GLOBAL CLIMATE OBSERVING SYSTEM

KEEPING WATCH OVER OUR CLIMATE

WMO | IOC | International Science Council | UN environment

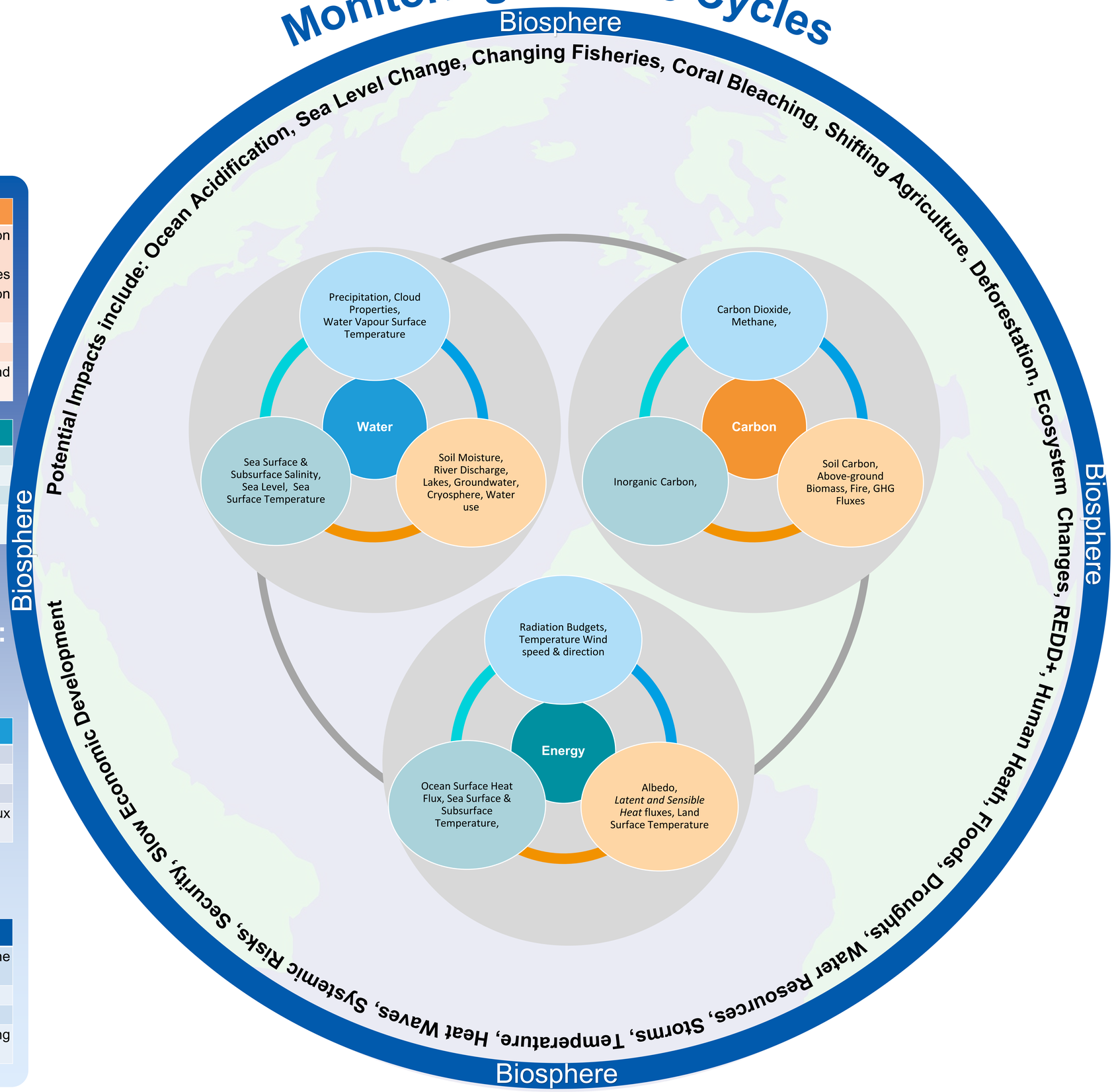
Closing the carbon budget	
Targets	Quantify fluxes of carbon-related greenhouse gases to +/- 10% on annual timescales Quantify changes in carbon stocks to +/- 10% on decadal timescales in the ocean and on land, and to +/- 2.5 % in the atmosphere on annual timescales
Who	Operators of GCOS-related systems, including data centres
Time frame	Ongoing
Performance indicator	Regular assessment of uncertainties in estimated fluxes and inventories

