

**FREE
#4**

**UNIVERSITY OF REIMS CHAMPAGNE-ARDENNE,
UNIVERSITY OF LINCOLN,
AND TEESSIDE UNIVERSITY PRESENT**

 **CAMPUS
DES MÉTIERS
ET DES
QUALIFICATIONS
D'EXCELLENCE**
Bioeco Academy
Grand Est

GREENKID



WHO IS SUGAR KID? IS SHE TRYING TO FRAME GREEN KID? ALL THIS AND MORE!

GLOSSARY

BAZANCOURT POMACLE BIOREFINERY - ORIGINALLY A SUGAR REFINERY, THIS SITE NOW HOSTS A DOZEN COMPANIES AND PROCESSES 4 MILLION TONES OF BIOMASS A YEAR TO MAKE FOOD, CHEMICALS, COSMETICS AND BIOFUELS.

BIOMASS - ANYTHING THAT IS MADE FROM LIVING ORGANISMS ALTHOUGH MAINLY FOCUSING ON PLANTS AND ALGAE.

CIRCULAR ECONOMY - A CLOSED LOOP, AT THE END OF LIFE, THINGS CAN BE MADE INTO SOMETHING NEW.

ECOSYSTEM - ALL LIVING THINGS ARE INTERCONNECTED, EVERYTHING FROM LITTLE BACTERIA TO BIG BLUE WHALES, FROM THE SMALLEST PLANT TO THE BIGGEST TREES, IF ONE SET OF THINGS CHANGE, IT WILL IMPACT (GOOD AND BAD) ON OTHERS.

NET ZERO CARBON FUTURE - WHERE HUMAN CIVILISATION CONTINUES TO GROW AND DEVELOP BUT DOESN'T MAKE ANY MORE CARBON DIOXIDE A YEAR THAN IT USES SO NO MORE GETS ADDED TO THE ATMOSPHERE.

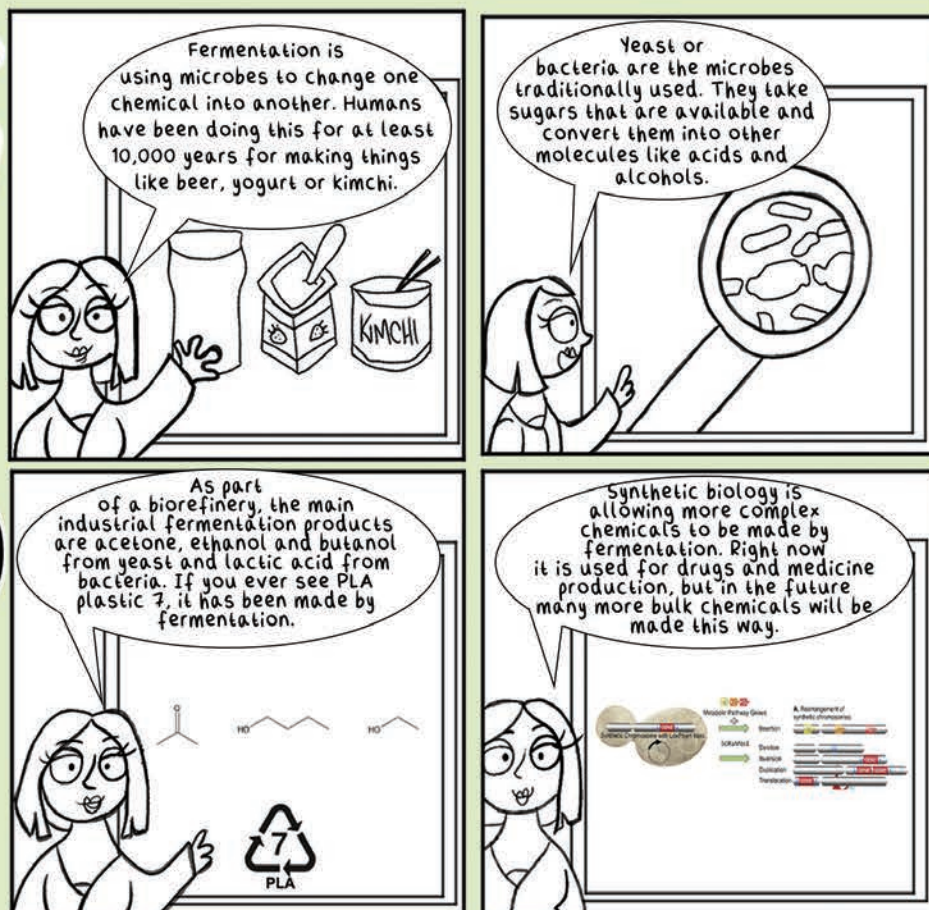
PETROCHEMICAL - ANY CHEMICAL THAT IS MADE FROM FOSSIL FUELS AND SO IS NOT SUSTAINABLE.

RESTORATIVE CYCLE - CROPS ARE GROWN IN WAYS THAT AID BIODIVERSITY. ALL THE CARBON IN ANY CHEMICAL OR FUEL IS FROM THE PLANTS SO THAT EVEN IF IT ENDS UP AS CARBON DIOXIDE, IT IS CAPTURED AGAIN WHEN THE NEXT CROPS ARE GROWN.

VALORISED - TURNING SOMETHING WITH NO OR LOW VALUE INTO SOMETHING MORE USEFUL AND WORTH MORE MONEY.

science!
with
Dr. Science!

COLOUR THE COMIC!



Hello!
I'm Dr
Science!

Figures extraites de Van Wik N. et al, "The smell of synthetic biology : Engineering strategies for aroma compound production in yeast". Fermentation 2018,4,54

REIMS, FRANCE.



A SUMMER
GETAWAY,
JUST WHAT
WE NEEDED!

ABSOLUTELY,
TELL YOUR MUM
I SAID THANKS
AGAIN.



BRMMMM!

HUH?

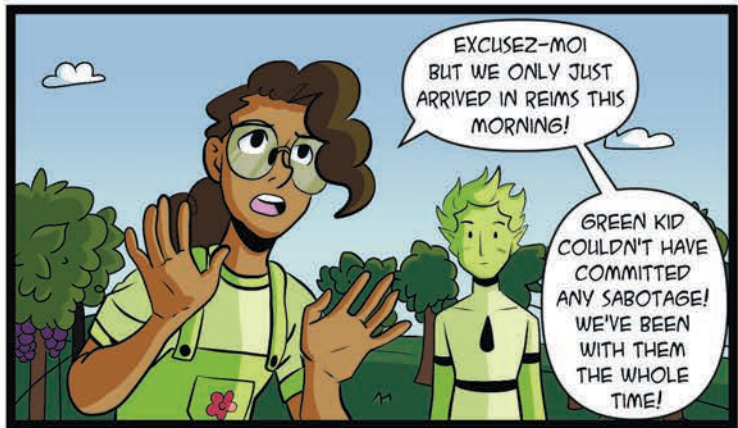


ARRÊTEZ-
VOUS! SUMMER
PATEL AND
GREEN KID!



YOU ARE
UNDER ARREST
FOR INDUSTRIAL
SABOTAGE! YOU WILL
COME WITH ME NOW
AND HAND YOURSELF
OVER TO THE
AUTHORITIES!

WHAT THE
SPRUCE?!



