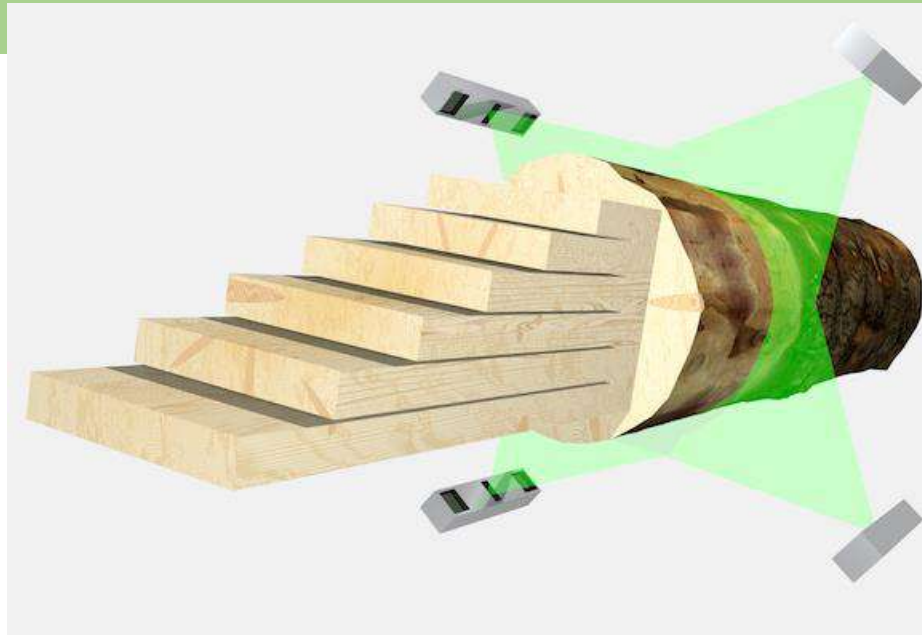
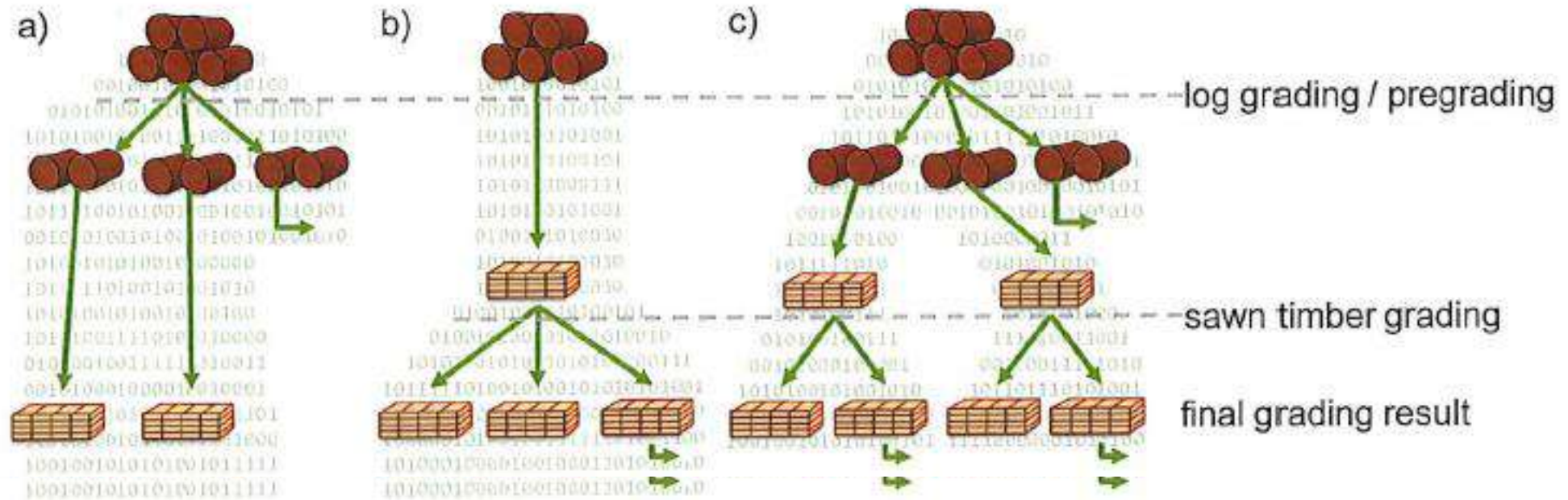