Closing the global energy balance	
Targets	Balance energy budget to within 0.1 Wm^{-2} on annual timescales
Who	Operators of GCOS-related systems, including data centres
Time frame	Ongoing
Performance indicator	Regular assessment of imbalance in estimated global energy budget

Targets from the GCOS Report: The Global Observing System For Climate: Implementation Needs (GCOS-200)

Closing the global water cycle	
Targets	Close water cycle globally within 5% on annual timescales
Who	Operators of GCOS-related systems, including data centres
Time frame	Ongoing
Performance indicator	Regular assessment of the uncertainties in estimated turbulent flux of latent heat

Explain changing conditions of the biosphere	
Targets	Measured ECVs that are accurate enough to explain changes of the biosphere (for example, species composition, biodiversity, etc.)
Who	Operators of GCOS-related systems, including data centres
Time frame	Ongoing
Performance indicator	Regular assessment of the uncertainty of estimates of changing conditions as listed above



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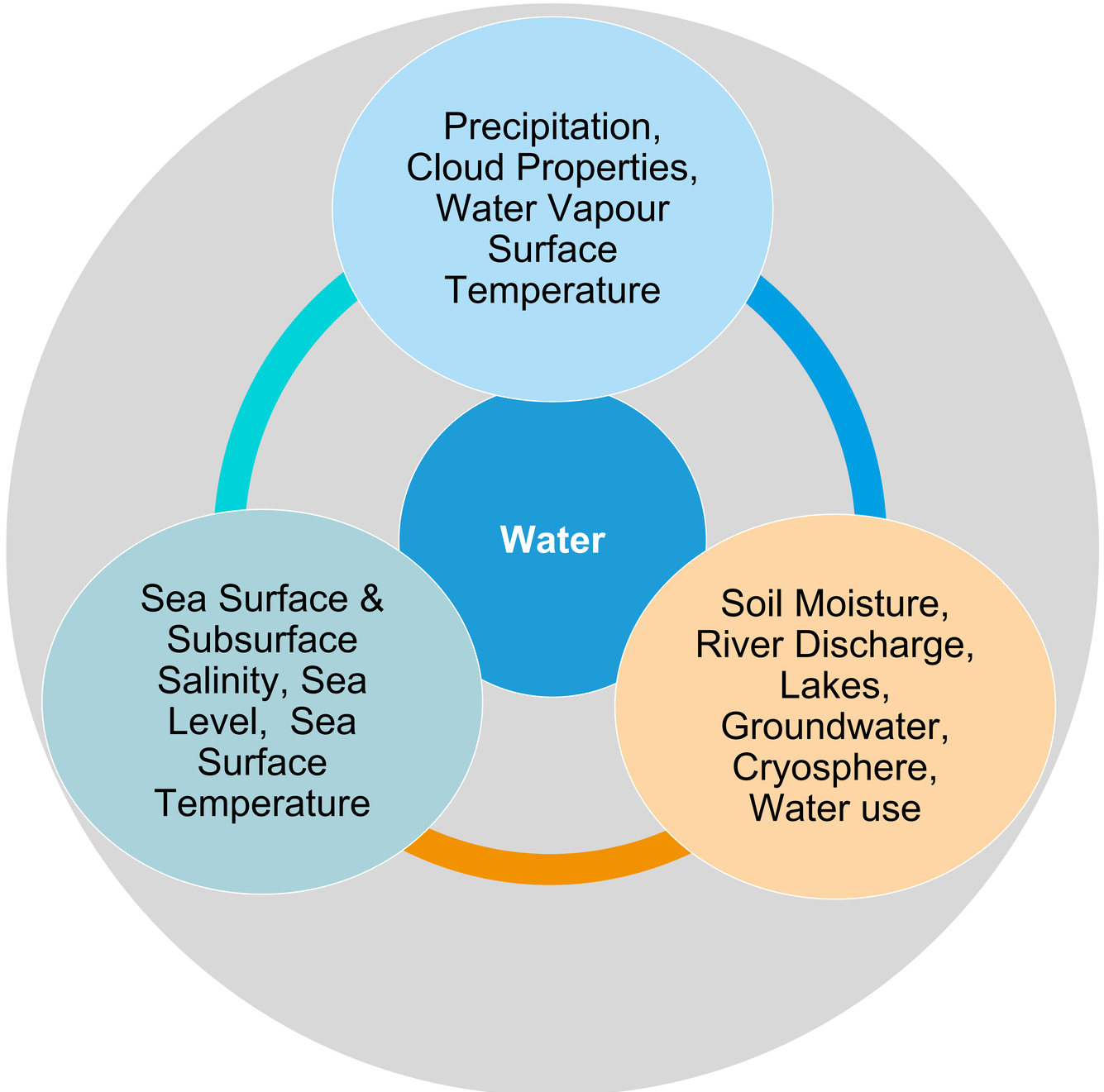

