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AEMI – HAPUA Forum
Ricardo Presentation

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SAPP Regulatory Framework and Wheeling Methodology

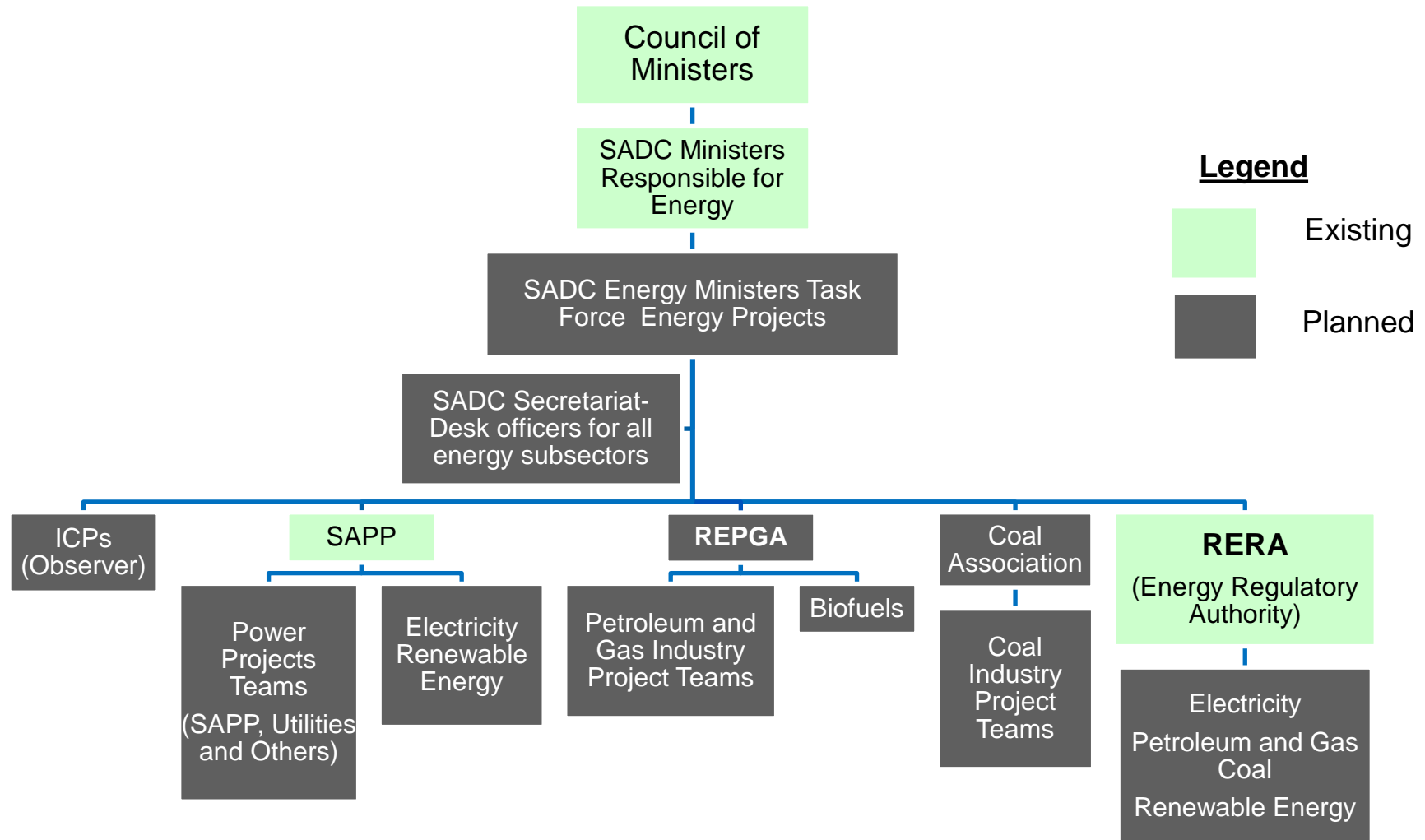
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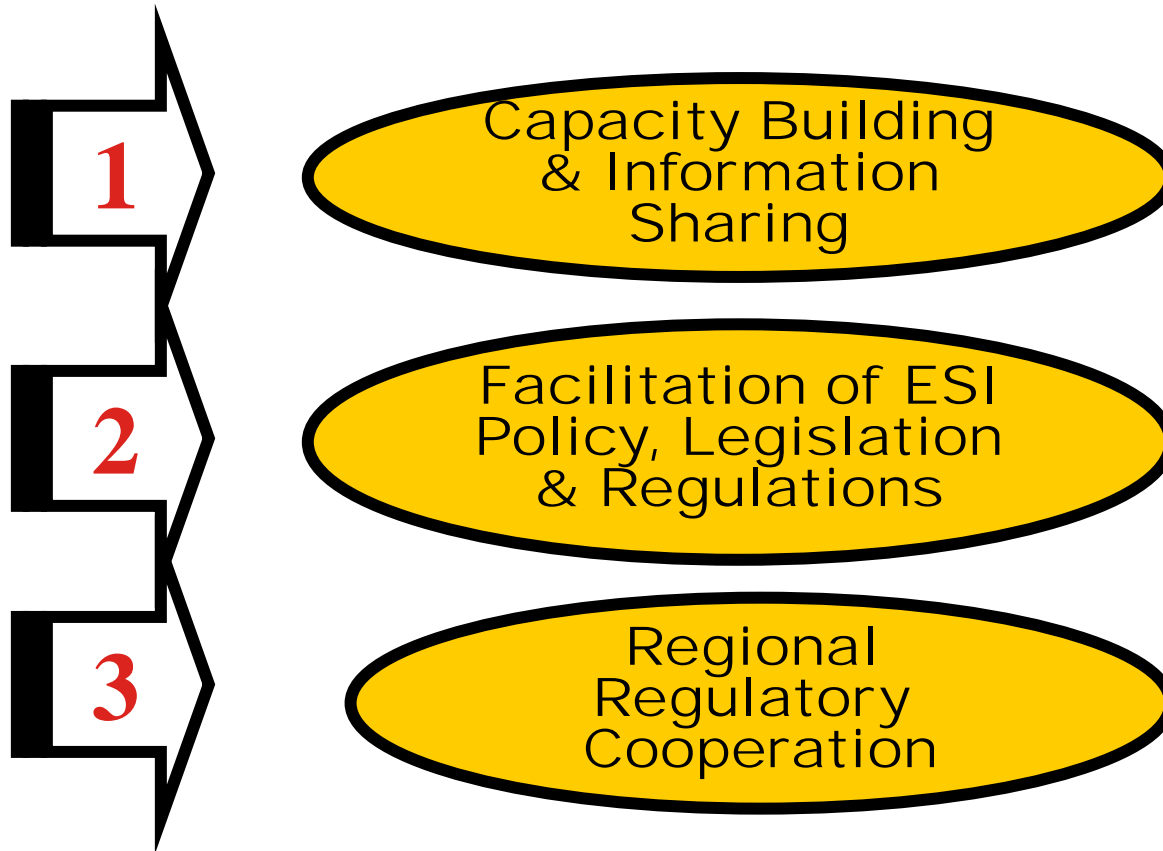
May 2016

