Project Name	Carbon Footprint Visualization
Production system (if any)	
Test system (if any)	
GitHub repository	https://github.com/amosproj/amos-ss2021-carbon-footprint
GitHub kanban board (project)	https://github.com/amosproj/amos-ss2021-carbon-footprint/projects/1
Team T-shirt (black)	https://www.shirtinator.de/loadBasket/gawEFWZioZC
Zoom-Meeting	https://fau.zoom.us/j/64835513630

Last Name	First Name	GitHub User Name	Email Address
Anand	Mani	manifau	mani.anand@fau.de
Dürsch	Martin	MartinDuersch	martin.duersch@fau.de
Gandomkar	Parham	gandompm	parham.gandomkar@fau.de
Oelhaf	Julian	ScoutAtlas	julian.oelhaf@fau.de
Olyaee	Ehsan	Olyaee	ehsan.olyaee@fau.de
Scheiderer	Michael	MichaelScheiderer	michael.scheiderer@fau.de
Toroslu	Irem	IremToroslu	irem.toroslu@fau.de
Varanasi	Sai Varun	SaiVarunVaranasi	varun.sai.varanasi@fau.de
Wagner	Martin	Waldleufer	martin.wagner@fau.de

Goals	Experience Agile/Scrum
	Achieve our defined project mission
	Develop software that is able to visualize the carbon footprint of some machinery / production environments (scenario) under different circumstances (calculations)
	Design a valuable product with functions that the user really uses
Meeting norms	Inform the others if you can't attend
	Everyone shows up on-time
	We do not interrupt each other
	Attend all of the meetings
Working norms	Everyone contributes regularly
	We value quality over quantity
	Lines of comments (well documented) > Lines of Code
	Recommendation: Visual Studio Code
	Testing/Verification (Unit Testing)
Coordination norms	Scrum tools
	People choose what they want to work on, unwanted work gets split up over all team members equally. (managed by Scrum Master)
	Put everything non code related to the google drive folder
	Every job has a responsible person
Communication norms	Email for important things
	GitHub for Code related things
	Slack for organizational and product related discussions
	Protocol of the Meeting (in google drive, like a summary) - writing meeting minutes - documenting decisions
	We check Email at least once a workday
Consideration norms	All important decisions made in the team meeting
	Possibility of a emergency meeting with at least 1 PO, 2 SD
	We discuss disagreement openly
	We vote for a final resolution
Cont. improvement norms	Using the kanban system to track the teams progress
	Using the continuous demo releases to track the improvement of our system
Rewards	To celebrate the achievement of a goal we will meet for a beer (or maybe a cocktail) if possible in person otherwise online
Sanctions	You must raise clear violations of the team contract
	We apologize by writing a 4 line poem about how one will improve themself (and the meaning of life) and share it with the team!

#	Meeting Day	Comment	Coach	Product Owner	Software Developer	Scrum Master	Release Manager
1	2021-04-14		Yes	Olyaee, Scheiderer	Everyone else	(Varanasi)	(Anand)
2	2021-04-21		Yes	Olyaee, Scheiderer	Everyone else	Varanasi	Dürsch
3	2021-04-28			Olyaee	Everyone else	Scheiderer	Gandomkar
4	2021-05-05		Yes	Olyaee	Everyone else	Scheiderer	Oelhaf
5	2021-05-12			Scheiderer	Everyone else	Olyaee	Toroslu
6	2021-05-19		Yes	Scheiderer	Everyone else	Olyaee	Varanasi
7	2021-05-26	Mid-term due	Yes	Olyaee, Scheiderer	Everyone else	Wagner	Wagner
8	2021-06-02			Olyaee, Scheiderer	Everyone else	Wagner	Anand
9	2021-06-09			Olyaee, Scheiderer	Everyone else	Anand	Dürsch
10	2021-06-16		Yes	Olyaee, Scheiderer	Everyone else	Anand	Gandomkar
11	2021-06-23			Olyaee, Scheiderer	Everyone else	Gandomkar	Oelhaf
12	2021-06-30			Olyaee, Scheiderer	Everyone else	Gandomkar	Toroslu
13	2021-07-07		Yes	Olyaee, Scheiderer	Everyone else	Toroslu	Varanasi
14	2021-07-14	Demo day!		Olyaee, Scheiderer	Everyone else	Toroslu	Wagner
15	2021-07-21	Retrospective		Olyaee, Scheiderer	Everyone else	N/A	N/A
						(Assignments refer to start date / start sprint)	

## **Product Vision**

The vision of this project is to create a (web) application to visualize, compare and analyze the impacts such as global warming, ozone layer depletion, acidification, etc that come from the production, use, and end-of-life of a product or service. We aim to set the highest standards for environmental protection in the industry and urge business partners to share this ambition and cooperate with both customers and suppliers to strive for continual improvement. We calculate the carbon footprint and help our customers to understand the impacts and risks associated with it and offer alternatives.