Water: Stephan Dietrich – Afternoon meeting in: Domes Hall

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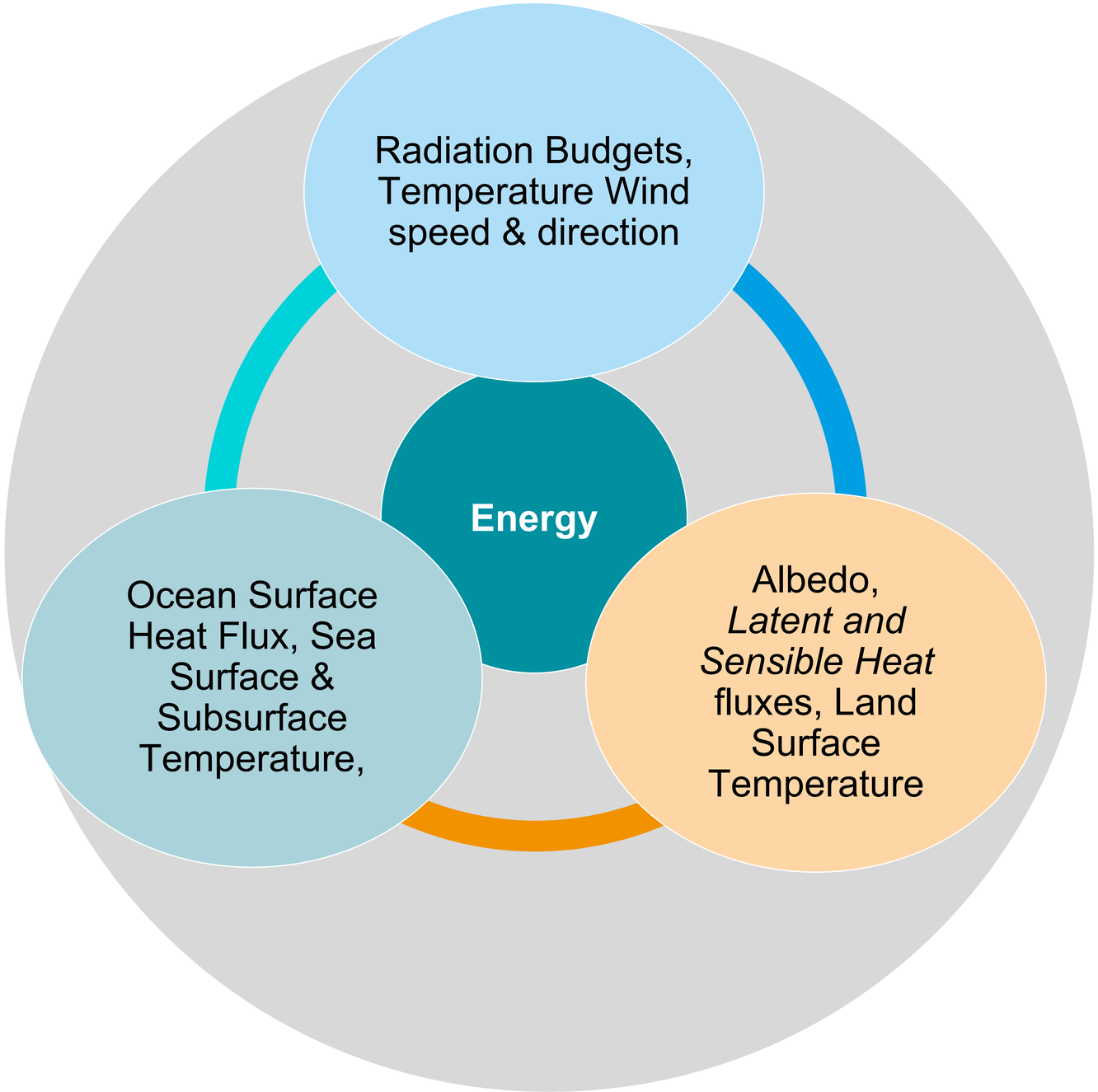