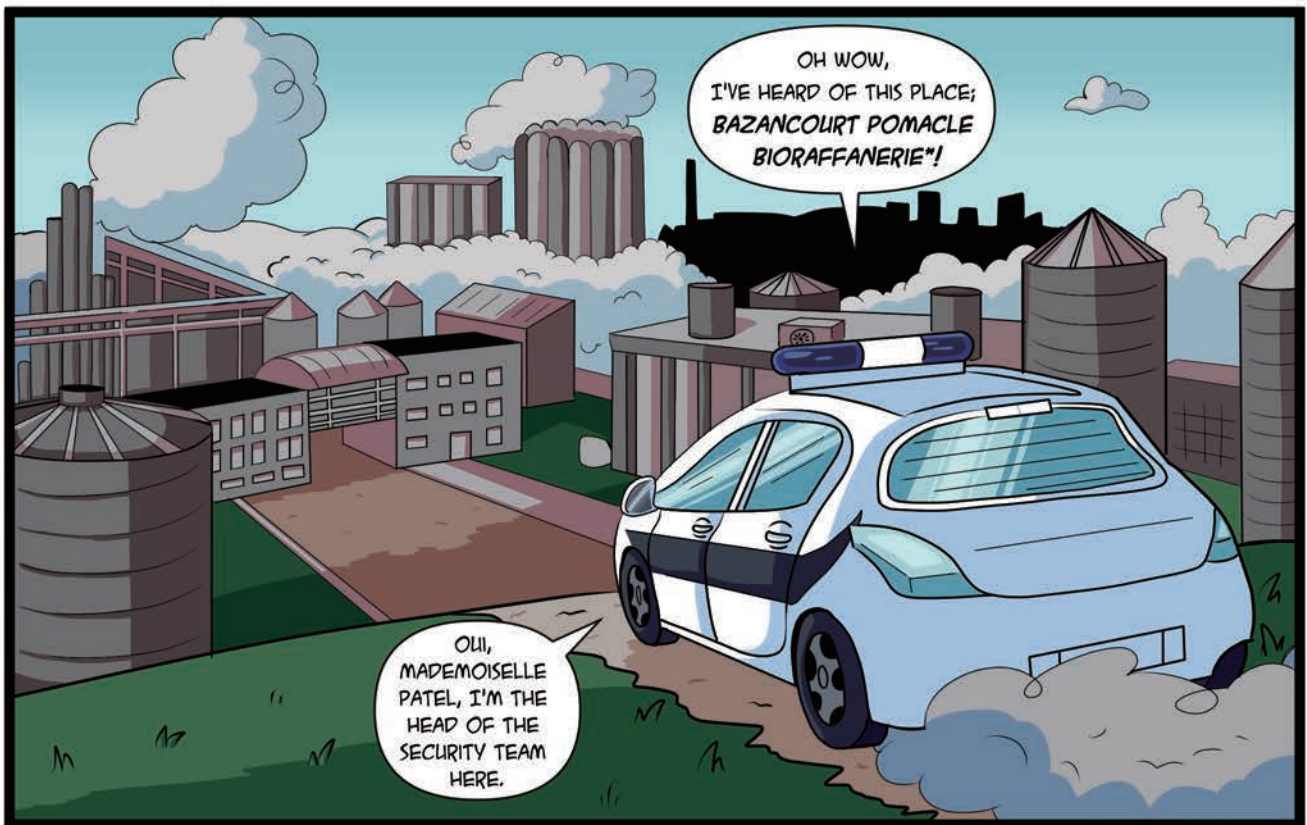
EXCUSEZ-MOI
BUT WE ONLY JUST
ARRIVED IN REIMS THIS
MORNING!

GREEN KID
COULDN'T HAVE
COMMITTED
ANY SABOTAGE!
WE'VE BEEN
WITH THEM
THE WHOLE
TIME!



WE
HAVE SECURITY
FOOTAGE CATCHING
GREEN KID IN THE
ACT!

WELL,
WHY NOT TAKE
US TO LOOK AT
THIS FOOTAGE
AND WE CAN
HELP SOLVE
THIS ISSUE?

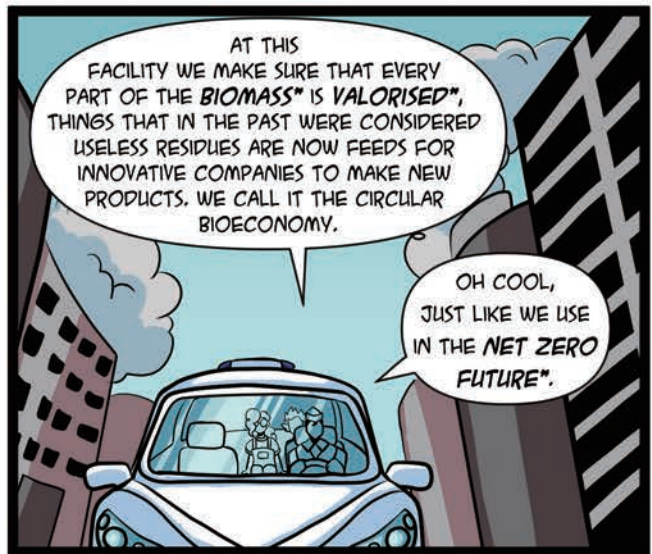


OH WOW,
I'VE HEARD OF THIS PLACE;
**BAZANCOURT POMACLE
BIORAFFANERIE!**

OUI,
MADEMOISELLE
PATEL, I'M THE
HEAD OF THE
SECURITY TEAM
HERE.



HERE WE
HAVE A DOZEN
DIFFERENT INDUSTRIES
AND COMPANIES ALL
CREATING SUSTAINABLE
PRODUCTS.



AT THIS
FACILITY WE MAKE SURE THAT EVERY
PART OF THE **BIOMASS** IS **VALORISED**,
THINGS THAT IN THE PAST WERE CONSIDERED
USELESS RESIDUES ARE NOW FEEDS FOR
INNOVATIVE COMPANIES TO MAKE NEW
PRODUCTS. WE CALL IT THE CIRCULAR
BIOECONOMY.

OH COOL,
JUST LIKE WE USE
IN THE **NET ZERO
FUTURE**.

