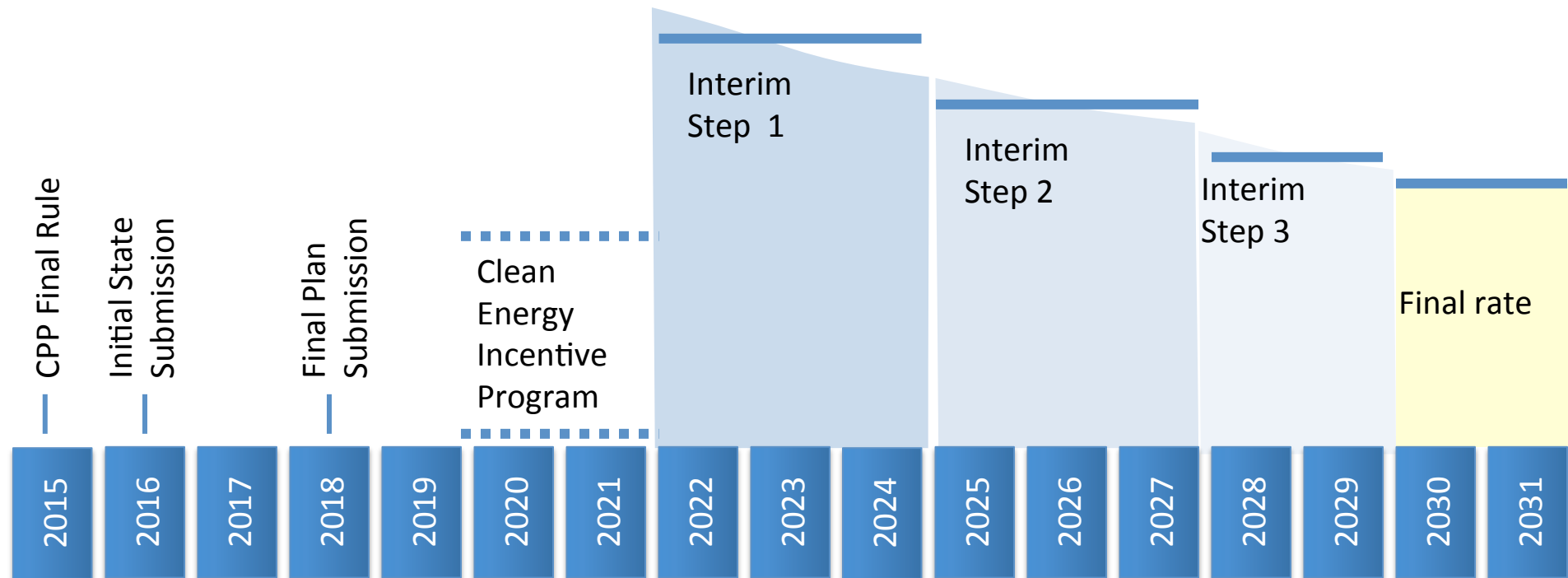


Trading-Ready Options and the Final Clean Power Plan

Jonas Monast & Sarah Adair
Nicholas Institute for Environmental Policy Solutions
Duke University