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Southern Africa - Proposed Institutional Framework

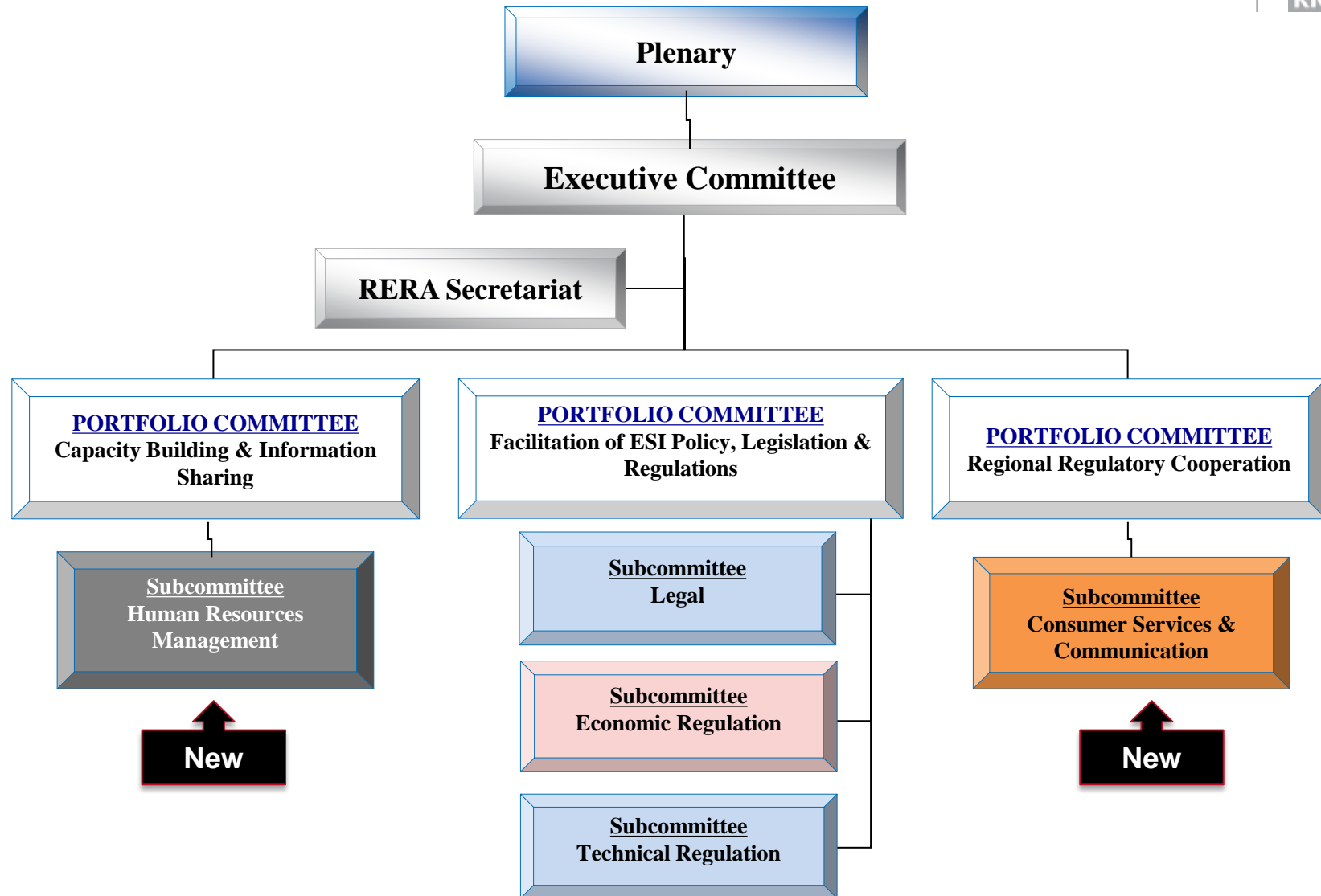


Source: RERA Secretariat - Presentation for the RERA Meeting at the Cape Town International Convention Centre (CTICC) in Cape Town, South Africa from 13 – 17 April 2015