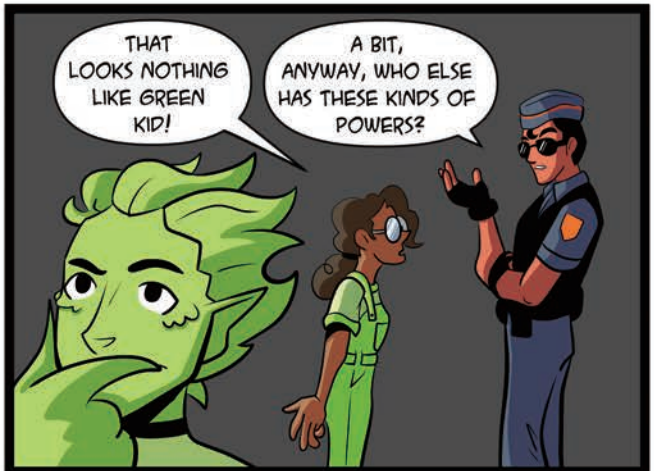
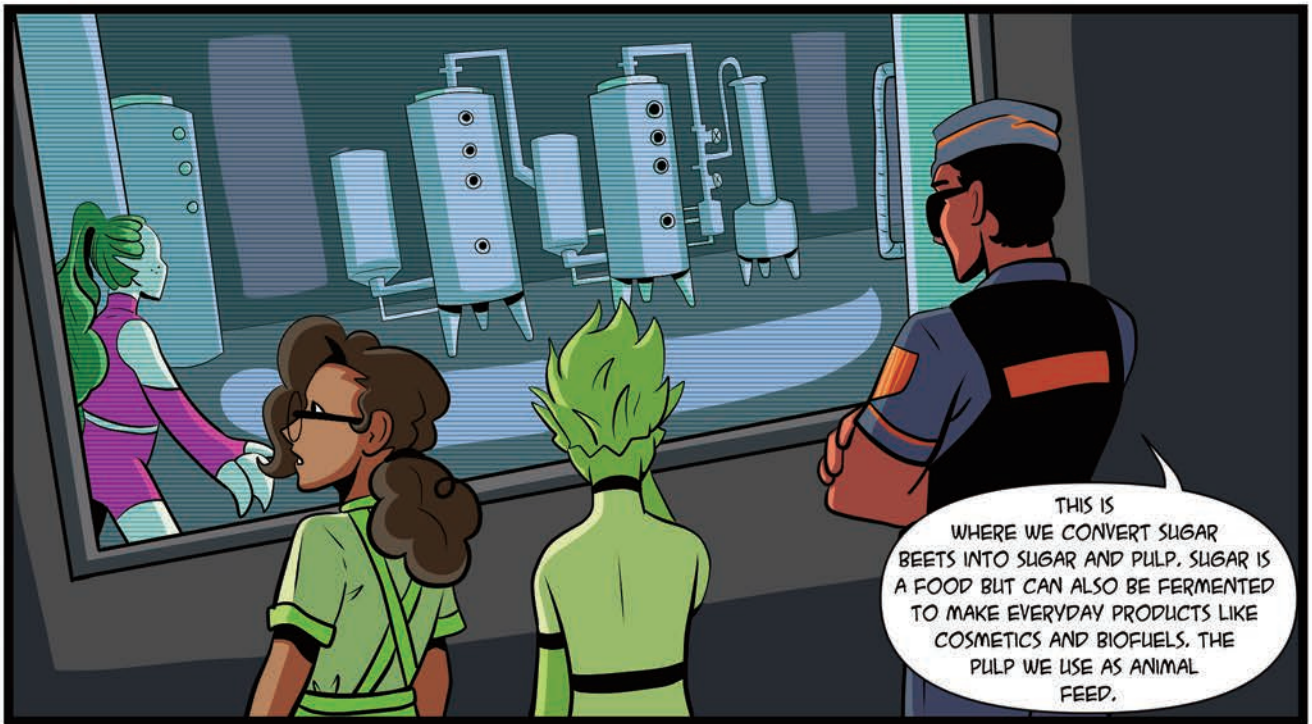


THIS IS
WHERE WE KEEP
AN EYE ON EVERY
FACILITY IN OUR
COMPLEX.

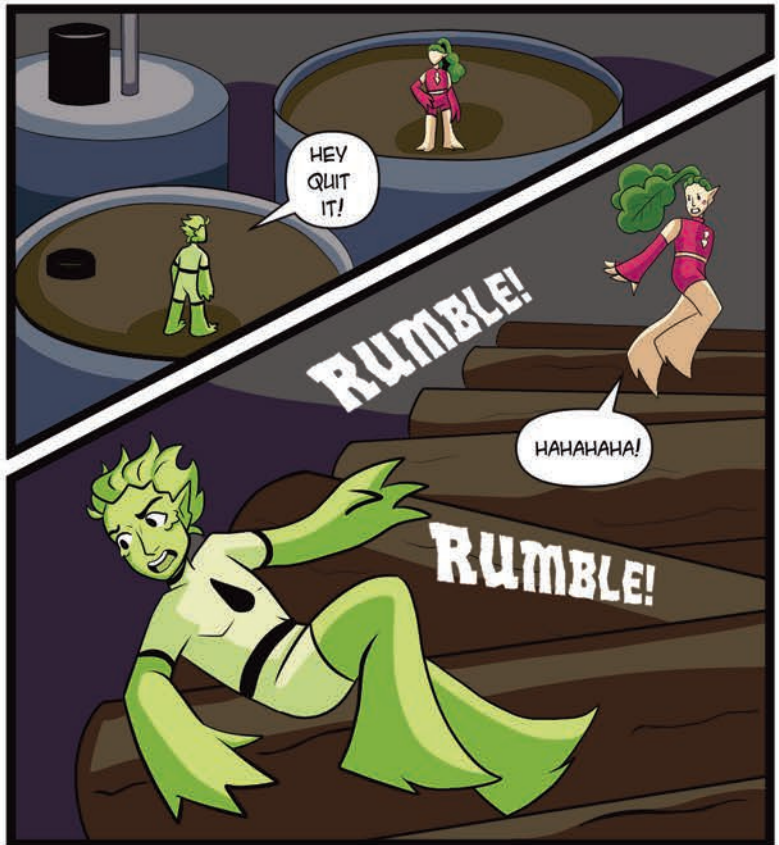
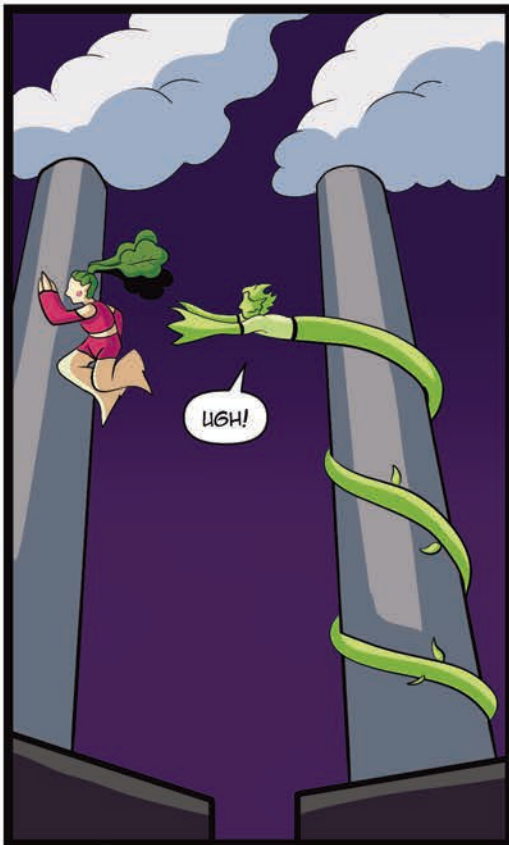


WATCH.

beep!











HOLD ON A SEC.

