

# SAM AND THE CLIMATE PLAN

BINE PENZ





1st edition 2019

© Sympatex Technologies GmbH, 85774 Unterfoehring, Germany

[www.sympatex.com](http://www.sympatex.com)

Text and illustration: Bine Penz

Printed by Baumann Druck & Marketing GmbH & Co. KG, 82538 Geretsried, Germany

Printed with recycled and FSC-certified paper from sustainably-managed forests  
using a climate-friendly process.



[ClimatePartner.com/11937-1901-1001](https://ClimatePartner.com/11937-1901-1001)

What a warm and beautiful fall day! Mom and Dad are planning to take a bike ride on their tandem. Sam knows what that means. He and Wiki, his big sister, get to stay with Grandma and Grandpa. It's never boring at Grandma's. They even have a swimming pool. Snowflake, the polar bear can come along too.



Sam finds Grandpa out in the yard. Uncle Albert is visiting as well! But why is he digging a hole with Grandpa? "Are you looking for buried treasure?" asks Sam. "No," says Grandpa, chuckling out loud, "We're burying one. We're planting a pear tree."

"Cool!" shouts Sam, "Can I help?" Uncle Albert nods yes, "But let's take a break first. The move will be easier on the little tree in the evening when it's not as hot anymore." "And it sure is hot," groans Grandpa, wiping a bead of sweat from his forehead. "It's just like in the middle of the summer." "Yeah, it's great, just like in the middle of the summer," delights Sam. He takes off his clothes wearing his swimsuit underneath already. Splash!





When Grandma brings out cake and juice, Sam and Wiki get out of the pool. They sit down on the blanket next to Uncle Albert. Grandma's cake tastes delicious!

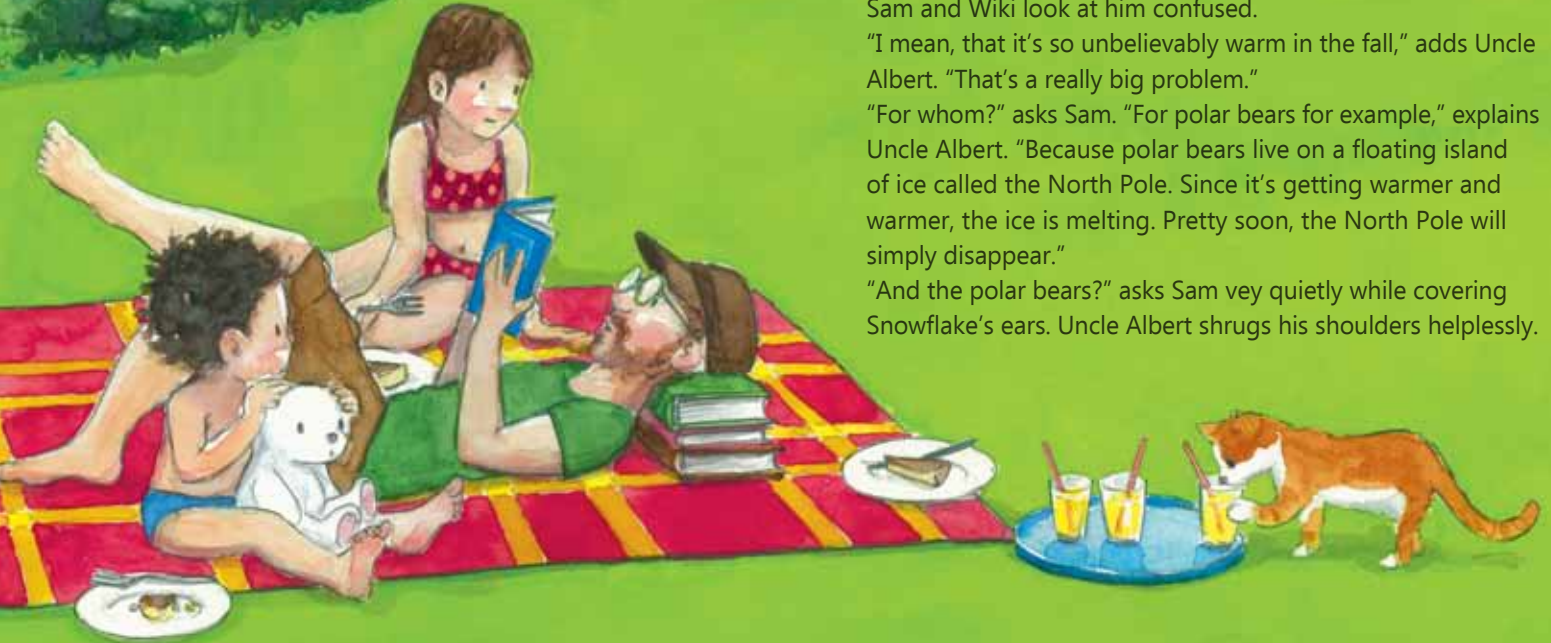
"You know, it's not so great," mumbles Uncle Albert.