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RERA Structure

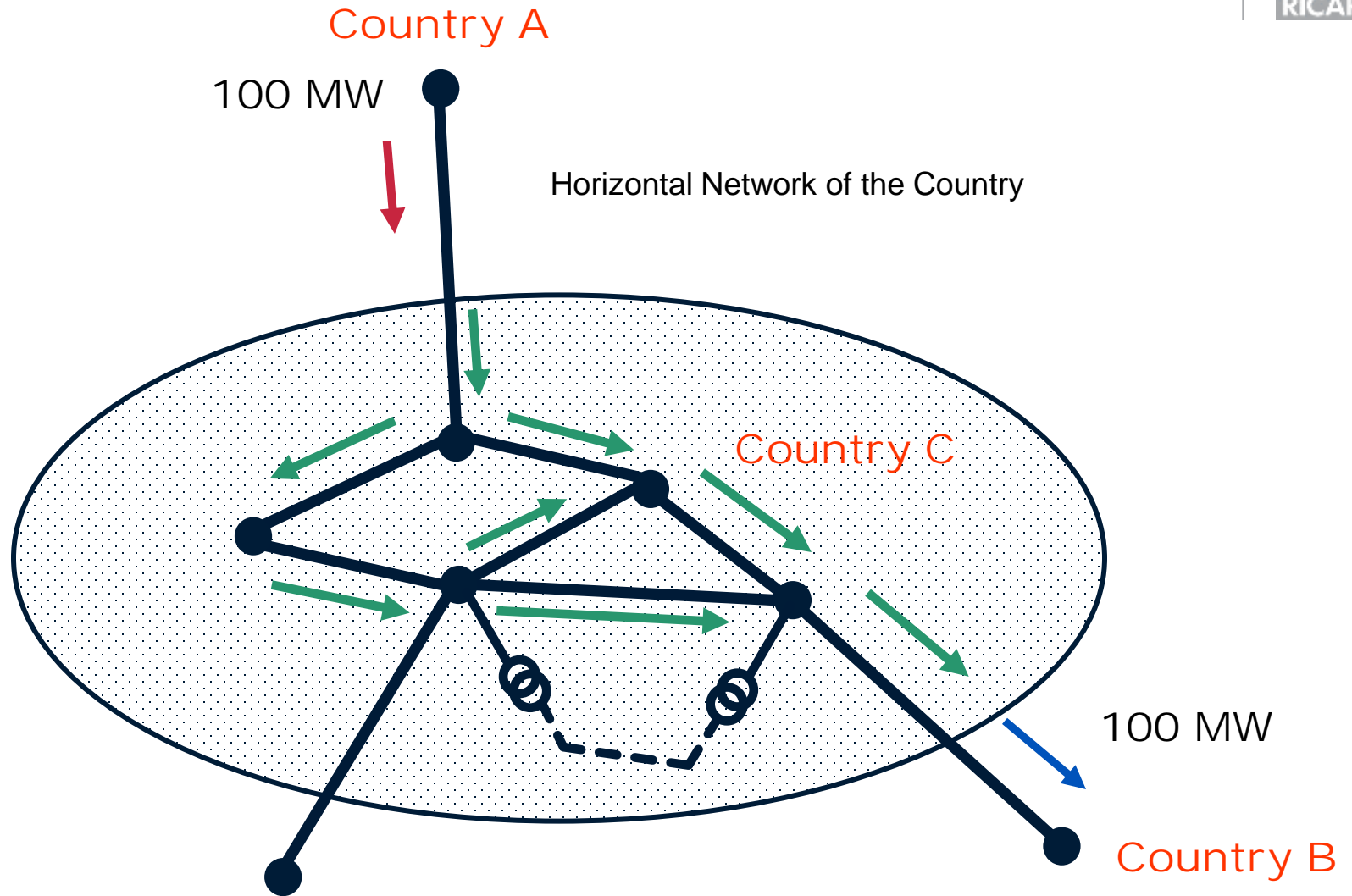


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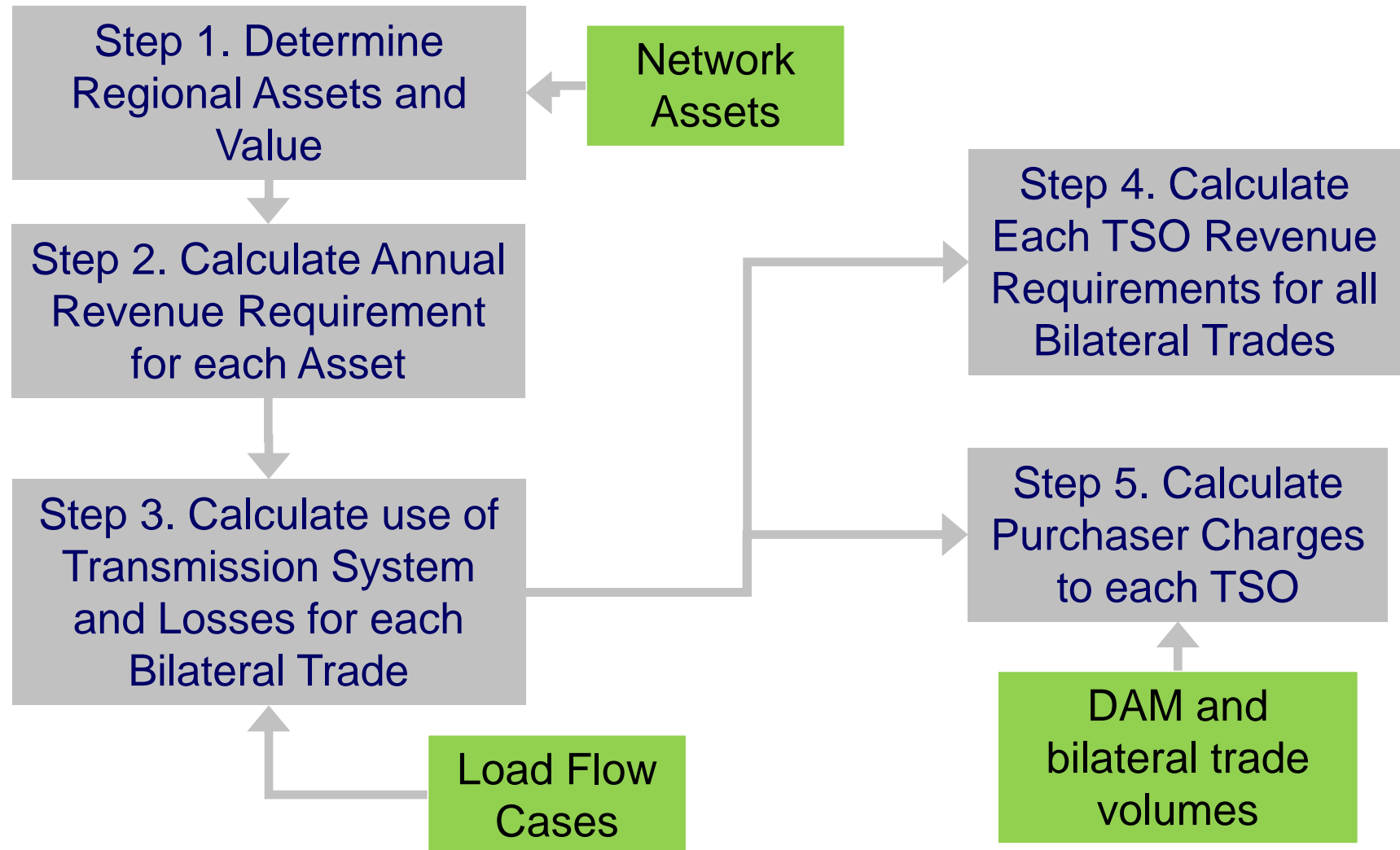
- Original methodology for transmission pricing was a postage stamp charge based on the number of countries involved in “wheeling”:
 - Tariff was based on 7.5% of the value of the energy transferred for each country
 - Losses were not catered for in the methodology
 - Method was used for all short and long term bilateral trades from 1995 to 1998

- MW-km load flow methodology is a recoverable “rent” on assets actually used for wheeling
 - Each transaction is explicitly analysed including losses and the rent payable is based on replacement values depreciated to $\geq 50\%$
 - Developing and publishing a matrix of wheeling charges and losses for potential future short term bilateral trades
 - Modified market clearing price for day ahead market trades where there is no counter party (postage stamp based on average bilateral trade transmission costs)
 - Method was used for all bilateral trades from 1999 to 2015