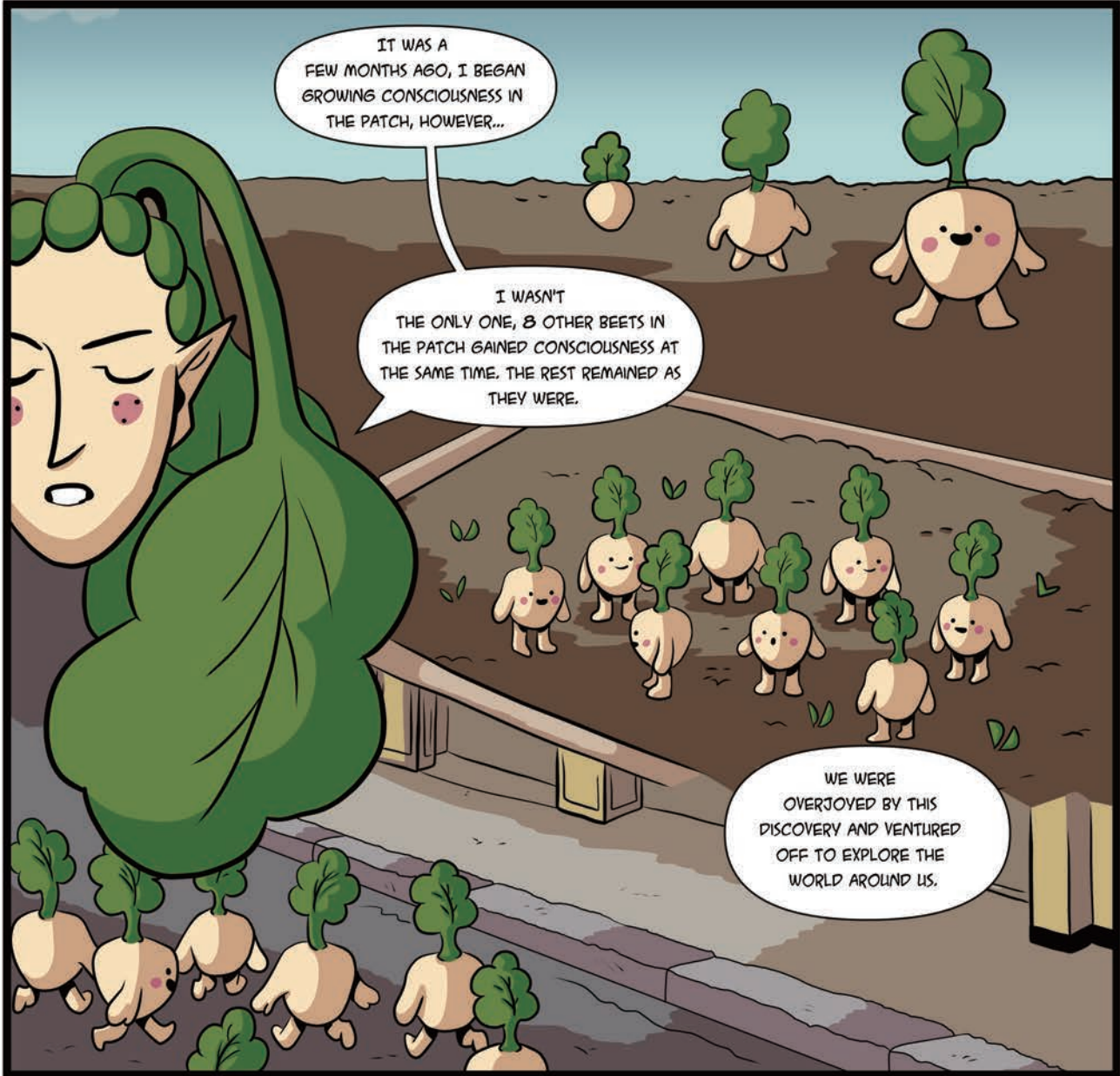


WHAT DO YOU THINK YOU'RE DOING?!

I DON'T THINK THEY JUST STARTED SABOTAGING THE MACHINERY FOR NO REASON. WHY DON'T WE FIND OUT WHAT'S GOING ON HERE?



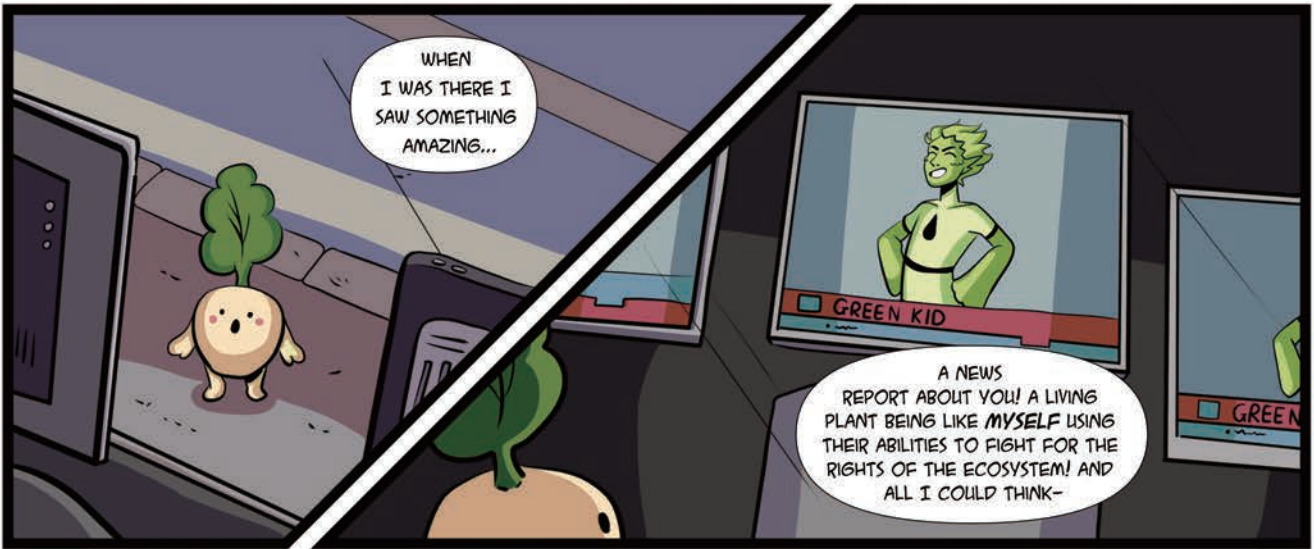
FIRSTLY, WHO ARE YOU AND WHY DO YOU HAVE MY POWERS?



IT WAS A FEW MONTHS AGO, I BEGAN GROWING CONSCIOUSNESS IN THE PATCH, HOWEVER...

I WASN'T THE ONLY ONE, & OTHER BEETS IN THE PATCH GAINED CONSCIOUSNESS AT THE SAME TIME. THE REST REMAINED AS THEY WERE.

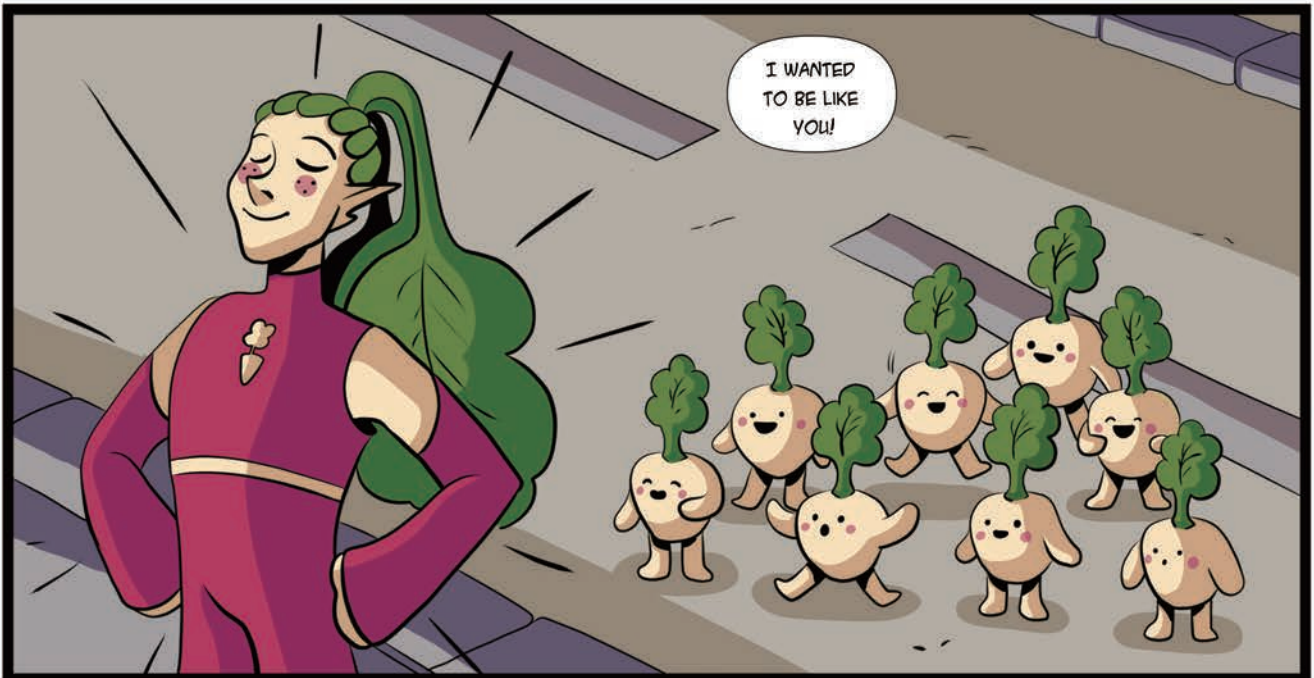
WE WERE OVERJOYED BY THIS DISCOVERY AND VENTURED OFF TO EXPLORE THE WORLD AROUND US.