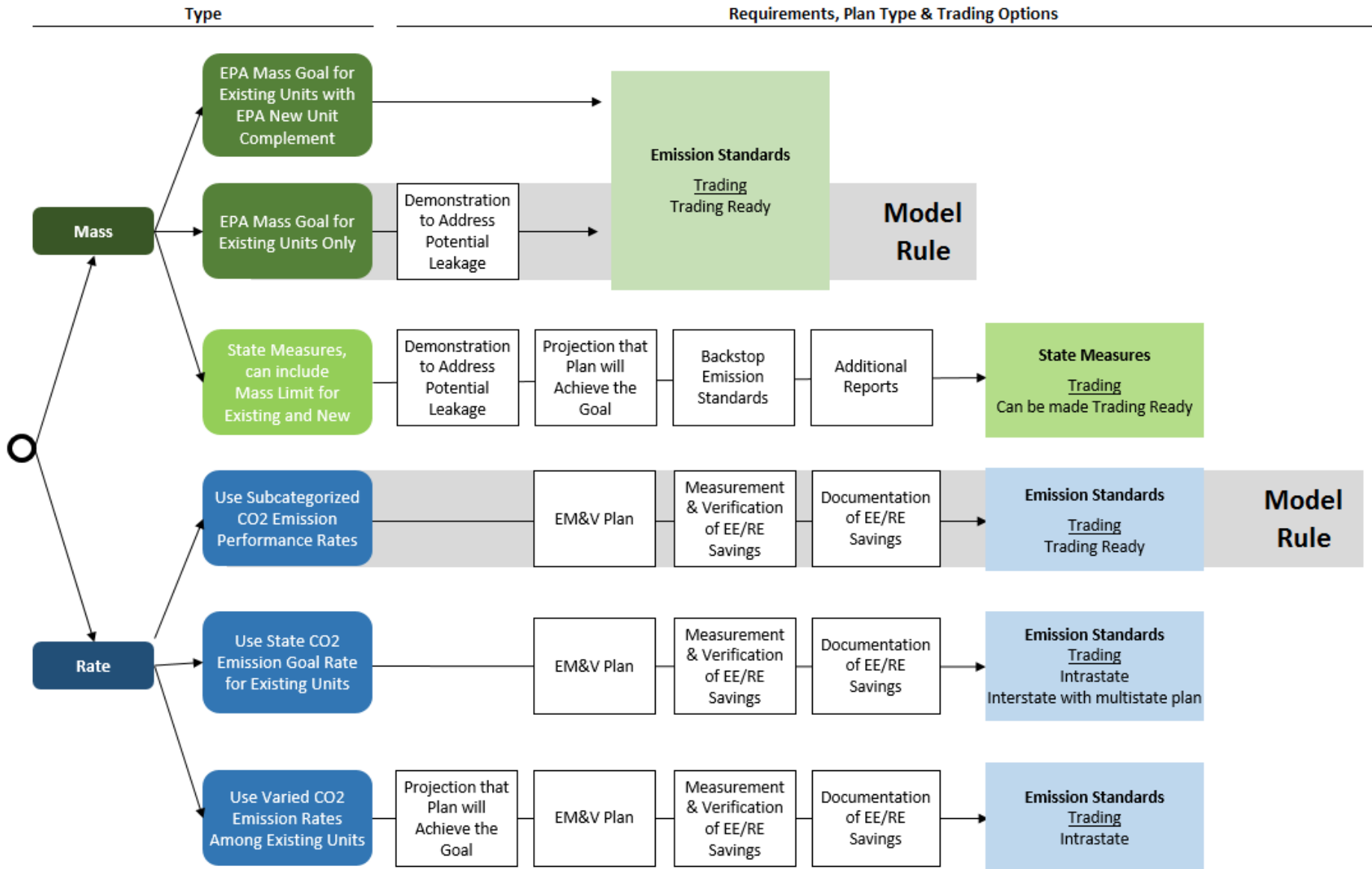
AAPCA
2015 Annual Meeting

CPP Compliance Timeline



- EPA is encouraging early action in 2020-2021
- Interim compliance period pushed back 2 years to 2022
- Three interim steps
- Two year compliance periods for final goal

EPA's MAPPING OF THE STATE PLAN APPROACH OPTIONS



Trading-Ready State Plan Pathways

What is “Trading Ready”?

Allows EGUs and others to trade compliance instruments **with the same definition** with entities in other states without a formal multistate agreement.

Mass	Rate
Allowance representing 1 short ton of CO2 emissions	Emission Rate Credit (ERC) representing 1 MWh of zero carbon generation or avoided emissions

*Mass can trade with mass and rate with rate.