Identification of Transmission Assets in Country C

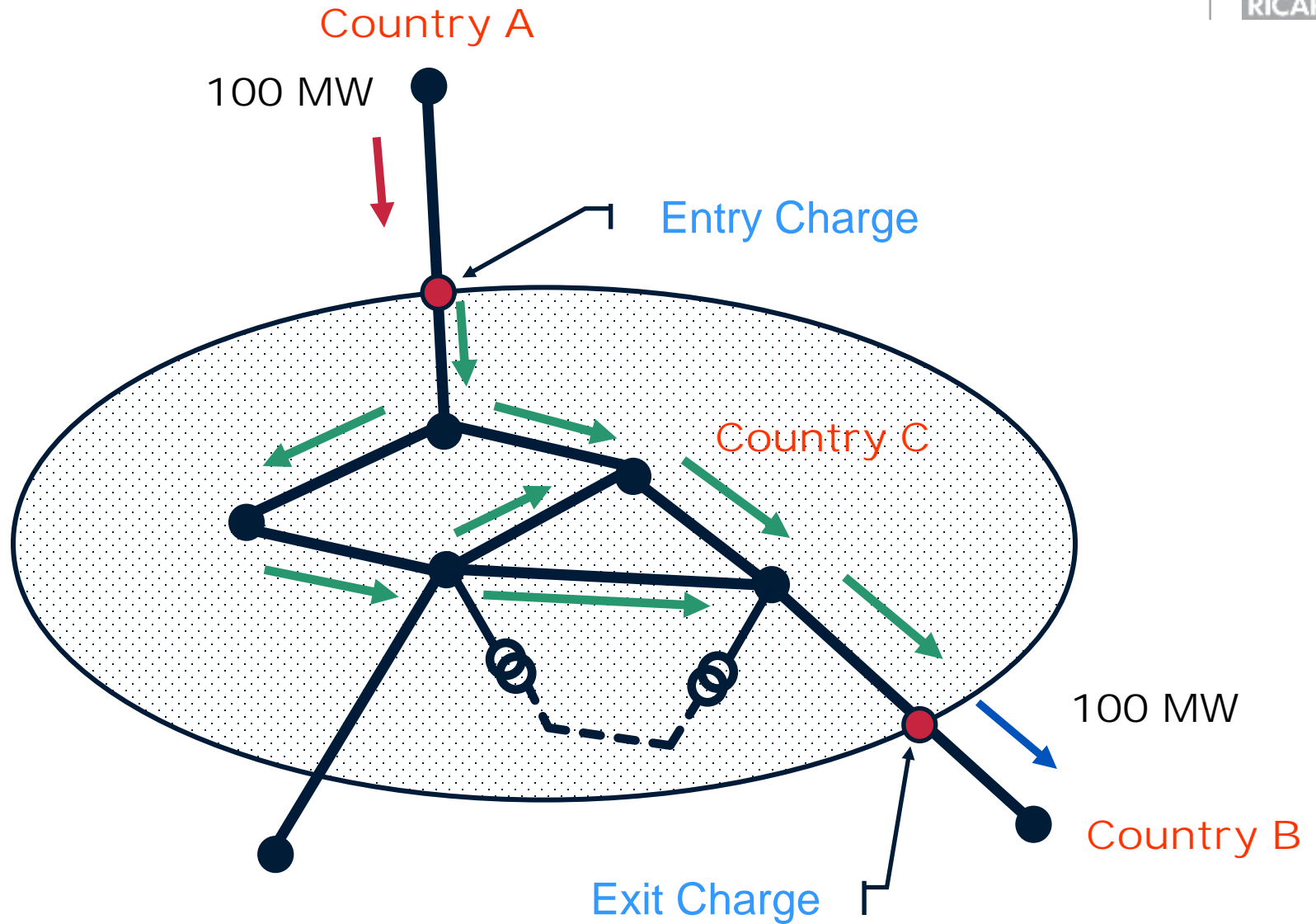


SAPP MW-km Load-flow Methodology Summary of Steps



- Entry and Exit Charge Methodology is a recoverable “rent” on assets actually used for wheeling but based on metered exports and imports at each node
 - Load flow used to determine the transmission assets that require revenue recovery
 - Developing and publishing a set of entry and exit charges for every import export node (country border & IPP connection point) in SAPP network
 - Revenues recovered from actual entry and exit flows
 - Method is being tested in 2016 but not yet formally adopted

Determining Entry and Exit Charges





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