WHEN I WAS THERE I SAW SOMETHING AMAZING...



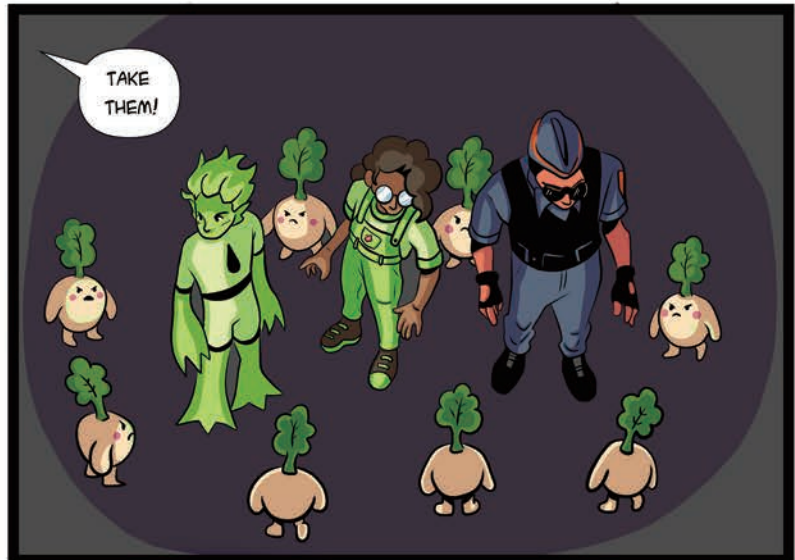
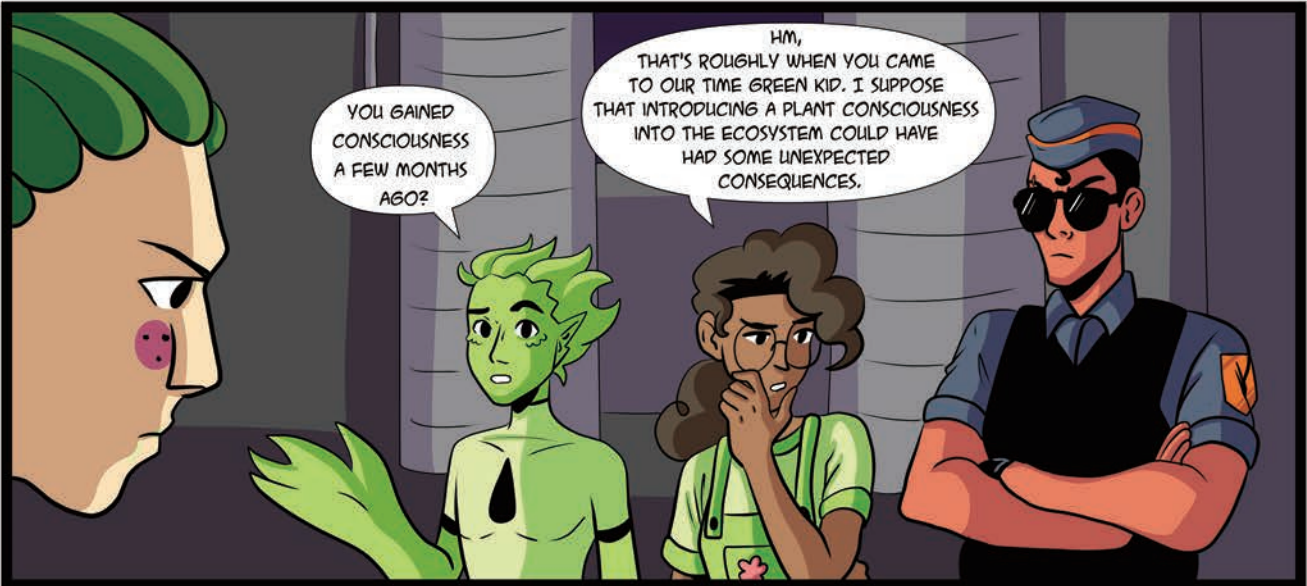
A NEWS REPORT ABOUT YOU! A LIVING PLANT BEING LIKE MYSELF USING THEIR ABILITIES TO FIGHT FOR THE RIGHTS OF THE ECOSYSTEM! AND ALL I COULD THINK-