To present those numbers effectively, they need to be visualized. This is where the "Carbon Footprint Visualization" comes in. Salesman can use the visualization to directly show the customers the impact a product has on the environment and how the impact could be reduced with another version. For example, we could possibly convince customers to invest in something that reduces CO2 emissions, which maybe is more expensive now but will payout in the long run by slowing down global warming.

## **Project Mission**

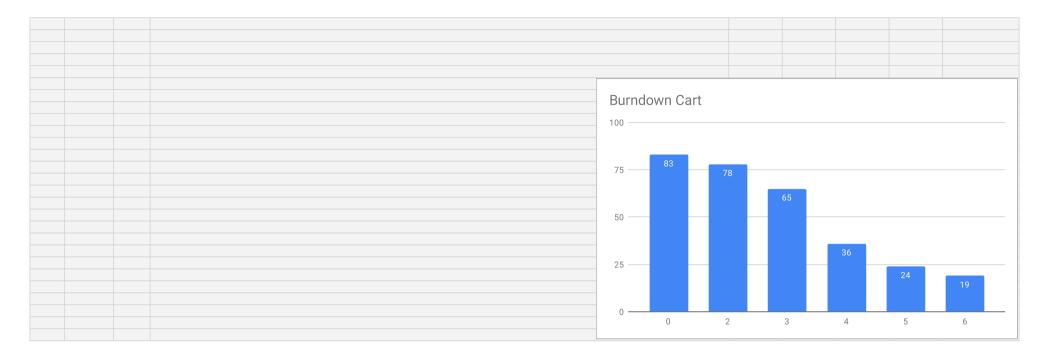
We pursue ambitious goals with regard to resource efficiency and environmental protection, and hence create long-term value by treating people and the environment in a responsible manner. The main objective of our environmental work is to prevent pollution and continually reduce the environmental impact of our activities in order to protect the environment for future generations.

To meet these objectives, we will maintain and further develop a culture in which reducing the environmental impact over each product's life cycle is an integral part of our daily work practices.

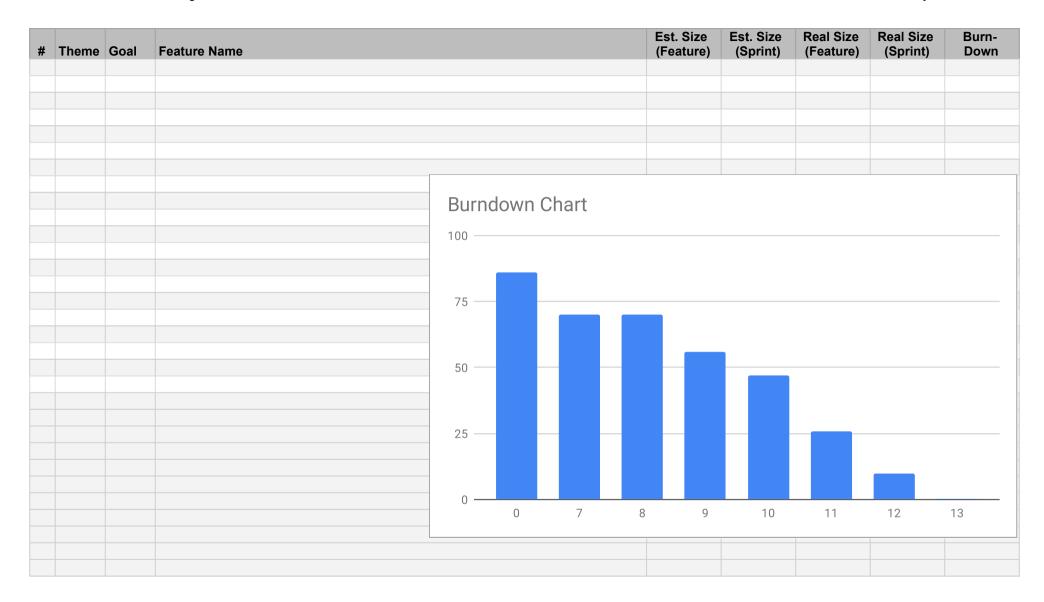
Term	Definition
Project	Synonym for projects created by Siemens Energy experts at SimaPro
Product	Synonym for the products available in Siemens Energy projects. For example, gas turbine or transformer
Model	Synonym for available models of a product. For example, a 3-phase GSU transformer. All the models are modeled by SimaPro. Detailed information of a model could be found at canvas section in SimaPro
Baseline scenario	Baseline scenario of a product with a default value for its variables
Scenario	The scenario created by changing default values of a model
Canvas	A window in which a scenario of a product is visualized
SimaPro Canvas	A canvas in which a SimaPro model is visualized. its different than the canvas in Carbon Footprint project