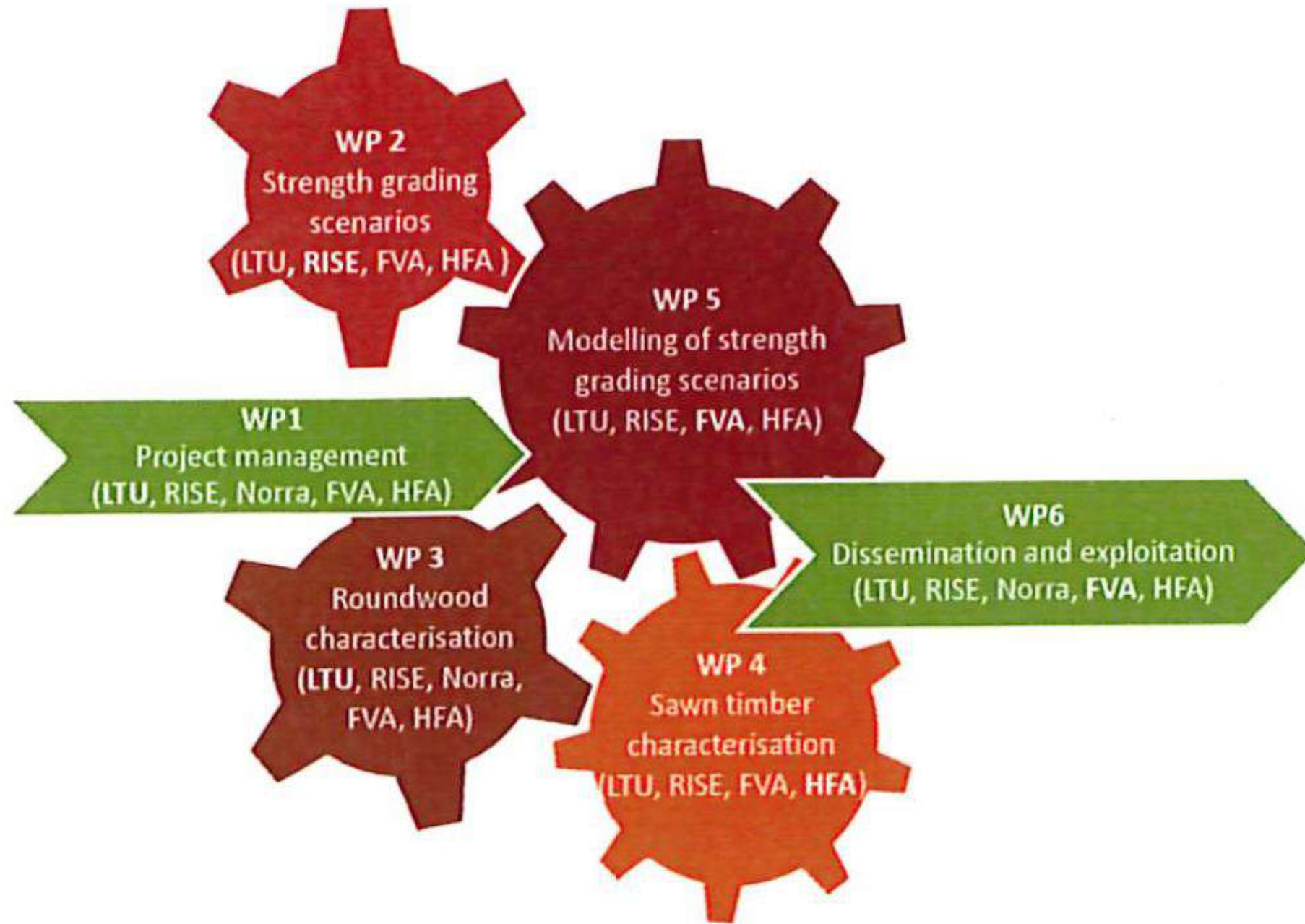
Resource-Efficient And Data-driven integrated log and board Strength grading (READiStrength)



ForestValue

Main question: How and when to grade timber?