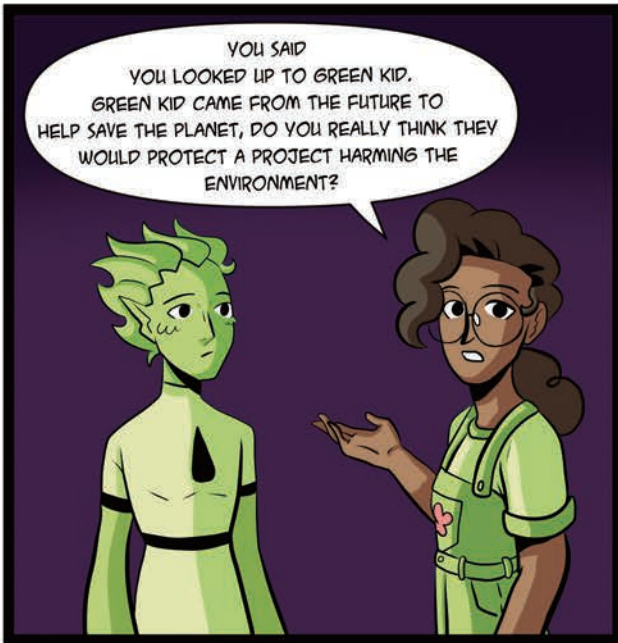


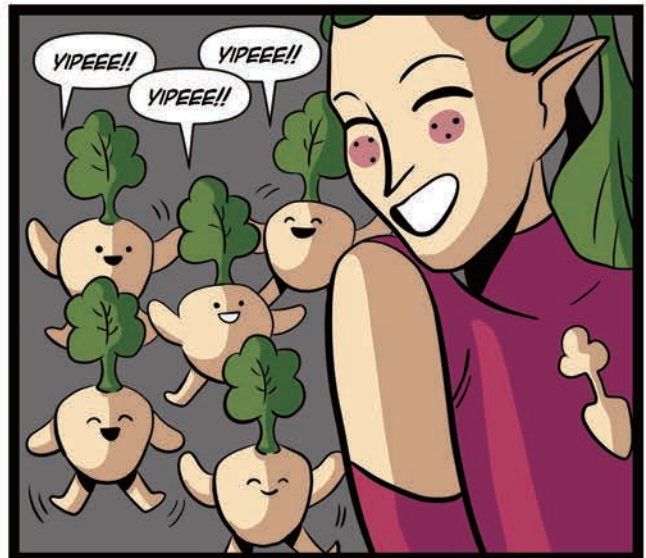
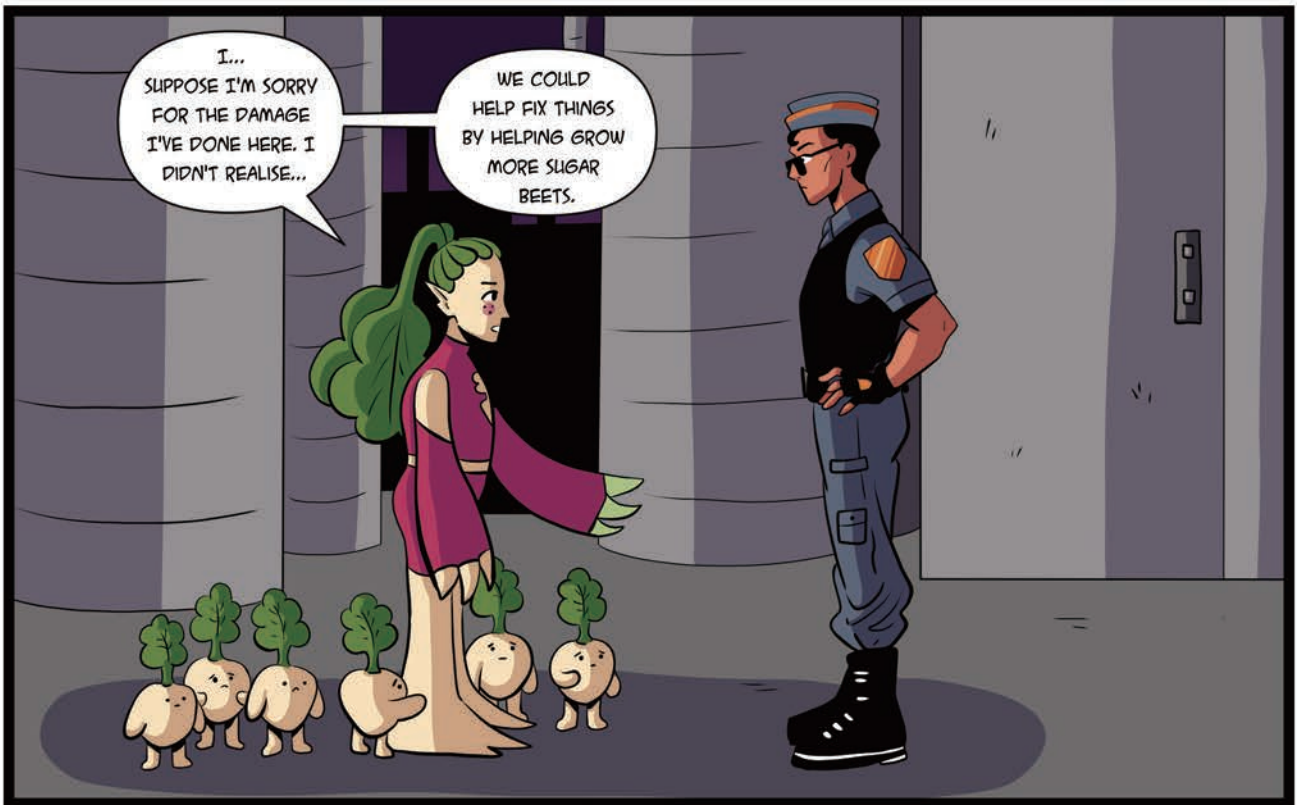
I WANTED TO BE LIKE YOU!

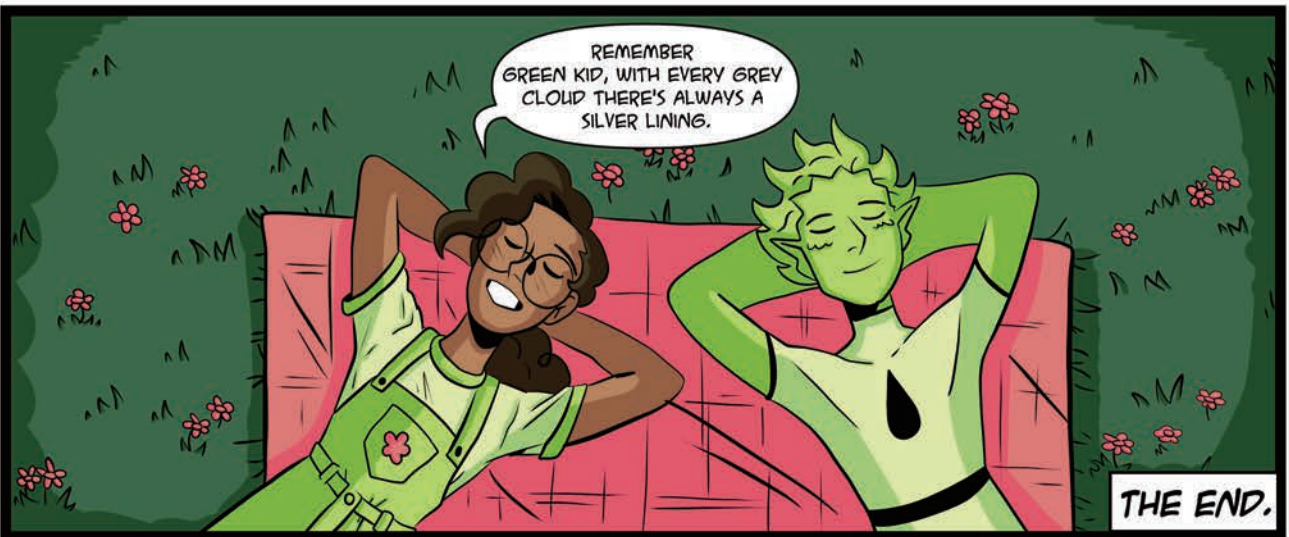
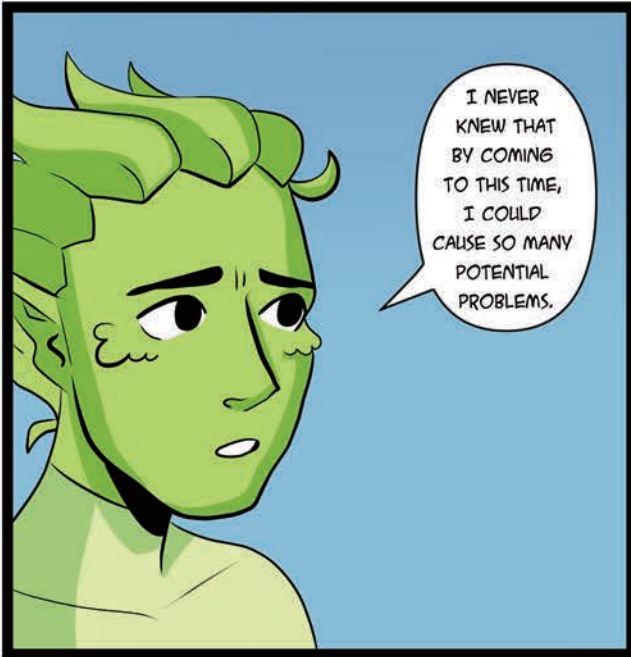


WHEN WE RETURNED HOME WE WERE DEVASTATED TO DISCOVER THAT THE OTHER BEETS THAT HADN'T GAINED CONSCIOUSNESS HAD BEEN HARVESTED BY BAZANCOURT POMACLE BIORAFANERIE!