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#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
0								83
2	Basic Use						5	78
		Deliver	first increment with basic User Interface Design	_		_		
_			Basic UI Design	5		5		
3	Visualizati				10		13	65
		Deliver	increment with initial backend setup and basic navigation	_				
			React.js initial setup	5		8		
_	0: D 4	NDI 0 11	Navigate through different Categories and display the corresponding Products (and their Models) as a List (No real Data, only dummy list)	5		5	00	20
4	SimaPro A		er Interface		29		29	36
		Deliver	increment with improved navigation, initial canvas and visualization	0		0		
			Receive data from SimaPro API	8		8		
			See the overview of products in a grid	8		8		
			Select a model and set canvas up	5		5		
_			Visualize a scenario	8		8		
5	Restructu				12		12	24
		Deliver	Increment with uniform Interface and first comparison method					
			Restructure GitHub branches and folder structure	2		2		
			Uniform User Interface	5		5		
			Add second canvas	5		5		
6	Real Data				8		5	19
		Deliver	Increment with compatibility to different screen sizes					
			Compatibility with different screen sizes (especially mobile devices)	8		5		



#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
0				(i calam c)	(Ср)	(1 000010)	(0):,	86
7	Real Da	ata & Lo	ginscreen		11		16	70
			r Increment with real data in UI & loginscreen					
			Loginscreen	3		3		
			Integrate data from SimaPro into the User Interface	8		13		
8	Refacto	oring & I	Researching		0		0	70
		No nev	w features are delivered					
9	User In	terface			11		14	56
		Delive	r Increment with improved and nicer User Interface					
			Siemens Energy Color Scheme	3		3		
			Properly formatting details page	8		8		
			Usage of empty space after closing sidebar			3		
10	User In		improvements		9		9	47
		Delive	r Increment with close & return buttons					
			Return to product grid button	3		3		
			Close comparison buttons	3		3		
			"Forgot password"-Screen			3		
11	Dashbo		PF & Real Data		21			26
		Delive	r Increment with a fancy Dashboard, real data in the graphs & a PDF export fund	ction				
			Export graphs as PDF	8				
			Integrate data from SimaPro into the graphs	8				
			First screen after login (Dashboard)	5				
12	Hierach		tegration & Changing Variables		16			10
		Delive	r Increment with the correct project structure & a way to change variables					
			Changes variables and update graphs					
			Integration of the projects into the hierarchical structure	8				
13	Takeov				10			0
		Prepar	e the project to be overtaken by Siemens Indian SD Team					



AMOS SS2021 - Team 8 - Planning Document Definition of Done

#	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
	Documentation for that feature is done	No severe bugs open	No severe bugs open
	Feature branch has been merged	Implemented features are distributed to every branch	User manual is available
	Code has been reviewed by at least one other team member	100% unit tests passed	Documentation has been peer reviewed
	Unit tests are written	Code is in a clean state	On the final project release: additional documentation has been added to unfinished features
		Prettier extension is applied to all code files	

Туре	Link / reference
Software Build and Deployment Document	https://github.com/amosproj/amos-ss2021-carbon-footprint/blob/main/README.md
User Documentation	https://github.com/amosproj/amos-ss2021-carbon-footprint/wiki/User-Documentation
Technical Documentation	https://github.com/amosproj/amos-ss2021-carbon-footprint/wiki/Technical-Documentation