Trading Ready State Plan Pathways

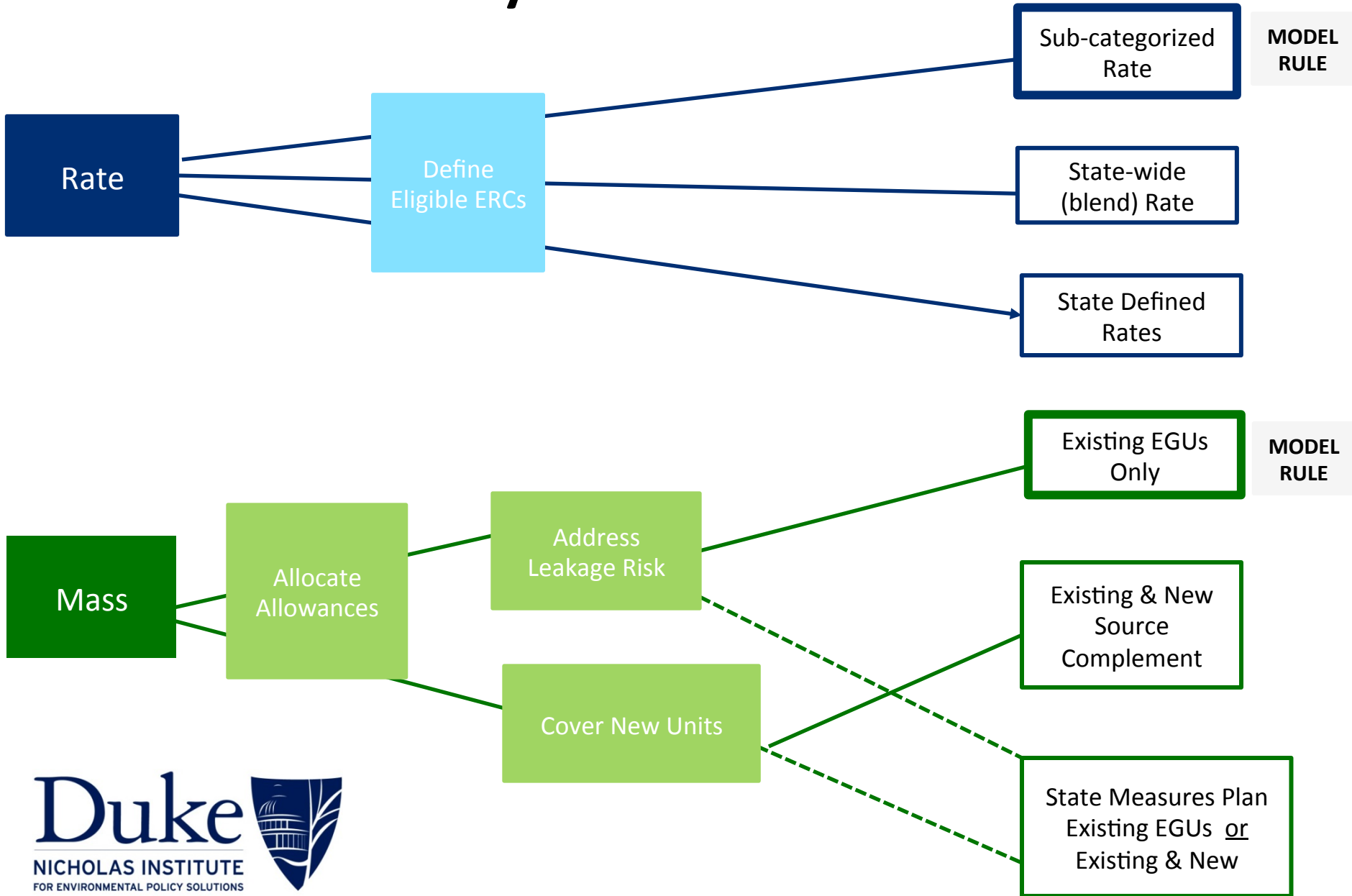
Trading-Ready Plans must:

- Use mass or subcategorized rate
- Submit as trading-ready
- Use linked or common tracking system
 - Can use EPA's Allowance Tracking & Compliance System (ATCS)