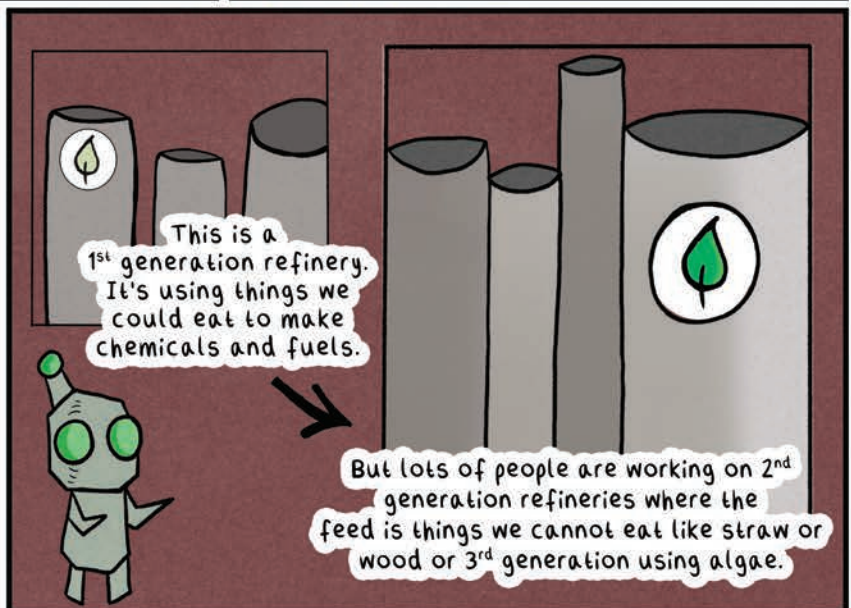
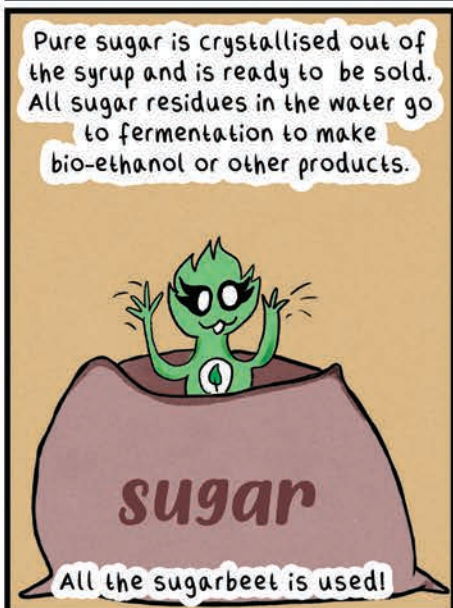
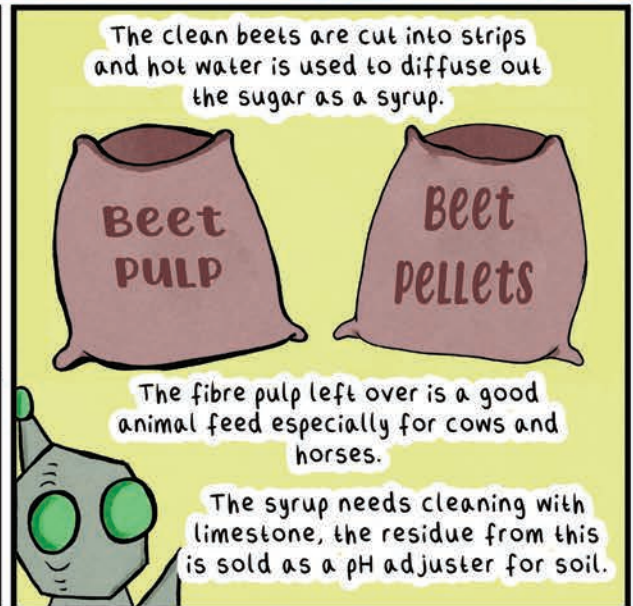
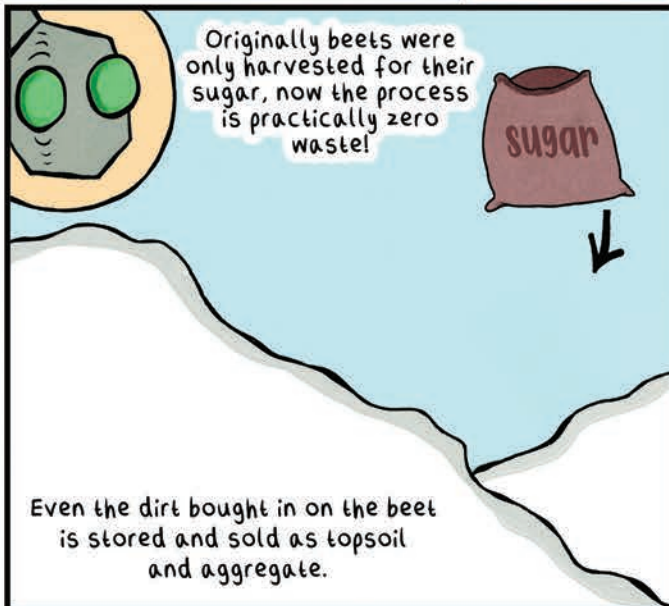
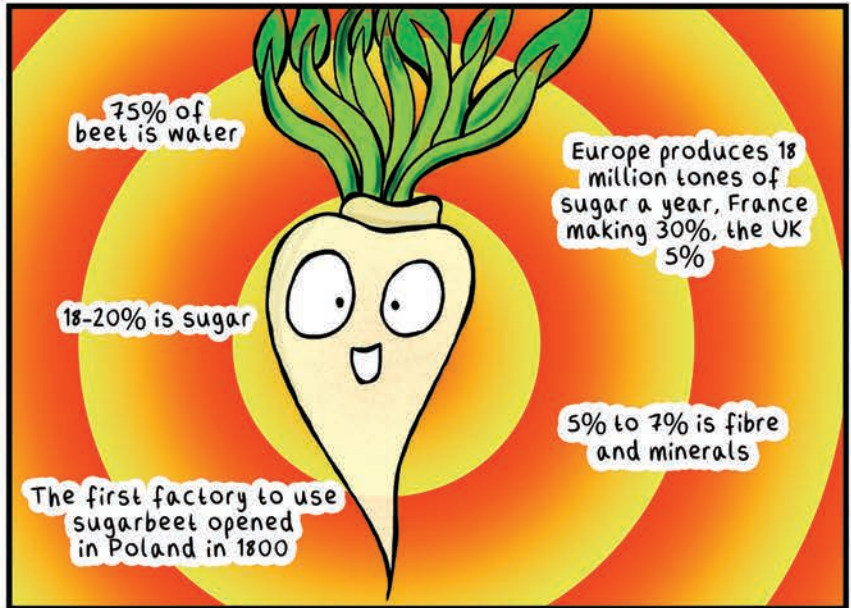
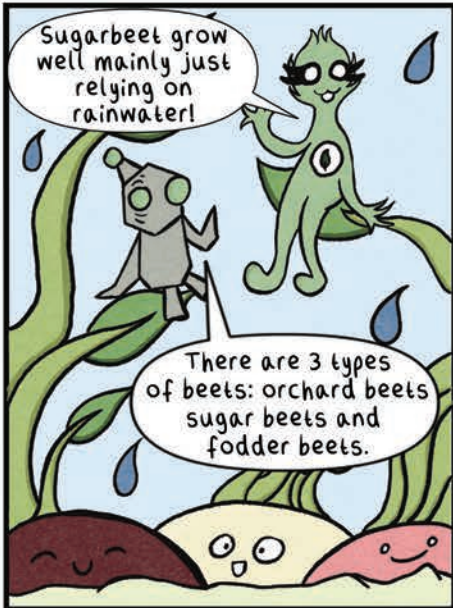