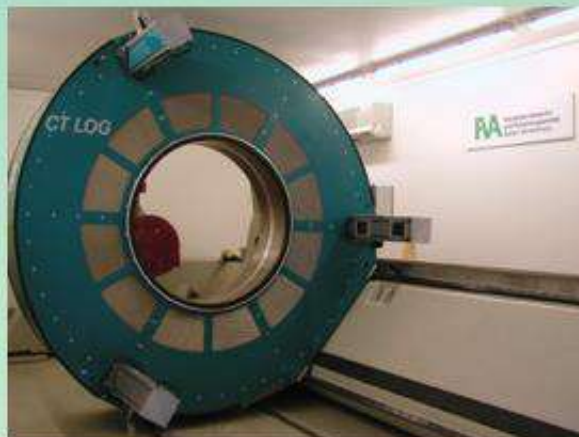
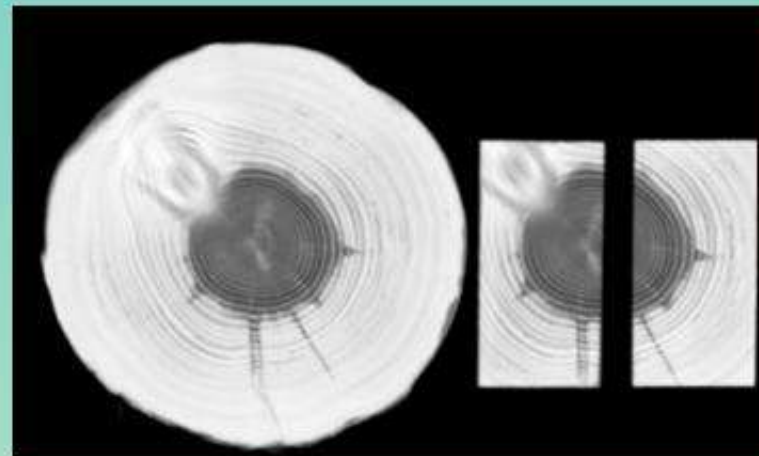




	SE ₁	SE ₂	AT	DE
Species (according to EN 13556)	PCAB, PNSY		PSMN	ABAL
Diameter	14-22 cm	14-22 cm	30-60 cm	20-60 cm
WP3: logs	3D (N_R)	100	1000	50
	Discrete X-ray (N_R)	(simulated)	1000	(simulated)
	CT (N_R)	100	-	50
	MoE_{dyn, log} (N_R)	30 logs per species		50
Conversion to sawn boards (N)	100 → 200	1000 → 2000	50 → 300	50 → 300
Dimensions	50x100 mm or 50x125 mm		45x200 mm	47x156 mm
WP4: sawn timber	Optical scanner (N_S)	200	2000	300
	Laser tracheid scanner (N_S)	-	2000	300
	X-ray (N_S)	-	-	300
	MoE_{dyn, board} (N_S)	200	-	300
	MoE_{dyn, board} (lab) (N_S)	-	200	300
	destructive test (N_S)	200	-	300

Table 2. Sampling plan (N_R, N_S) for logs and sawn timber per country, species and scanning technology, plus timber dimensions.

THE WAY WE DO IT!



Contacts:

Andreas Weidenhiller, Holzforschung, Austria

Johan Oja, Norra Timber, Sweden

Anders Lycken, RISE, Sweden

Olle Hagman, Luleå University of Technology, Sweden

Franka Brüchert, FVA, Germany



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