Energy: Karina von Schuckmann– Afternoon meeting in: Jean Bauchet Hall

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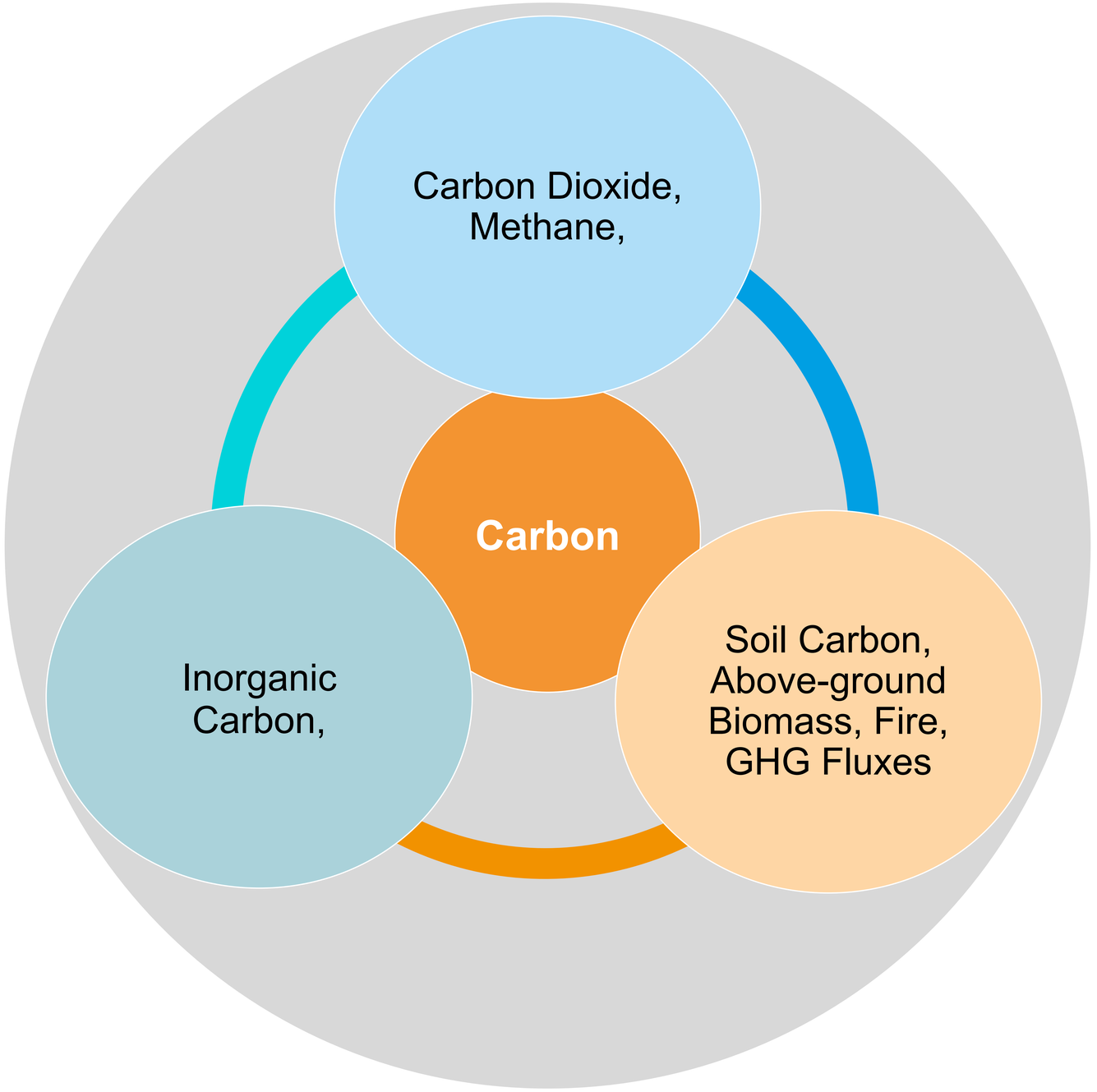