Sam and Wiki look at him confused.

"I mean, that it's so unbelievably warm in the fall," adds Uncle Albert. "That's a really big problem."

"For whom?" asks Sam. "For polar bears for example," explains Uncle Albert. "Because polar bears live on a floating island of ice called the North Pole. Since it's getting warmer and warmer, the ice is melting. Pretty soon, the North Pole will simply disappear."

"And the polar bears?" asks Sam very quietly while covering Snowflake's ears. Uncle Albert shrugs his shoulders helplessly.



"As the climate becomes warmer, our earth loses its balance," says Uncle Albert. "The ice at the poles and the glaciers on our mountains melt. The meltwater raises the ocean levels and floods the coastal areas. The heat causes droughts, landslides and stronger tornadoes. Polar bears aren't the only ones in danger. Lots of animals and plants won't be able to adapt quickly enough."

"But why is the earth getting warmer?" asks Sam. "Because of the greenhouse effect," Wiki knows. Wiki reads a lot and is really smart. "That's right," says Uncle Albert, "It's like what happens with Grandma's tomatoes."





Uncle Albert opens the door to Grandma's greenhouse. The children are hit by a gush of hot and humid air and the unmistakable smell of tomato plants. Sam knows from Grandma how the greenhouse works, "The warm sun shines through the glass. When all of the windows are closed, the warmth is trapped inside and it gets really hot in here."

Sam wonders, "But our earth doesn't sit inside a greenhouse!" "Fortunately it does," answers Uncle Albert. "Otherwise, it would be bitter cold like in outer space. The problem is, there are no windows to let cool air in. The earth's greenhouse isn't made out of glass, but gases such as CO<sub>2</sub> ... but this is getting too complicated," Uncle Albert suddenly stops his explanation.



Wiki frowns, "Children understand more than grown-ups think!" – "Okay, okay," says Uncle Albert, who laughs and continues, "So, greenhouse gases like CO<sub>2</sub> keep our earth warm. But if there is too much CO<sub>2</sub> in the atmosphere, it becomes too warm." – "I get it," says Sam and nods, "We've got too much CO<sub>2</sub> in the atoms-fear." – "In the atmosphere," says Wiki, laughing out loud, "That's the layer of air between the earth and outer space."

Grandma sticks her head through the door, "Come into the house kids. A storm is on the way." The three of them suddenly notice the strong wind outside that is whisking dark clouds through the sky.





Grandpa has made hot chocolate. Heavy raindrops are banging against the windows. "Mom and Dad are gonna be soaking wet," says Wiki with a grin. Sam tries to make his stuffed animal feel better, "Look Snowflake, it's raining. I'm sure it will be cool again soon."