AMOS SS2021 - Team 8 - Planning Document Impediments Backlog

Sprint	Status	Source	Impediment	Resolution
4	Resolved	Industry Partner	Connection/motivation from the industry partner with SDs missing	Industry Partners join next team meeting (05-12)
4	Resolved	Industry Partner	Unclear requirements from the industry partners (technologies)	Weekly meetings with their SDs from India
5	Resolved	Team	Too many SDs assigned for the same tasks	Improve communication (One person responsible for issue, you need to communicate with this person if you want to work on the issue)
5	Resolved	SDs	Commits are too large	Split large commits in few smaller commits
5	Resolved	SDs	Libraries not been added to BOM and in the Readme file	Add to team contract
6	Resolved	SDs	No enough mutual understanding of each other's code	-At least one person have to review the code -Assign two people to each issue for pair programming -Rotate partners
7	Resolved	Industry Partner	Dev team from the industry partner showing up late or not at all to negotiated meetings.	We try to put our industry partner in cc, whenever contacting the Dev team, and try to do more communication via email.
7	In-work	Team	Mysterious Martins (Not everyone showed up to the meetings with image data)	Pictures will be provided after receival of the Team T-Shirts.
7	Resolved	SDs / Source Code	There is a lot of noise in the commits, as still some frontend files are not yet prettified.	Prettier has been applied to all frontend code files. Team members that did not use prettier yet has been offered a helping hand in setup.
7	Resolved	SDs	A lot of work went into the backend, and we now found out that it might be replaced in the end.	This situation will not directly affect grading, as agile Methods are being graded. So the team should just focus on frontend tasks at hand.
8	In-work	Team	"Lets meet for a beer or something in July"	A doodle for this meeting will be created at some point in June.
9	Resolved	SDs	Discussion about feature and branching in the beginning of the sprint	Have a short SD meeting after sprint meeting, same day
9	Resolved	SDs	To make sure if CI pipeline is working for all the commits	Not ignore CI pipeline warnings while committing
9	Resolved	SDs	Not enough interaction about backened working functionality	Have a meeting with the backened developers, pair programming if needed to understand better
10	In-work	POs	focusing on the most prioritized issues	Picking the top most Issue in product backlog
10	In-work	SDs	which "Martin" are you refering to? Mr "Wagner" or Mr "Dürch"?	Mentioning the whole name to not be mistaken
10	In-work	SDs	Time of meetings are offen late at the evening! so I can't attend.	Arranging the meetings a bit sooner

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Bill of Materials

Context	Name	Version	License	Comment
1 Frontend Framework	React.js	16.13.1	MIT	https://www.npmjs.com/package/react
2 Frontend Framework	react-admin-dashboard	2.0.0	MIT	https://github.com/llorentegerman/react-admin-dashboard/tree/v2-0-0
3 Frontend Framework	react-hook-form	7.5.2	MIT	https://www.npmjs.com/package/react-hook-form
4 Frontend Framework	react-jss	10.6.0	MIT	https://www.npmjs.com/package/react-jss
5 Frontend Framework	react-router-dom	5.2.0	MIT	https://www.npmjs.com/package/react-router-dom
6 Frontend Framework	simple-flexbox	2.3.2	MIT	https://www.npmjs.com/package/simple-flexbox
7 Frontend Framework	react-grid-system	7.1.2	MIT	https://www.npmjs.com/package/react-grid-system
8 Frontend Framework	react-apexcharts	1.3.9	MIT	https://www.npmjs.com/package/react-apexcharts
9 Backend: Framework	.NET 5	5.0.0	MIT	
10 Backend: Package	AspNetCore.Proxy	4.2.0	MIT	https://www.nuget.org/packages/AspNetCore.Proxy/
11 Backend: Package	Newtonsoft.Json	13.0.1	MIT	https://www.nuget.org/packages/Newtonsoft.Json/
12 Frontend Framework	w3.css	4.15.0	MIT	https://www.w3schools.com/w3css/
13 Static Code analysis	CodeQL		MIT	Github tool
14 PDF Generator	jsPDF	2.3.1	MIT	https://www.npmjs.com/package/jspdf
15 Frontend-Backend Connection	axios	0.21.1	MIT	https://www.npmjs.com/package/axios
16 Frontend Framework	Material-UI	4.11.4	MIT	https://www.npmjs.com/package/@material-ui/core
17 Frontend Testing	Enzyme	3.11.0	MIT	enzyme - npm (npmjs.com)
18 Frontend Testing	Jest	26.6.0	MIT	
19 Frontend Testing	identity-obj-proxy	3.0.0	MIT	
20 PDF Generator	react-pdf/renderer	2.0.12	MIT	https://www.npmjs.com/package/@react-pdf/renderer
Frontend State Management				
21 Framework	Redux Toolkit	1.6.0	MIT	https://www.npmjs.com/package/@reduxjs/toolkit
22 Frontend Framework	apexcharts	3.27.1	MIT	https://www.npmjs.com/package/apexcharts
23 Middleware Framework	cors	2.8.5	MIT	https://www.npmjs.com/package/cors
24 Image Generator	html2canvas	1.0.0-rc.7	MIT	https://www.npmjs.com/package/html2canvas
25	jspdf-autotable	3.5.14	MIT	https://www.npmjs.com/package/jspdf-autotable
26 Prop Types	prop-types	15.7.2	MIT	https://www.npmjs.com/package/prop-types

Last Name	First Name	Value			
Anand	Mani		TUIVI	TUIVI	
Gandomkar	Parham		0!	0!	
Oelhaf	Julian		O:	U:	
Toroslu	Irem				
Varanasi	Sai Varun		0	No effort	
Wagner	Martin		1	Minimal effort	
Dürsch	Martin		2	Small effort	
			3	Medium effort	
			5	Large effort	
			8	Very large effort	
			13	Too large effort	