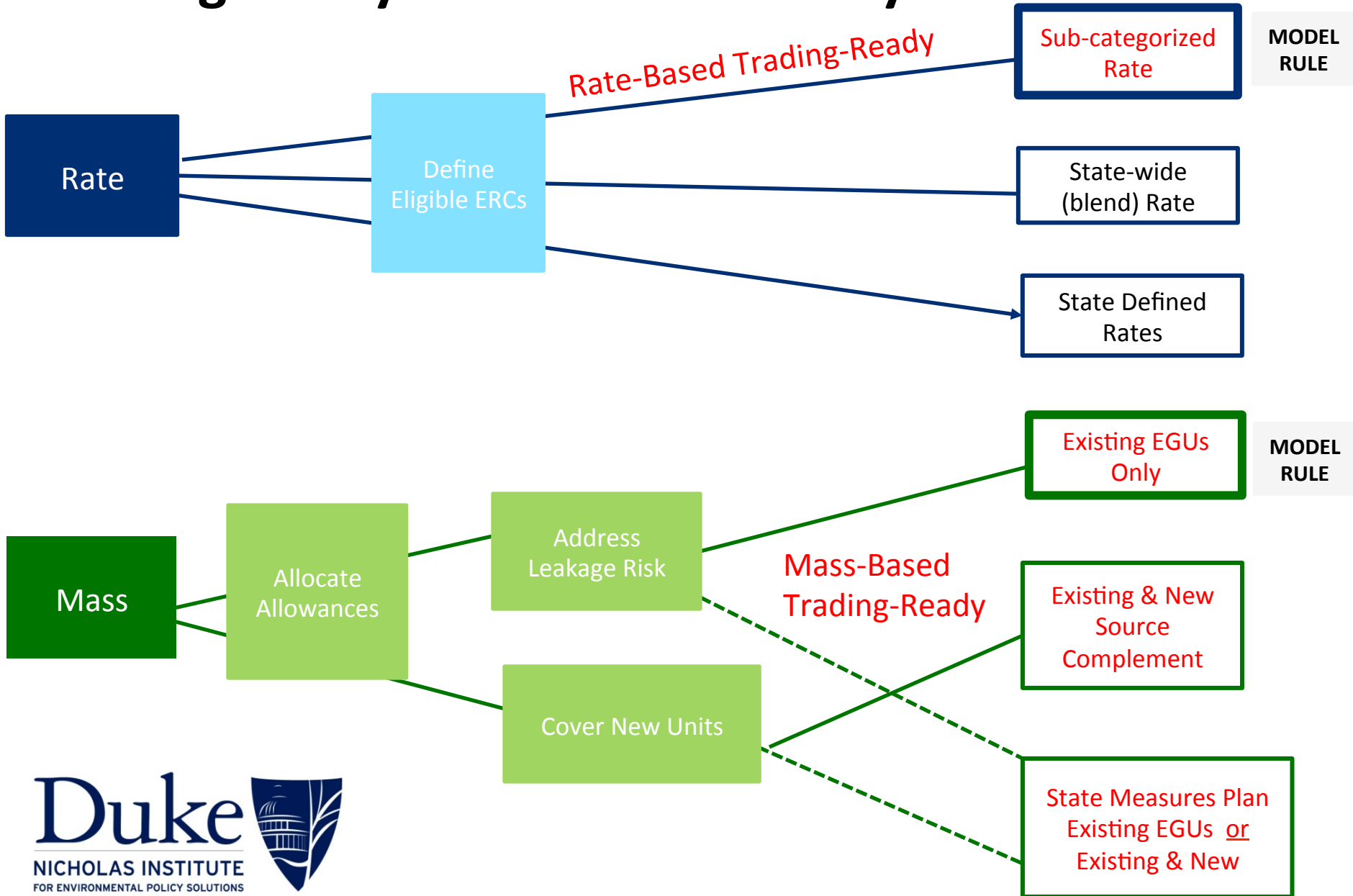
State flexibility:

- Can limit trading partners, turn trading on or off by updating plan
- No plan modification if other states move in and out of trading ready

State Plan Pathways



Trading Ready State Plan Pathways



Mass-Based Compliance Options

Mass-based trading budget basics

- Emissions limit
- Submit an allowance for each ton of emissions
- Cost of allowance represents cost/tax on emissions
- EPA allows unlimited banking
- Allocation vs. Auction
 - How to allocate allowances is a major decision
 - Auctioning allowances can raise revenue
- Tracking system

Mass-Based Plans and Leakage

Mass-based plans need to demonstrate they have addressed risk of leakage to new sources in state plan

3 options available to states

- Include new units under mass limits with new source complement
- Use an allocation method that counteracts leakage
 - EPA proposes using both output based allocation and allocating to RE in model rule
- Other methods demonstrated by state to prevent leakage

Model Rule Mass-Based Budget Trading Plan

Covers only existing affected EGUs, trading-ready

→ Addresses leakage risk through allowance allocation

3 allowance set asides

1. CEIP
2. Output-based allocation set-aside for existing NGCC
3. RE set-aside

Rate-Based Compliance Options

Tradeable compliance instrument: ERCs

Affected EGUs: difference between emissions rate and standard

If positive, earn ERCs

If negative, owe ERCs

3 compliance rates: blended state rate, 2 subcategory specific rates

Incremental (post 2012) RE, demand side EE, nuclear earn ERCs based on MWh generation, avoided generation during compliance periods (from 2022 onward)

New NGCC not part of compliance equation

Federal Rules vs Model Rules

Mass-based

- Both trading-ready
- Federal rule affected EGUs responsible for all biomass emissions

Rate-based

- Both trading-ready
- Federal rule only revenue quality metered solar, wind, geothermal, hydro, nuclear can earn ERCs
 - No biomass, EE, CHP, distributed RE, WHP, T&D efficiency but requesting comment on their inclusion

Thank you