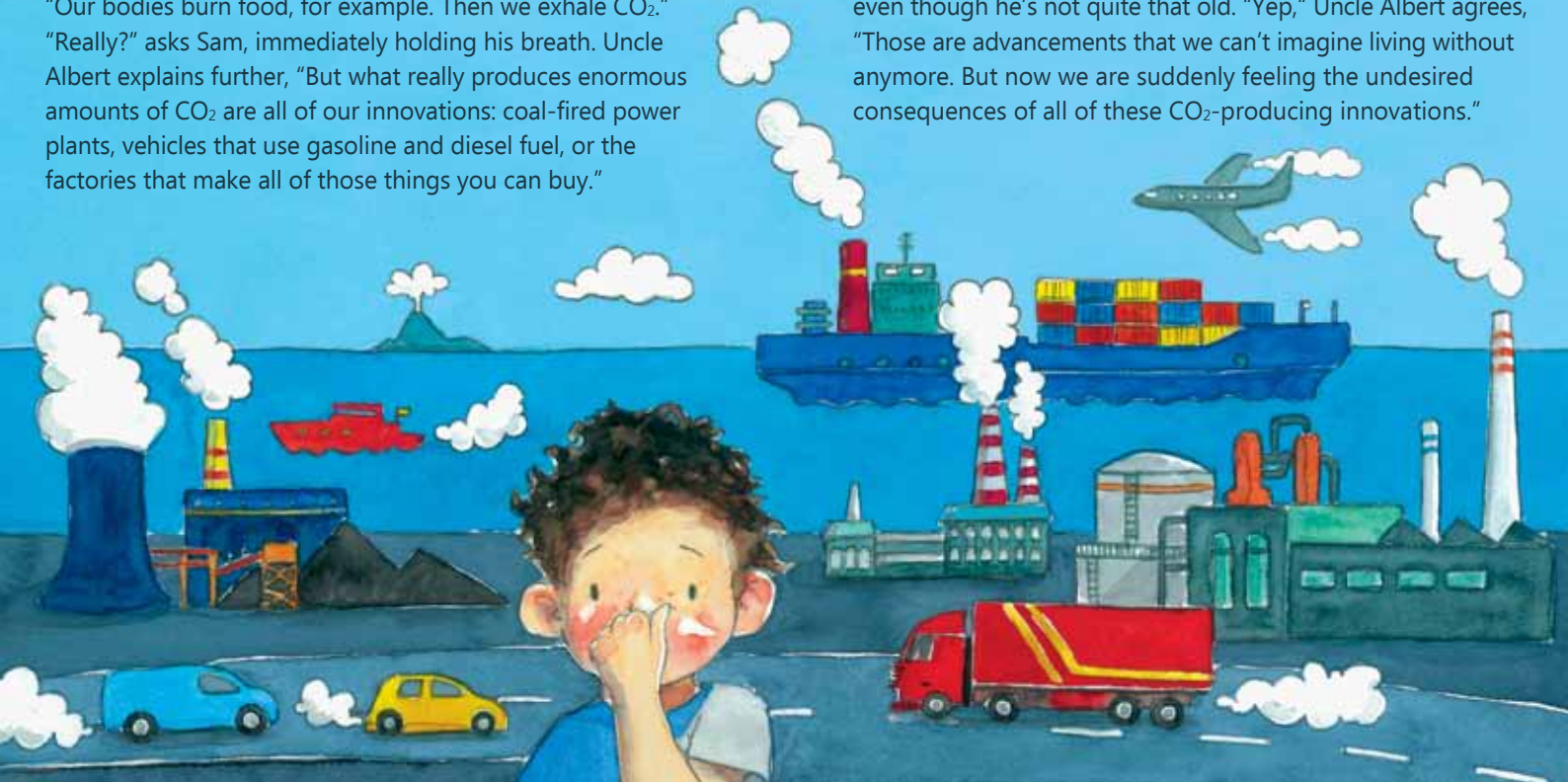
"Did your polar bear get too hot in the greenhouse?" inquires Grandma. "Climate change is making his life miserable," explains Wiki. Sam chimes in, "We have too much CO<sub>2</sub> in the atoms-fear." – "Atmosphere!" says Wiki, correcting him again. But Sam isn't listening at all. He wants to know more, "Where is all that CO<sub>2</sub> coming from?"





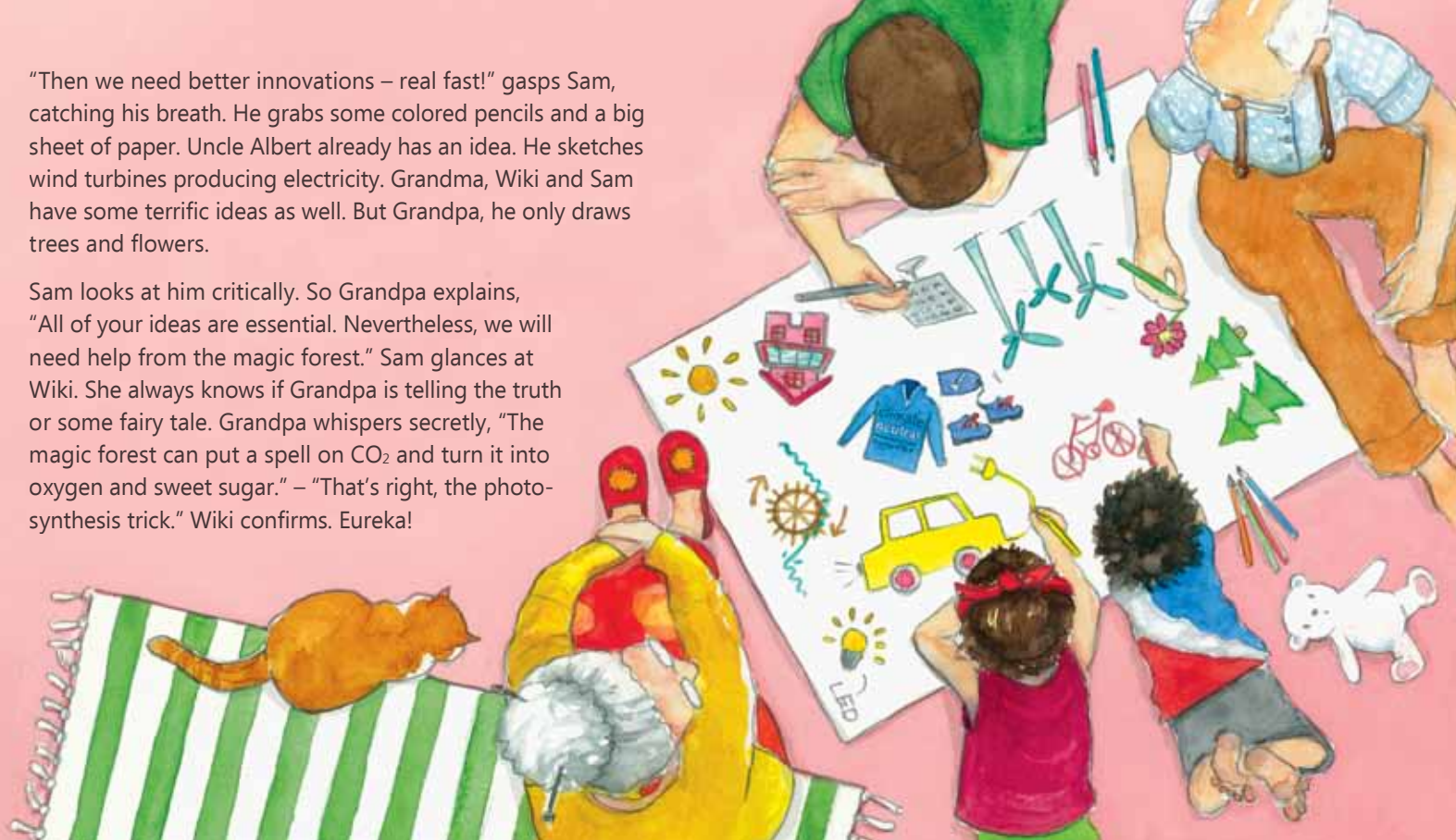
"CO<sub>2</sub> occurs when something burns," answers Uncle Albert. "Our bodies burn food, for example. Then we exhale CO<sub>2</sub>." "Really?" asks Sam, immediately holding his breath. Uncle Albert explains further, "But what really produces enormous amounts of CO<sub>2</sub> are all of our innovations: coal-fired power plants, vehicles that use gasoline and diesel fuel, or the factories that make all of those things you can buy."