Carbon: Han Dolman – Afternoon meeting in: Warda Hall

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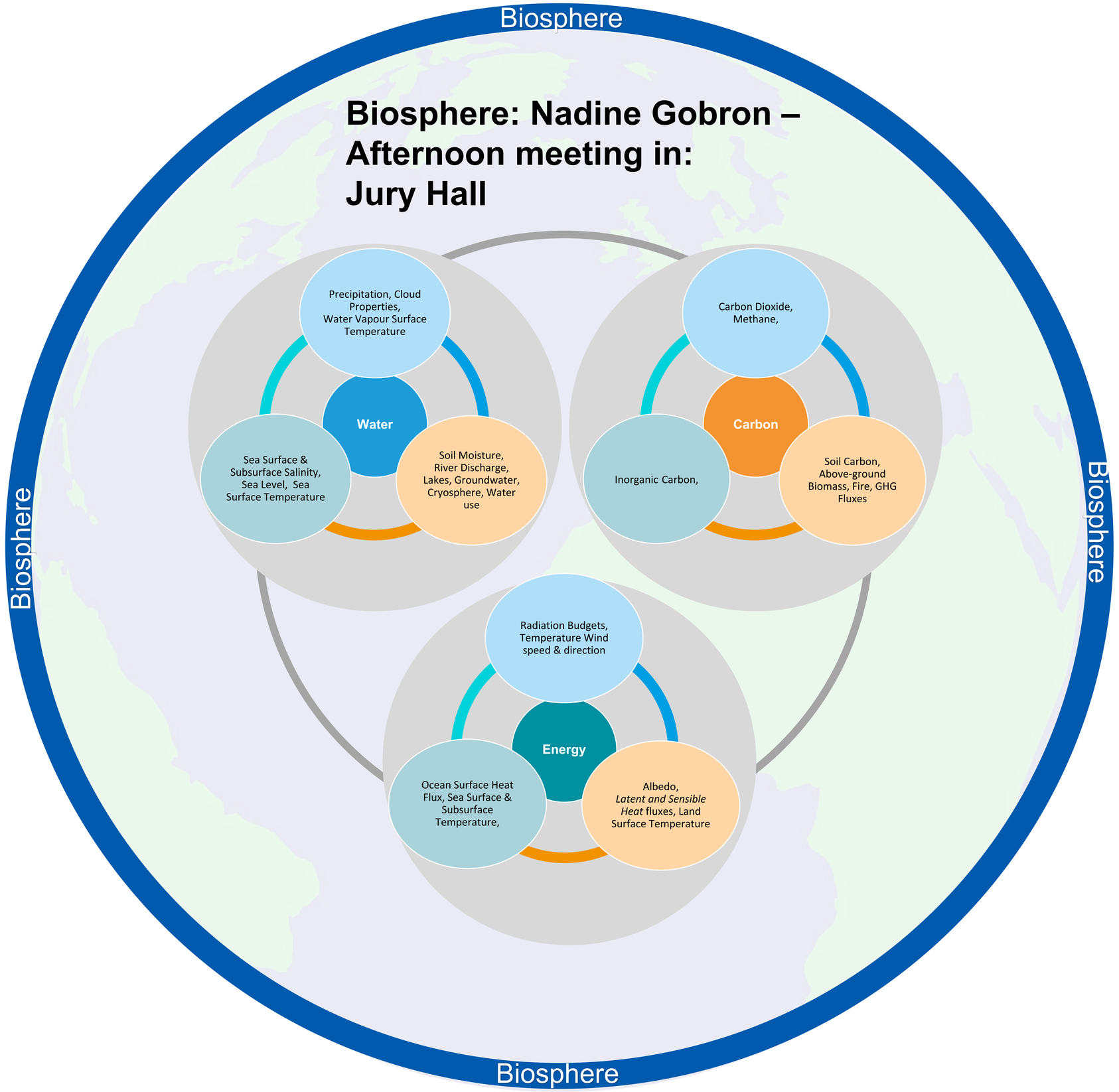

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