ACTIVITIES





WORDSEARCH

E	N	V	I	R	O	N	M	E	N	T	S	S	I
C	O	E	D	R	K	B	T	E	E	E	Y	S	S
O	R	G	N	S	E	S	G	R	T	T	R	U	P
S	R	G	R	E	E	N	K	I	D	U	E	G	R
T	M	O	R	B	G	A	R	O	O	T	N	A	O
Y	I	V	A	L	O	R	I	S	E	D	I	R	U
S	S	Y	S	E	T	T	D	A	K	U	F	B	T
T	S	V	C	F	R	I	R	G	S	U	E	E	I
E	M	G	K	I	K	E	R	E	S	O	R	E	D
M	S	R	R	R	Y	U	V	G	U	U	O	T	E
S	R	T	A	E	I	E	S	C	E	I	I	T	T
S	E	G	M	D	R	N	U	P	S	S	B	R	L
N	U	O	D	R	C	Y	R	U	S	S	D	S	O
S	I	T	A	E	B	I	O	M	A	S	S	G	E

GREENKID
 CYRUS
 BIOREFINERY
 ENVIRONMENT
 ECOSYSTEM
 PETROCHEMICAL
 SUGARKID
 SPROUT
 SUGARBEET
 BIOMASS
 VALORISED

FRENCH WITH LITTLE BEET



HI I'M LITTLE BEET! I'M FRIENDS WITH SPROUT AND CYRUS AND I'M HERE TO HELP YOU WITH THE FRENCH LANGUAGE!

HELLO! - BONJOUR!



ENGLISH

BIOECONOMY
 ENVIRONMENT
 SUGAR
 SPROUT
 CIRCULAR ECONOMY
 SUGAR BEET
 BIOREFINERY

FRENCH

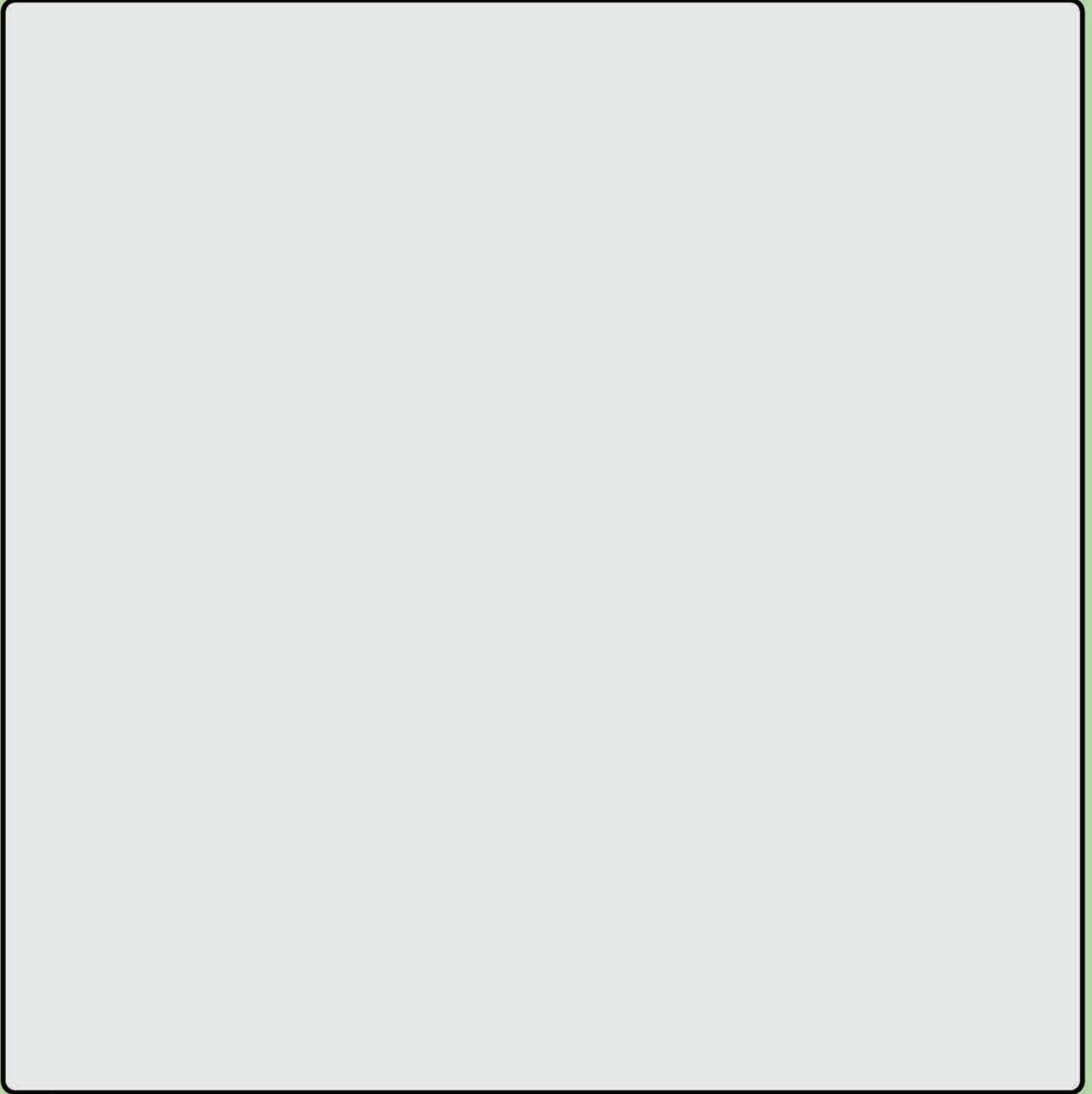
BIOÉCONOMIE
 ENVIRONNEMENT
 SUCRE
 GERMER
 ÉCONOMIE CIRCULAIRE
 BETTERAVE
 BIORAFFNERIE

GAMES

DID YOU ENJOY
THE COMIC?

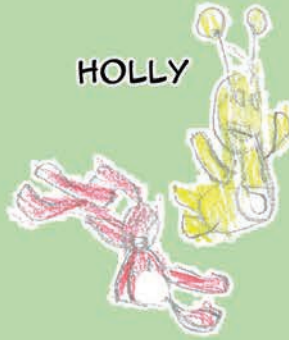


IMAGINE AND DRAW THE NEXT CHARACTER THAT GREEN
KID WILL MEET... A FRIEND OR FOE, WHO KNOWS?



WHY NOT SEND US YOUR DESIGN? ASK YOUR
PARENT OR TEACHER TO SHARE
YOUR ART WITH US!
GREENKID@GMAIL.COM

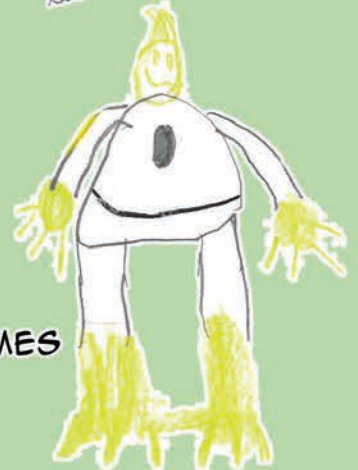
FAN ART



WOW!
WHAT A VARIETY
OF AMAZING
WORK!



WE
LOOK SO
CUTE!



GREEN KID COLLECTION!



GREEN
KID 5 COMING
SOON!



ACKNOWLEDGEMENTS

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UNIVERSITY OF
LINCOLN



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RÉGION ACADÉMIQUE
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Égalité
Fraternité