"All these things didn't exist 200 years ago!" remarks Grandpa, even though he's not quite that old. "Yep," Uncle Albert agrees, "Those are advancements that we can't imagine living without anymore. But now we are suddenly feeling the undesired consequences of all of these CO<sub>2</sub>-producing innovations."



"Then we need better innovations – real fast!" gasps Sam, catching his breath. He grabs some colored pencils and a big sheet of paper. Uncle Albert already has an idea. He sketches wind turbines producing electricity. Grandma, Wiki and Sam have some terrific ideas as well. But Grandpa, he only draws trees and flowers.

Sam looks at him critically. So Grandpa explains, "All of your ideas are essential. Nevertheless, we will need help from the magic forest." Sam glances at Wiki. She always knows if Grandpa is telling the truth or some fairy tale. Grandpa whispers secretly, "The magic forest can put a spell on CO<sub>2</sub> and turn it into oxygen and sweet sugar." – "That's right, the photosynthesis trick." Wiki confirms. Eureka!



Grandpa explains to Sam that every green plant is part of the magic forest. "A tree for example, transforms the same amount of CO<sub>2</sub> in a year that is produced by making a pair of shoes or a jacket."

"It stopped raining," notices Uncle Albert, who promptly suggests, "We could start to make the magic forest bigger. Right now!" Just then Sam remembers, "The pear tree!" It isn't long before Grandpa, Uncle Albert and Sam are busy working in the yard.





A little while later Mom and Dad returned from their ride.  
"It's good we took rain jackets with us," said Mom smiling.  
"How were things with you guys?"  
Sam replied proudly, "We planted a magic tree to transform  
CO<sub>2</sub> in the atoms-fear so that the climate in our greenhouse  
won't get too hot and Snowflake's home will be saved."  
"Uncle Albert came to visit," says Wiki.  
"You can tell," laughs Dad.



## **SYMPATEX**

### **Best protection and maximum ecology**

Global warming can already be felt everywhere and is endangering our children's future. Industry, which is responsible for around 25 % of the global CO<sub>2</sub> emissions, must act now.

That is why we have signed the „UN Charter for Climate Action“ for the clothing industry – as the first company in the world to do so.

We are acting – and you can help too!

#### **Best protection:**

- 100 % waterproof
- 100 % windproof
- optimally breathable

#### **Maximum ecology:**

- 100 % recyclable and the world's first climate-neutral membrane
- 100 % recyclable and recycled textiles
- PTFE-/PFC-free, Oekotex® standard 100





Polar bears aren't the only ones  
struggling with the unusually warm weather.  
Sam understands right away the problem with the "atoms-fear",  
he gathers loads of ideas for better innovations  
and discovers the secrets of the magic forest.

